

English Language Instruction as 'Co-Creation':

A new CHAT Model for integrating mobile technologies in Advanced TEFL

Warren Lilley

LLLWAR001

Supervisor: Associate Professor Joanne Hardman

University of Cape Town

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Abstract:

English Language education within South African universities currently faces a crisis of access. The #Must Fall movements have highlighted the many historical, economic, political and English language barriers local students face in meeting the demands of higher education. At the same time, universities face an issue of funding, where, to remain accessible requires further internationalisation and a commitment to English language instruction. Research has advocated that pedagogies employing emerging technologies (ETs), like mobile devices, may be able to overcome these issues of access as they are not hindered by limited student space and can be immediately deployed. However, there is a paucity of research which demonstrates how ET's affordances can be meaningfully mobilised in English language instruction, especially within postcolonial contexts.

In this thesis, I seek to understand and find drivers for local, English language pedagogical change which draws on mobile technology. This study is anchored within the critical tradition of Cultural Historical Activity Theory (CHAT) and its encompassing Expansive Learning theory of development. Using a participatory, formative approach to research-interventions, I describe a seven-week, 'blended' adaptation of CHAT's Change Laboratory (CL) method. The CL chronicles language teachers', from a South African university's language centre, development towards meaningful integration of mobile technologies for instructing Advanced language students. Applying a CHAT lens, I critically trace the development of participants' expansive agency towards the model's creation as well as highlight influential aspects of the 'blended' CL design I employed.

Findings from this research-intervention suggest that relations of power are intricately inscribed in the integration of mobile technologies for language teaching. Participants' initial primary contradictions emanated from the object towards the rules, division of labour and mediators, which centralised teachers' positions in their classrooms. The meaningful integration of mobile technologies was only realised by participants when these contradictions were unpacked, resulting in a language pedagogy emphasising instruction as 'co-creation' between students and teachers. I propose this pedagogical model holds significant potential for the meaningful use of mobile technologies in similar postcolonial contexts. Moreover, I stipulate that the 'blended' CL method is a significant development for future formative interventions in the modern workspace.

Declaration:

I declare that:

- this thesis is my own work and that it has not been submitted before, for any purpose, to any other institution.
- I have read and understood the regulations governing the submission of Doctor of Philosophy, including those relating to length and plagiarism, as contained by the University, and that this thesis conforms to those regulations.

Signed: Signed by candidate

Warren Lilley

Date: 31/10/2019

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Dedication:

In loving memory of ‘Ned’, a friend, a colleague and research-participant, who sadly passed away before the completion of this doctoral dissertation.

in some way we are bound to find a mode of teaching that equips the young to deal with often unrecognized ideologies, provides some sense of agency, some consciousness of beginnings rather than closures.

At once, we need to enhance our capacity to make sense of our own experiences, to enable those we teach to pursue meanings as they shape their own life stories, as they are aroused somehow to look through new eyes upon the world around, to listen for new frequencies, to heed shapes and nuances scarcely noticed before

- Maxine Greene, 2007

Abbreviations & Acronyms

ALC	Academic Language Centre
CAE	Cambridge English: Advanced Certificate
CEFR	The Common European Framework of Reference for Languages
CELTA	Certificate in English Language Teaching to Speakers of Other Languages
CHAT	Cultural-Historical Activity Theory
CL	Change Laboratory
CLT	Communicative Language Teaching
CPD	Continuing Professional Development
CPE	Cambridge English: Proficiency Certificate
DELTA	Diploma in English Language Teaching to Speakers of Other Languages
DHET	Department of Higher Education and Training
DWR	Developmental Work Research
EAP	English for Academic Purposes
EFA	Education for All
EFL	English as a Foreign Language
FCE	Cambridge English: First Certificate
HCM	Historical Change Matrix
IELTS	International English Language Testing System
LMS	Learner Management System
ML	Mobile Learning
MALL	Mobile-Assisted Language Learning
NA	Needs Analysis
POC	Paid on Claim
SAMR	Substitution-Augmentation-Modification-Redefinition
TCF	Teaching Change Frame
TEFL	Teaching English as Foreign Language
TPACK	Technological, Pedagogical and Content Knowledge
ZPD	Zone of Proximal Development

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Introduction

To question what it means to learn a language in the 21st century

1.1. Background & Context

Education has always been in a state of successive small transformations (Säljö, 2010). From the formalisation of writing bringing about the ability to mass-produce textbooks: new ways of recording, storing and transferring knowledge always shift and challenge previous notions of learning (Kukulska-Hulme, 2012; Sevillano-García & Vázquez-Cano, 2015). These small changes have continuously led towards radically new potentials of what it 'meant to learn' in those moments, facilitating new understandings of learning and aligning teaching methodologies accordingly (Leu, Kinzer, Coiro, & Cammack, 2004). It is then no strange coincidence that more modern technologies are challenging what it 'means to learn' in the 21st century (Ng'ambi & Bozalek, 2015; Säljö, 2010).

In terms of Teaching English as a Foreign Language (TEFL), the introduction of more recent technologies such as computers, the internet and mobile phones have subsequently challenged our understanding of what it 'means' to learn a foreign language (Jarvis & Achilleos, 2013; Kukulska-Hulme, 2009). This question technology poses in 'what it means to learn' resonates particularly with TEFL's focus on communication (Kukulska-Hulme, 2010b) and its dominant pedagogy of Communicative Language Teaching (CLT) (Savignon, 1983; Thompson, 1996).

However, CLT has been criticised on several fronts which focus on its ideological underpinnings of 'appropriateness' (Fairclough, 1995); and lack of practitioners' critical awareness towards learner communities (Hiep, 2005) including the pedagogical texts they deploy within them (Wallace, 2006). In effect, CLT is considered to be at odds with its aim of 'authentic' communication (Canagarajah, 2006; Krashen, 1981). These criticisms have been compounded by information-communication technologies (ICTs) which have equally contested CLT's understanding of what it means to competently communicate in the twenty-first century as computers, the internet and the mobile phone have radically altered how people interact.

These alterations are demonstrated in communication not necessarily being face-to-face nor necessarily in the same location anymore – it can occur "anytime, anywhere" (Kukulska-Hulme, 2009; Kukulska-Hulme & Shield, 2008; Stockwell, 2008). At the same time, social

networks, Web 2.0 sites, and the use of applications have fundamentally altered the way we read, record, and share social interactions with each other (Godwin-Jones, 2011; Greenhow, Robelia, & Hughes, 2009; Säljö, 2010). Tied to these new communicative pathways are the ways new technologies have interwoven multiple modes of representation through the use of text, picture and sound. This interweaving of modalities lead to novel, interconnected traversals through which we share information (Lemke, 2002).

In turn, these changes in communication and information brought about by ICTs have led to a questioning of what it means to be a 'competent' language user, as the language literacies of the past have evolved to take advantage of the modern communicative pathways we have today (Beetham & Sharpe, 2007; Kukulska-Hulme, 2010b; Warschauer & Healey, 1998). These needed competencies of the twenty-first century have been coined as 'new millennium' literacies (Jarvis & Achilleos, 2013; D. Kim, Rueckert, Kim, & Seo, 2013). They centre on facilitating radical change in (intercultural) communication, appreciating new (multiple) modes of representation in learning and viewing information as the critical economic commodity (see Archer, 2000; Guariento, 2001; Hagood, 2000).

Added to this is the complexity of the South African higher education landscape, where new questions on what it means to learn English in a postcolonial territory are taking shape, specifically in terms of access and success (Cilliers & Aucoin, 2016; Molefe, 2016; Motala, Vally, & Maharajh, 2018). This can be most explicitly seen in the student movements of *Rhodes Must Fall* and *Fees Must Fall*. These movements criticise South African higher education institutions as spaces that still marginalise South African students due to their continued propagation of historical colonial practices through curricula, English language instruction, fee structures and construction of learning spaces (Francis & Hardman, 2018). At the same time, the Department of Higher Education and Training [DHET] (2017) calls for further 'internationalisation' stand in direct contrast to these assertions, placing the question of English language learning and its 'place' as seminal to South Africa's education system.

In this light, emergent technology pedagogies such as Mobile-Assisted Language Learning (MALL), have been recognised as a potential site to alter the terrain of language instruction (Jarvis & Achilleos, 2013; Miangah, 2012) in its use of "personal, portable devices that enable new ways of learning [while] emphasising continuity or spontaneity of access and interaction across different contexts of use" (Kukulska-Hulme, 2009, p. 162). MALL studies drawing on this report the benefits mobile phones have in a variety of language-learning areas (see

Azabdaftari & Mozaheb, 2012; Chon, 2009; Huang & Lin, 2011; Wang & Smith, 2013). At the same time, MALL and other emergent technology-driven approaches to language teaching have been criticised for not updating traditional pedagogical models and their teacher-centric focus (Kukulska-Hulme & Shield, 2008; Ng'ambi & Bozalek, 2015).

These radically contrasting views of MALL regarding what it contemporarily means to learn a foreign language illustrate that while its potential is foreseen, insights in utilising these capabilities are under-realised (Burston, 2014; Nouri, Cerratto-Pargman, Rossitto, & Ramberg, 2014). The research study below (see Section 1.3.) counteracts this problematic under-realisation by outlining a more critical perspective into the field of MALL.

1.2. Rationale

My experience of the under-realisation of technology's transformative potential in language education informs my rationale for this study. As a language teacher, I have worked in secondary, corporate, adult, and tertiary institutions, and have seen questionable use of information technologies in language learning. On the one hand, teachers are compelled to use them, but on the other, the specific requisites teachers place on their use are not value-free as demonstrated in my master's study by teachers' uptake of CLT practices. In these cases, rather than developing the transformative potentials of technology in language education, teachers' uptake and their roles can constrict them (Lilley & Hardman, 2017).

As an academic, my master's study (2014) highlighted the possible space for a more in-depth elaboration of power in Cultural-Historical Activity Theory (CHAT). I found that using both Critical Discourse Analysis (CDA) and CHAT to understand power relations in mobile-phone use opened up a number of insights that could be fully explored by applying both as complementary lenses. I wish to further a framework from which power can be more deeply understood using CHAT, especially in the construct of division-of-labour. Moreover, I was privileged to attend a series of workshop on Change Laboratories (CL) by Jaako Virkkunen. Having read so much about Developmental Work Research [DWR] (see Virkkunen & Newnham, 2013) and its propensity to provoke change, I see a need for such formative-interventions in South Africa and other postcolonial territories where change emanates from 'within' the context in which it is needed.

My third reason for wishing to embark on this investigation is related to the challenges South Africa is facing in the higher and adult education sectors. Many learners are ill-prepared for

higher education (Hardman & Ng'ambi, 2003) due to the continuing complications of redressing inequality and the challenge many post-matriculants face being second or foreign language learners. Simultaneously, international students entering South African higher education experience extreme difficulty in passing benchmark language proficiency tests such as IELTS or TOEFL, leading many to enrol in private adult EFL centres. I wish to find ways in which these students' learning can be more suitably enhanced using emergent technologies to transform their access to higher education. I believe further critical inquiry into the role power plays with mediation in using ICT can potentially address these challenges and drawing upon this to inform the creation of local pedagogies for MALL is key to the changes I wish to observe.

1.3. Aims

This research aims to elucidate the 'powerful' roles mobile-phones play within South African TEFL and draws on them to find a more local MALL-informed pedagogy for adult learners in higher education. Drawing upon the cultural-historical tradition which underscores the critical, cultural/political context of technology-in-action with teaching (Oliver, 2011), I view mobile phones as mediating artefacts within language learning.

As mediating artefacts, I see mobile devices as 'sense-making' tools. Their historicity of use becomes shaped and transformed through the learning activities they are used within (Hardman, 2008; Säljö, 1994). For example, mobile phones may be 'explicit' mediators when a teacher instructs students to use mobile dictionaries to uncover new word meanings in a reading text. At the same time, mobile phones operate 'implicitly' when students use their mobile phones to communicate or publish using new words they have found (Kozulin, 2003). While there are other ways mediators can operate (Hardman & Amory, 2015), central to CHAT is that mediators are used by a culturally advanced peer to expand an individual's learning potential in his or her society (Donato, 1994; Gallimore & Tharp, 1992; Vygotsky, 1962, 1997).

Of central interest to me is that mobile phones are identifiable as emergent technologies in their ability to not only disrupt pedagogies, but also to be unpredictable in their use (Ng'ambi & Bozalek, 2015). This disruptive, unpredictable force of mobile technologies resonates in CHAT's subsequent elaborations (Leont'ev, 1981), especially third-generation Activity Theory (Y. Engeström, 1987), which highlights the disruptive/ transformative potential of mediating artefacts in the contradictions they pose. Contradictions manifest in dialectical

double binds (two competing messages) within or between different activities which allow new perceptions and understandings of artefacts and the systems they are contained within (Y. Engeström & Sannino, 2011). By highlighting and tracking contradictions, CHAT provides a useful heuristic to understand the potentially powerful disruptive/ transformative ways mobile phones operate in language-learning which can lead to new understandings of subjectivity, positioning and artefact use in the language classroom (Y. Engeström, 1987).

Furthermore, these understandings, created through tracking contradictions, can be exploited through CLs. Based on CHAT's understanding of expansive learning, CLs can facilitate the creation of new, locally situated pedagogies (Virkkunen & Newnham, 2013) that can inform a MALL-pedagogy for adult language learners in South Africa. This formative intervention method is renowned for its ability to adapt to the context of its intervention sites and promote participants' transformation of their activity in meeting the changing demands they experience (Y. Engeström, 2011b; Sannino & Engeström, 2017; Sannino, Engeström, & Lemos, 2016). I find the adaptability of CL's to be crucial in this research undertaking. As stated above, South African higher education is experiencing a tumultuous period where the *Must Fall* student protests are calling for profound transformation (see Section 1.1). These protests have in the past resulted in universities being closed down (Francis & Hardman, 2018), and a research method that can not only account for, but also integrate these disruptions into its design will be a necessity if it is to uncover the 'powerful' ways technology and pedagogy interact in the current South African context. In sum, this research aims to harness this robust intervention method to realise transformative pathways for English Language Teaching in South African higher education institutions.

1.4. Research Questions

In light of the above, this study's research question is stated as:

RQ1: *How can a Change Laboratory research-intervention develop a meaningful integration of mobile technologies and English language teaching, in the context of a South African higher education language centre?*

From this, three sub-research questions were derived:

RQ1.1. *What potential contradictions are evident in the use of mobile phones as artefacts in the activity of language learning at the Academic Language Centre (ALC)?*

RQ1.2. *To what extent can the Change Laboratory method be adapted to suit the current local context of the research-intervention site and still facilitate Expansive Learning Actions towards meaningful MALL integration?*

RQ1.3. *What potential changes in the use of MALL occur when these contradictions are collectively drawn upon and addressed by the participants and researcher in a Change Laboratory?*

1.5. Summary

Above, I have introduced the 'questionable' position of English language education in South Africa regarding its need for change within a broader educational system that is itself in the midst of upheaval. I argued that positions which hold the use of emergent technologies, like MALL, for English language teaching could only potentially transform these issues if radical new avenues for using technology meaningfully in teaching English can be found. I have stipulated that the use of CHAT and CLs can provide a pathway to identify and cultivate meaningful English language instruction utilising emerging technologies in South African higher education.

1.6. Thesis Structure

This dissertation is organised into two sections. The first section (Chapters 1 to 4) provides the context and background of the study. In the second section (Chapters 5 to 8), I chronicle how participants' contradictions progressively intensified along the expansive learning cycle (see Figure 1). The cycle holds that the internal conflicts participants experience in their activity will increasingly manifest their discord until they are taken up by practioners to invoke systemic change in their practices (Virkkunen & Newnham, 2013).

Chapter 2 presents the literature and theory that informs this study. I provide a more in-depth discussion of the issues of access and inequality facing English language teaching in South Africa and the potential ability of MALL to transcend these issues. This discussion is followed by how a cultural-historical approach to understanding educational change through CHAT and CLs can offer radical new potentials in order to realise the transformative potential of mobile technologies.

The third chapter provides the methodological framework of this study. I present an argumentative grammar for this participatory, formative research-intervention that draws extensively upon the principles of 'double-stimulation' and 'ascending from the abstract to the concrete'. Further, I introduce the research context and participants highlighting my approach to data collection as well as data analysis.

Chapter 4 affords my first data analysis chapter. It offers my findings from my preliminary ethnographic study of the ALC work practices with Advanced language students. Using a CHAT frame, I firstly unpack the vertical dimensions of work practices at the ALC, where I outline a potential conflict of motives arising from its placement as an income-generating unit for the university, versus its ability to meet student language-learning needs. I juxtapose this analysis with a closer examination of horizontal work practices of two teachers' advanced classrooms where, respectively, the potential contradictions from mobile phone use were seen to constrict and expand opportunities for developing students' communicative competence. From this, two potentially contradictory sites within the ALC's activity were shown as promising for the CL intervention: the centre's rules of a 'communicative approach pedagogy' and the teacher-centricity in division of labour.

Following the preliminary analysis, I begin to historically trace the development of participants' Expansion Learning actions in Chapter 5. This chapter chronicles the progression of participants' *dilemmatic* questioning actions in light of their exposure to mirror data drawn from the preliminary ethnographic study. Of particular resonance for this study was teacher-participants' questioning actions that underscore the problematic role global coursebooks pose and their questioning of always being 'on show' in the language classroom.

Chapter 6 documents participants' analysis actions in the expansive learning cycle. Here, participants were involved in double-stimulation principled tasks which required them to account for both the deeper cultural and historical antecedents of their activity. I trace how teacher-participants' feelings of time and workspace demands of their activity were articulated as *conflicts* and *critical conflicts* in their inability to achieve the type of classroom communication they wished for, or meet students' language learning needs. Added to this, was participants' further identification of secondary contradictions between the division of labour, mediator and rules of their activity

The final analysis - Chapter 7 - discusses the more profound modelling work that was done during this research-intervention. It accounts for how participants' expansive learning actions moved to a more precise articulation of their experienced contradiction, and in so doing were able to formulate a new object for language learning: language instruction as co-creation. Participants' actions were analysed in light of their modelling how 'language instruction as co-creation' could potentially be carried out with mobile technologies which would, in turn, be used in their experimental lessons.

Chapter 8 provides the conclusion for this research-intervention. It specifically discusses the main findings of this study, its generativity in line with the intervention site and its novel research contributions. I outline how teacher-participants' experimental lessons with their new model resulted in them being more open to the potential of using technology in their classrooms. Moreover, I discuss how a language learning pedagogy based upon the object of co-creation could facilitate a transformative move in TEFL, especially in South Africa.

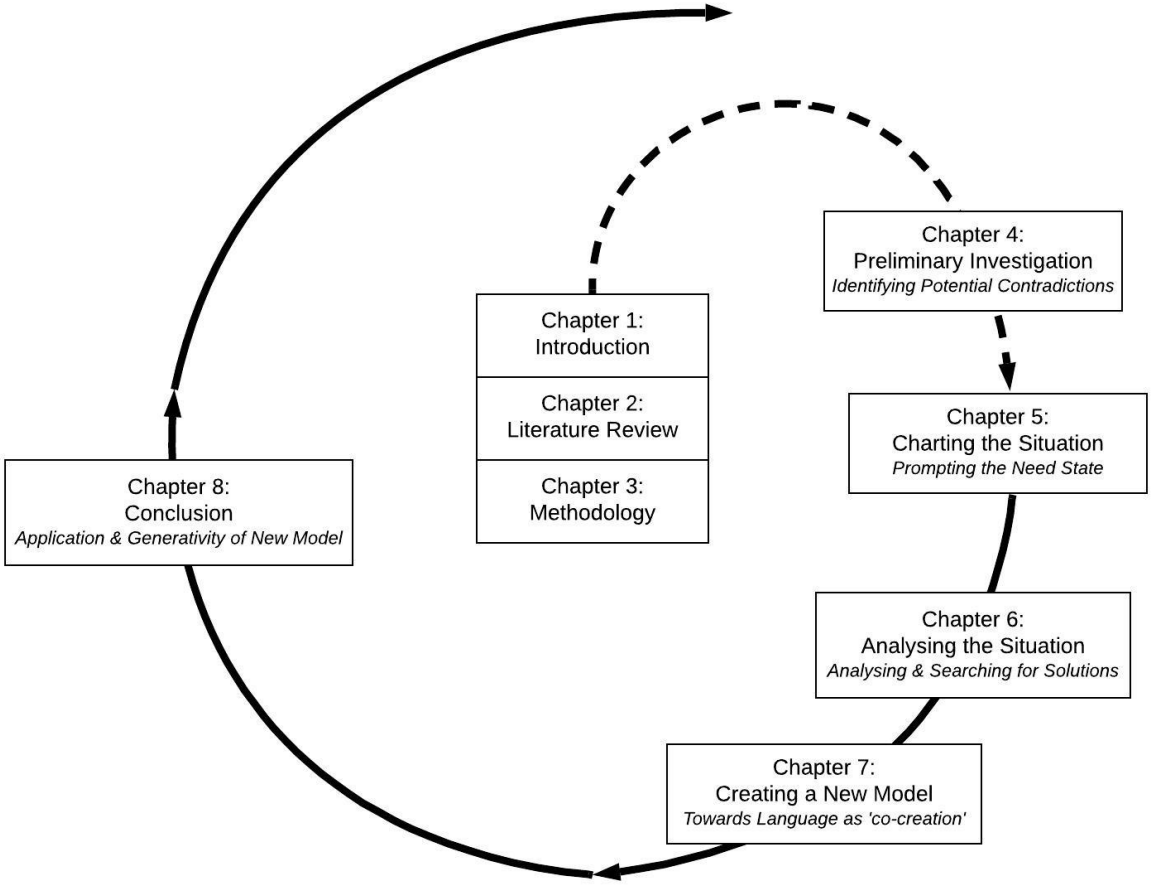


Figure 1: Overview of Dissertation, structured according to Y. Engeström's Expansive Learning Cycle (1987)

Chapter 2: Literature Review and Theoretical Framework:

> The problem of education in its relation to direction of social change is all one with the problem of finding out what democracy means in its total range of concrete applications; economic, domestic, international, religious, cultural, economic, and political. (Dewey, 1937, p. 473)

2.1. Access & Inequality in South African Higher Education: Possibility for transformation?

Access has been a prevalent issue that has long plagued education globally. UNESCO's (1990) adoption of the World Declaration of Education for All (EFA) recognised the fundamental role that access to teachers, materials, sites and opportunities for learning have in promoting individual empowerment, as well as broader social (and global) development. Herein, vast disparities people universally experience in their opportunities to access education concerning their geographical location, socio-economic level, gender, race and age were stressed, culminating in a long-term commitment to redressing these issues (see UNESCO, 1990, 2000). More than twenty-five years later, while some significant progress has been made, providing equitable access to education, especially in developing economies (such as those in sub-Saharan Africa), remains an unrealised vision (UNESCO, 2015).

As the quote above by Dewey (1937) notes, this difficulty in creating change in education relies on the complex navigation between the social, political and economic forces that circumscribe the core of what *EFA* entails, namely universal access. South Africa's recent higher/ adult education student movements such as 'Rhodes' and 'Fees Must Fall' (Cilliers & Aucoin, 2016; Molefe, 2016; Motala et al., 2018) provide examples of this complexity. These movements are the result of the debilitating effects that historical and unequal access to education in all sectors have had on South Africans (Badat, 2010; Spaull, 2013a, 2013b). These effects further resonate within the broader African diaspora's call for transformational access to education (see Maringe & Ojo, 2017; Strong, 2018). Added to this, is the continuing research that clearly demonstrates that South Africans entering higher education are notably academically unprepared for their university studies, especially in mathematics (Engelbrecht & Harding, 2008; Jaffer, Ng'ambi, & Czerniewicz, 2007; Spaull, 2013b). These clear links between educational access, academic success and social mobility/ transformation in postcolonial territories (Spreen & Vally, 2006; Subotzky & Prinsloo, 2011) have furthered and entrenched the call for the 'decolonisation' of education (Shizha & Makuvaza, 2017). Subsequently, they have refocused a particular spotlight on English and its questionable role in educational access (Brock-Utne, 2010; Heugh, 1999, 2002; Phillipson, 1996, 2006).

However, these recent movements and criticisms are juxtaposed with the DHET's (2017) drafting of new policies which further 'internationalization' funding quests for South African universities, including an increased presence on the global and higher education marketplace. To do so entails attracting students from foreign countries, which means the ability to collect higher fees, but at the same time requires that these degrees be internationally transferable, requiring a particular focus on English as a medium-of-instruction and the inclusion of internationally-relevant curricula (Altbach & Knight, 2007; Kishun, 2007; J. J. Lee & Sehoole, 2015).

Within higher education, the global trends towards furthering internationalisation have been strongly linked to furthering the advancement of English (Phillipson, 2006) and its position of being a 'neutral' and 'bridging language' that offers a link to modernity and economic progress (Rubdy, 2008). This questioning of the place of English within the academy and its facilitation of 'access' and 'success' has been a protracted preoccupation within the critical turn in Teaching of English as a Second/ Foreign Language (TESL/ TEFL) (Belcher, 2004). As mentioned earlier (see Section 1.1), the authenticity, acceptability, adaptability of TEFL, its methodologies, as well as their learning resources, have long been under criticism for their ability to account for, and be sensitive to the local contexts they are deployed in (Kumaravadivelu, 1994, 2006; Magnan, 2007; Pennycook, 1989).

However, as the recent student movements call for 'decolonisation' in South Africa underscore, this privileged access to English is not always equally available to all students, (Spaull, 2013a, 2013b) nor does learning English necessarily encapsulate local knowledge and identities (Norton, 1997). It is in this sense that I argue that South Africa lies in a contradictory state in its need to assimilate educational access between both its local (the need for decolonisation/ local students) and global pressures (the need for further internationalisation/ international students) in providing *EFA*. It reflects the underlying tension in "the assimilation of the 'powerless towards the powerful' as communities and individuals find themselves torn between the desire to enhance their economic prospects and maintain their linguistic/ cultural affiliations" (Rubdy, 2008, p. 216).

The role that technology in education has played in facilitating these conflicts between recent local and global movements in education cannot be downplayed. The increased use of technology in higher education has been seen as a primary driver for updating South Africa's and other developing economies' educational systems to be on par with global education trends

(DHET, 2017; Isaacs, 2012a, 2012b). Moreover, the use of technology for education has been regarded as a way to mitigate the disruptive state that higher education has found itself in since the 'Must Fall' movements. For example, universities have advocated the use of *distance/ blended learning* as an alternative learning pathway to bolster the completion of degree curricula (Ng'ambi, Brown, Bozalek, Gachago, & Wood, 2016) while students' have used technologies as a means to collectively organize and discuss their 'decolonisation' movements (Francis & Hardman, 2018).

With this in mind, the problem that South Africa faces is one of how to reconcile the place of English language learning in the higher education landscape and address its need to 'decolonize' and 'internationalize'. For me the key to this is not viewing these needs as mutually exclusive, but rather finding drivers of pedagogical change that draw on both by facilitating English language learning (Belcher, 2004; Canagarajah, 2001). To do so, I believe calls on a critical inquiry as set out by Phillipson (2006) which investigates the affordances for emergent technology in higher/ adult education, specifically mobile learning (ML) and the powerful ways it disrupts and can potentially transform education, to which I now turn.

2.2. Uncovering the Potentials for Mobile Learning for Education

2.2.1. Transforming Access: Mobile Learning Crossing 'Space' and 'Time'

One of the major difficulties in providing *EFA* that UNESCO has recognised, especially within developing economies, resides in the issue of resource allocation: "the pledge… that no country should be thwarted in achieving the *EFA* goals due to lack of resources has been one of the biggest failures of the *EFA* period" (UNESCO, 2015, p. 279). The development and dispense of educational resources, creating and initiating teacher-development programs along with the substantial costs of building sites for learning are expensive undertakings for any government, let alone nations, like South Africa, that are already financially and politically strained.

One of the solutions that has been proposed lies in developing economies making greater use of emergent technologies such as mobile devices (Isaacs, 2012a, 2012b; Kukulska-Hulme, 2010c). However, frequently cited to curtail these initiatives is the 'digital divide' between Africa and the West that posits technological access as more available, and the ability to use it is more 'native' to the West than to the rest of the world (Fuchs & Horak, 2008). These criticisms have come under fire regarding these binary categories of digital 'have' and 'have-

nots'/ 'natives' and 'immigrants', with research instead showing a continuum of access and literacy of digital device use (Brown & Czerniewicz, 2010; Warschauer, 2002).

To illustrate this further, in the next two years it is estimated that just under three-quarters of the world's population will have access to a mobile device (GSMA Intelligence, 2016, 2017, 2018, 2019) with most of this growth emanating from African economies (see Aker & Mbiti, 2010; McCarthy, 2016; Poushter, 2016). This surge in mobile device access is further complemented in that most individuals in sub-Saharan Africa prefer mobile devices as their primary means of telephonic communication (Pew Research Center, 2015) and their ideal platform for accessing digital/ online services (GSMA Intelligence, 2017, 2019). Of particular relevance to this study is the fact that cell-phone ownership numbers in South Africa almost equal that of America and that individuals within Africa are one of the top users of online social networks (Pew Research Center, 2015). Consider these statistics in light of the recent Limpopo textbook delivery crisis (see Chrisholm, 2013; Spaull, 2013a; Stein, 2017) or other developing economies where educational resource distribution remains a critical issue. The statistics above offer a potential platform (mobile phones) for learning material delivery which is readily accessible and not reliant on erratic government co-ordination or time-consuming physical distribution channels.

Moreover, is the fact that the statistics above suggest many learners and teachers may already own and use their mobile devices to access, create and digitally interact with virtual content which further supports the potential of mobile devices as an educational resource. It is little wonder then, why UNESCO (Isaacs, 2012a, 2012b) sees potential in teachers and learners utilising their own devices in developing economies to alleviate and open up funding for institutions and governments towards other equally-worthwhile aspects involved in supplying educational access for all.

The other reasoning behind the turn towards the potential use of mobile devices and other emergent technologies for learning lies in how they reformulate traditional barriers in accessing quality education and pedagogy. In South Africa, some of the most pervasive obstacles to *EFA* are found within the classroom, as many teachers are poorly supported and lack sufficient content knowledge; the unavailability and poor allocation of relevant learning resources (Modisaotsile, 2012) as well as inadequate learner preparedness for higher education in terms of 21st century 'literacies' and language proficiency (Jaffer et al., 2007; Ng'ambi et al., 2016).

In light of these dilemmas, I would argue that these issues stem from antiquated educational practices of the classroom concerning how it conceptualises 'time' and 'space'. Traditionally, teachers with sufficient content knowledge are ideally given an allocated time and specific classroom space to teach their learning content. During this time, teachers and learners make use of the physical resources available to them in those learning spaces, most commonly approved textbooks for the subject/ content area and whiteboards. After that specific learning time has passed, the teachers or students move to another classroom space (depending on the educational institution's rules), and another content area for learning is introduced, following the same afore-mentioned format.

Here, 'time' in which learning can occur is regulated and fixed within school hours to fit within the teaching and learning schedule of the institution and in the broader sense, the set curriculum. Furthermore, the 'space' in which learning occurs is also fixed and assigned to a classroom, with rationed textbooks and other learning resources available in that learning space. In countries such as South Africa, this presents a challenging barrier to access, as despite the lack of actual spaces to learn, the few available classrooms often house large student numbers, have insufficient relevant learning resources, and brave limited teacher knowledge or support (Modisaotsile, 2012). Put simply, there is just not enough 'time' and adequate access to resources within these learning 'spaces' to ensure that all learners are given equal opportunities to education – so education remains 'bounded' within the restrictions of impoverished physical learning settings.

The use of mobile devices for learning (ML) "has the *potential* [emphasis mine] to transcend these spatial and temporal restrictions" (Kearney, Schuck, Burden, & Aubusson, 2012, p. 4; Taylor, Sharples, O'Malley, Vavoula, & Waycott, 2006) by not regulating learning into formalised, restrictive classroom spaces as explicated above. Learning can become mobilised (Sharples, 2000), in that it can occur 'anytime, anyplace' as it does not require a formalised learning setting, thus bridging time and space to what works best for the teacher and learner. For example, a teacher in a low-income school need not worry about the provision of textbooks for an entire class, or the need to update these learning materials to match contemporary curricula. The learning content to be covered could be virtually pushed to all the learners' mobile devices, allowing both the teacher and students access to the material. Furthermore, as the curriculum or content needs to be updated, this does not lead to the need to physically create or distribute entirely new textbook series, but rather virtual learning content can be updated

and at the disposal of learners seamlessly. Additionally, the teaching of the material does not wholly reside in the mastery of the content the teacher brings to a class, which itself may be dated or lacking. By mobilising learning content to learners, the teacher's expertise as an educator is placed in the forefront, changing their role from 'transmitter' of knowledge to a 'facilitator' of learning. Accordingly, the focus then shifts to creating meaningful learning experiences for learners rather than mere transmission of curriculum content (Isaacs, 2012a; Kukulska-Hulme, 2010c; Vosloo, 2012).

A further case would be adult learners that are working and studying part-time. Should their course make use of ML, they need not be hampered by their inability to attend classes physically. Their learning and participation in the class can occur on their commute to work, during their lunch breaks or at other times more suitable for them. For learners in more remote settings this facilitates access to education, which learners in more centralised areas with ready accessibility to learning institutions and resources take for granted.

The examples above show the potential for ML to open up a myriad of pathways to learning whether that be synchronous (with a teacher and learners in class) or asynchronous (interacting with educational content online at a learner's own pace), or lying somewhere in-between (Kukulska-Hulme, 2009) that move us beyond the traditional limitations of the classroom in terms of 'time' and 'space'. It is this capability for mobile devices to revolutionise/ reconceptualise learning that has led to them being consistently featured 'as an emergent technology to watch' in international publications such as the Horizon Report, that has repeatedly featured ML in its various incarnations and features since 2005 (Johnson, Adams Becker, Estrada, & Freeman, 2015; New Media Consortium & EDUCAUSE Learning Initiative, 2005).

This ability for ML to address traditional barriers of access of EFA in Africa has been highlighted by many (Isaacs, 2012a; Motlik, 2008; Ogunlesi & Busari, 2012; Vosloo, 2012, 2016). Yet, I would argue that it is the exact emergent nature of ML and how this technology is uncovering new possibilities within language education that indeed holds its potential for transformational access in South Africa higher education for English language teaching and learning. Below, I trace global research inquiries of ML's pedagogical use, exploring its capabilities and challenges to our contemporary understandings of language learning and literacies that can facilitate exciting new avenues of what language learning may mean in the

21st century and beyond (Jantjies & Joy, 2012, 2015; Kukulska-Hulme, 2009, 2010a, 2010b, 2010c).

2.2.2. ML as an Emergent Perspective: New Avenues for Transforming Language Learning

The term 'emerging technology' may appear to be a misnomer when referring to mobile phone use in education, as there has been a strong tradition in research and use of mobile phones for almost 40 years (Parsons, 2014). However, in Rotolo, Hicks & Martin's (2015) attempt to operationally define 'emerging technologies' their selected five identifiable attributes of "(i) radical novelty, (ii) relatively fast growth, (iii) coherence, (iv) prominent impact, and (v) uncertainty and ambiguity" (p. 1604) strongly link to other definitions of emerging technology (Ng'ambi & Bozalek, 2015) as well as recent research in mobile phone use in education (Crescente & Lee, 2011; Kukulska-Hulme, 2010c).

More explicitly, the general ambiguity surrounding ML/ m-learning and its subset MALL, is their actual definition (Crescente & Lee, 2011; Frohberg, Göth, & Schwabe, 2009; Laouris & Eteokleous, 2005). The field has had difficulty in establishing and separating itself from the broader fields of e-learning, characterised in the use of electronic communication for learning goals, and computer-assisted (language) learning (CALL) which focuses on computers (Crescente & Lee, 2011). However, in contrast to these other fields which have drawbacks in needing a single point of contact for access or specific device access, m-learning/ MALL is distinguishable in its ability to be unconstrained by physical access points and the ubiquity of mobile devices (Kukulska-Hulme & Shield, 2008). Nevertheless, the consensus in the field relies on the use of devices for (language) learning which promote portability, personal access, ownership, connectivity and the blurring of traditional learning boundaries (Kukulska-Hulme, 2009; Pimmer, Pachler, & Attwell, 2010). Agreement has also been reached on investigated m-learning/MALL devices including: mobile/smartphones, personal digital assistants, electronic dictionaries, MP3 players or portable music players, voice recorders and tablets, with recent studies into mobile/smartphones and tablets increasing as their capacities continue to evolve in comparison to others (Burston, 2013; Chinnery, 2006; Duman, Orhon, & Gedik, 2015).

Furthermore, mobile phones' continual increase in hardware capabilities illustrates their 'radical novelty' and 'relatively fast growth'. Mobile phones have developed in their initial limited capacity to only supply simplistic forms of communication (SMS and calling) to

increasingly more complex and immediate communication forms, including a range of functions such as GPS, internet connectivity to name but a few (Godwin-Jones, 2011; Kukulska-Hulme, 2012). These distinct novelties of the device, along with their portability, mean that current perspectives and frameworks from CALL and e-learning may no longer be suitable for understanding m-learning/ MALL (Vavoula & Sharples, 2009 as cited by Ting, 2012). To this end, there has been a recent surge in the number of m-learning and MALL studies in investigating the potentials of mobile devices (Baran, 2014; Burston, 2013), further reflecting the 'fast growth' of the field itself.

In terms of 'coherence' and 'prominent impact' that define emergent technologies (Rotolo et al., 2015), recent reviews of m-learning/MALL indicate that there has been acute focus on identifying usability and effectiveness trends, especially in terms of content delivery and design (Burston, 2013; Duman et al., 2015; Kukulska-Hulme & Shield, 2008). Furthermore, these trends have been linked at ushering in new learning approaches such as ubiquitous learning (see Liu, 2009; Pegrum, Oakley, & Faulkner, 2013), lifelong learning (see Sharples, 2000) and seamless learning (see Lung-Hsiang Wong, 2012). All of these learning approaches have been premised on the ability of mobile learning to effectively blur the boundaries between formal and informal learning contexts (Jeng, Wu, Huang, Tan, & Yang, 2010). At the same time, while there have been initial steps taken towards the development and use of theory to inform these new approaches, several reviews have highlighted that this is an area that has been under-researched (Duman et al., 2015; Ting, 2012).

These potential weaknesses stress the importance of critical inquiry into areas that have not been foregrounded in previous research. They secondly lead to the need for creating alternative understandings of the exact intricacies that take place when teachers and learners engage in MALL if they are to be applied to the uniqueness of the South African context. It dictates the need to examine the exact affordances of MALL for language learners and critical analysis to emerge new areas for possible growth.

2.2.3. The Affordances of MALL for Language Learning

As stated above, recent research into mobile devices as an emergent technology has foregrounded that mobile phones for language learning are seeing a surge of research interest and are positioned as key in orchestrating change in language education (Kukulska-Hulme, 2009). This positioning of mobile phones in terms of their affordances for language learning is

related to their potential to enhance language acquisition, be positively perceived and taken up by learners and teachers, as well as the possibilities they present as educational tools (Viberg & Grönlund, 2012). I will briefly examine recent literature reviews and exemplary studies reflecting these affordances underscoring their importance in MALL research and possibilities for language education enhancement.

Burston (2013) supplies a 575 list of recent MALL studies conducted between 1994-2012 which draws from journal periodicals, conference proceedings, journal reports, as well as master and doctoral dissertations. Frequently cited studies found within often refer to project implementation studies which focus on the effectiveness of MALL for language acquisition. This finding concurs with other literature reviews which have exclusively limited their reviews to refereed and established journal publications to this dominant focus of MALL studies (Duman et al., 2015; Kukulska-Hulme & Shield, 2008). Implementation studies have been broadly categorised by Viberg & Grönlund (2012) as facilitating specific foci: a *proxy* view of technology wherein the focus is on student and teacher perceptions of mobile use; a *tool* view of mobile learning that exclusively measures aptitude differences in learners' acquisition; and an *ensemble* view that follows the social-constructive aspects of technology in language acquisition.

Often cited studies that exemplify both the *proxy* and *tool* use of mobile technologies are those which focus on the difference in students' performances in language acquisition by mobile phones versus traditional measures, or measuring students' desire and attitude towards mobile phone instruction, such as vocabulary (Wu, 2015) or listening (Abdous, Camarena, & Facer, 2009). For example, Başoğlu & Akdemir's (2010) study assigned 30 students to an experimental group (which used a mobile phone vocabulary acquisition program) and compared it to a control group of 30 students (who used flashcards). Their study collected both qualitative data on student perceptions and quantitative data on score differentials. They found that both groups' vocabulary acquisition increased, with mobile scores showing a slightly significant improvement. However, both groups advocated that the vocabulary application and flashcards were enjoyable learning mechanisms.

Similarly designed studies reported similar findings, as in Alemi, Sarab & Lari's (2012) study on using SMS applications to learn an academic word list, as well as Sariçoban & Özturan's (2013) study on students' perceptions of using SMS as a vocabulary tool. Wu's (2015) study used an English academic vocabulary application for Chinese learners which reported that the

experimental group retained 8.49% more than the control group. As with the other studies, Wu (2015) relates these findings under the affordances of mobile phones which are firstly their: "convenience and [secondly, their] accessibility; the third is the technological functions incorporated into the program that make learning testing and reviewing easy" (p. 10).

Within these studies, it is the mobile device as a tool that is responsible for the learning and results, with very little emphasis given to the learning context itself, other than the easy access students have during their leisure time or other informal contexts (Alemi et al., 2012; Başoğlu & Akdemir, 2010; Wu, 2015). This sole attribution to mobile devices perpetuates a discourse around how the mobile phone alone changes students' language learning due to how learners frame it and are in turn affected by it. Only in circumstances where learners have become weary of the device is the importance of context mentioned. For example, in Başoğlu & Akdemir's (2010) study, a learner states: "Initially I used 5 to 10 minutes, but then it increased up to one hours or two hours, but lately it dropped" (p. 5). It is only here, where the context of students nearing the end of the semester, that the effect of context in determining the frequency of mobile device use for language learning is discussed.

While the *proxy* and *tool* MALL studies above are essential to clarify the extent to which mobile devices can aid instruction, they have also been criticised for not accounting for the complexity of language learning, levelled at how these are informed through behaviourist language learning strategies (Joseph & Uther, 2009). Even in cases where there has been an explicit introduction of cognitive psychology's language learning principles in the design of MALL software or device instruction with vocabulary to address these problems regarding the complexity and pedagogy of MALL instruction, some fundamental issues remain (Burston, 2014). Two exemplary cases are: firstly, Thornton & Houser's (2005) 3-tiered study of mobile vocabulary acquisition around *Learning on the Move (LOTM)*, a timed interval vocabulary e-mailing system, and *Vidioms*, a web-based video platform to provide a visual explanation of idioms. Their study illustrated that students readily appropriated and utilised these MALL instructional methods, with students not being hampered by the small screen size. Secondly, Stockwell's (2008) study, which investigated 75 Japanese students' preparedness for mobile vocabulary acquisition proposed an intelligent tutor system which created profiles for the learners and designed activities for areas they found difficult.

Both studies present a move towards the personalisation of instruction and accounting for broader factors influencing learning. These include class timings, environmental factors such

as the timing of activities, and learner ownership into their design (Stockwell, 2008; Thornton & Houser, 2005). Yet, they follow the trend of other studies wherein there is little contextualisation into the language learning process. Learners are left idle to merely receive and respond to content as the mobility of the device is emphasised and afforded prominence - not the learners. Herein, while more extensive contextual areas have influenced design, they have no impact on the actual learning facilitated by the device. In this sense, these MALL studies further support traditional models of teacher-to-student learning with little emphasis on creating actual communication or communicative tasks (Kukulska-Hulme & Shield, 2008). Furthermore, they frame the mobile device as the enabler of language learning in its effectiveness, ease of use and learner willingness (Stockwell, 2008; Thornton & Houser, 2005).

Constructivism and collaboration in MALL instruction are supported by *ensemble* studies that take the wider social ambit of learning into account (Viberg & Grönlund, 2012). In effect, it is the context that facilitates learning, as the interplay between digital media and the learning activities have been carefully orchestrated to create the authentic 'pull' for learning and engagement to occur (Tessmer & Richey, 1997; Ting, 2012). These studies mainly focus on the productive skills of TEFL (speaking and writing) and, to a certain extent, listening (Joseph & Uther, 2009).

One study emphasising the power of taking context into the design was the *Handheld English Language Organization* (HELLO) which used sensors and augmented reality (AR) to create an English language learning experience on a high school campus (Liu, 2009). The study used a two-group experimental design with students being placed in the control (which used paper materials) and the experimental (utilising the HELLO system). Four phases defined the orchestration of activities: a preparation phase which administered a pre-test; a self-study phase of specific language areas; a context-aware phase focusing on the targeted language in context; and ended with a task-based activity. Of particular significance is the context-phase where HELLO users explored the campus with the system, allowing them to record specific phenomena around the campus, while the control group listened to a conversation and printed materials matching the HELLO systems input. The final phase involved learners completing a task-based activity wherein the experimental group participated in a story-race using their HELLO devices, while the control group completed a similar race with a voice-recorder. The results showed that the experimental group outperformed the control in all measures as well as facilitated more creative opportunities for students interacting with the device.

As previously stated, there has been a tradition of MALL studies assessing the extent to which short messaging applications can improve language acquisition. Jin & Erben (2007) designed a qualitative MALL study on eight Chinese foreign-language speakers collaborating with Native Chinese speakers on several intercultural tasks. The study was underpinned by the need for authentic communication tasks to develop foreign-language learners' proficiency as well as increase intercultural sensitivity. The findings illustrate that by incorporating technology with sound collaborative pedagogy and authenticity, learners were found to have increased critical thinking, self-reflection, cultural identity and intercultural awareness while developing their language proficiency.

Wong, Hsu, Sun, & Boticki (2013) utilised a mobile game to develop primary students' orthographic proficiency in Chinese characters. The game was designed to enhance students' ability to make competitive and collaborative choices in their learning, focusing more on peer scaffolding to enhance the learning. The researchers located the strength of the study in its development focusing on the mobility of both the learner and the mobile device, as it created more opportunities within the learning context for learners to explore and create alternative solutions to problems they experienced.

Another MALL study demonstrating the need for context-in-design involves primary learners' creation of visual images to describe English prepositions and Chinese idioms (L-H. Wong & Looi, 2010). By focusing on learning in informal contexts, mobile devices can function as tools for data collection, communication, language assistance, production and interaction. They designed two cases to exploit these functionalities in a *"mobilised* lesson… a lesson that starts with an existing lesson but then is transformed to make use of the mobile technologies to enhance student learning" (L-H. Wong & Looi, 2010, p. 424). In the two case studies, groups were given a lesson, one on prepositions, and the other on idioms. The students were tasked to capture images that visualised the given word or idiom meaning and upload them to a web page to be discussed or transformed. Findings illustrated that learners benefited from the authentic, seamless learning experience that effectively utilised both formal and informal language learning contexts. The researchers noted that this positively influenced learners' self-directed learning, as well as collaborative peer learning. However, there were problems with achieving full participation from students, as some parents barred their children from using their mobile devices outside the home or class to take the needed pictures.

Similar results were obtained in Cheng, Hwang, Wu, Shadiev, & Xie's (2010) study of *StudentPartner* which used GPS and multimedia to create speaking and listening activities on students' mobile devices around campus. The project spurred the need to create a ubiquitous learning design wherein students' English learning outside the classroom (on-campus) can feed into their English studies in class. Preliminary results showed that learners who utilised the system were willing to do so, and performance in presentation activities correlated to improved learning achievement scores. However, in their data collection of student willingness and interviews, it was demonstrated that there was low system usage by students due to the system not being a part of a formal course.

These five studies in language learning demonstrate that prioritising learners' mobility to shift between contexts instead of devices can have profound effects on MALL. Employing a social-constructivist paradigm in design exploits the affordances of mobile phones in their ability to create immersive, authentic and meaningful experiences for the learners, which in turn facilitates seamless boundary-crossing through formal and informal learning contexts. More importantly, while all the studies demonstrated a concern for contexts, aspects such as power were not taken into account. This lack of focus on power relations can be seen in: parents restricting student mobile phone access (L-H. Wong & Looi, 2010), non-integration with formal course design (Cheng et al., 2010), or students' flexible groupings not being thoroughly analysed (L. H. Wong et al., 2013). These factors evidence that in these MALL studies, power relations are not incorporated nor analysed in MALL projects' design.

One study which has incorporated power relations into MALL project design was Comas-Quinn, Mardomingo, & Valentine's (2009) study that focused on mobile blogging to promote constructivist, informally-situated language learning opportunities for students on a Spanish open-distance learning course. Microblogging was selected as a vital tool as it would enable students to express their experiences and reflections, regardless of whether they had visited or were living in Spain. Students were instructed to describe, capture or record specific experiences and post these to the mobile blog site, which would then be used in the class as points for discussion and interpretation. Their use of this design centres on placing the learner at the centre of activities, while embedding them within situated informal learning contexts, ensuring they construct their own, individual representations, an activity particularly suited to MALL (Naismith et al. 2004, Comas-Quinn et al., 2009). While not formally assessed, the authors acknowledged that in the pilot study, learners reacted positively to the project. More

importantly, the authors noted that the novelty of the learners' agentive use through their mobile blogs facilitates 'new millennium literacies' of critical thinking, creativity and collaboration. In this, the power of the device, along with how the learner has been intended to use it, shifts traditional language learning power relations and interaction of teacher-to-student to student-to-teacher/students (Zhang, 2010).

However, while the design acknowledged power relations, there was no data nor formal analysis ascertaining if the transformational power relations referred to had indeed occurred for/ or used by participants in this way. Comas-Quinn et al. (2009) located this to the 'noisiness' of deeply personally situated MALL studies which are hard to evaluate. This 'noisiness' suggests deeper problems within MALL design frameworks in finding pathways to cut through the 'noise' in order to evaluate how power is implicated in MALL applications or affects them.

In sum, these studies and literature reviews of MALL concur that mobile devices for language learning are fostering new understandings and new types of interactions as devices continue to change (Godwin-Jones, 2011; Kukulska-Hulme, 2009; Miangah, 2012). The studies reflected upon reference behaviourist, cognitivist and constructivist understandings of MALL, illustrating a move towards changes in implementation are occurring in making language learning a more individualised and personal, collaborative and constructive experience (Crescente & Lee, 2011; Kukulska-Hulme, 2012; Kukulska-Hulme & Shield, 2008). This has led to innovative applications in educational strategies which facilitate seamless, ubiquitous and lifelong learning, and reflect the blurring of education's virtual and physical boundaries is taking shape (Jeng et al., 2010; Solé, Calic, & Neijmann, 2010) which increasingly place the learner at the centre (Ting, 2012; Lung-Hsiang Wong, 2012).

At the same time these studies' affordances of mobile devices for MALL demonstrate that while research studies show a priority in determining the causes for MALL, they are not defining or exploring the greater variables, such as power, that impact upon language acquisition (Duman et al., 2015). This lack of exploring greater variables shows a focus more on the benefits of designs than the internal complexities and contradictions that facilitate language learning, stressing the need for more emic views drawn from mobile educational contexts (Yang, 2013).

2.2.4. The Fallacy of 'Affordance' in MALL and Technology in Education

Other theorists have agreed with Yang's (2013) perspective on the need for more emic perspectives in the field of MALL studies and more wide-ranging technology in education,

such as Salaberry (2001) and Oliver (2011). Both theorists are concerned about the variety of different perspectives that have converged to explain the benefits of ICTs in education.

Oliver (2011) describes his apprehension in the problematic use of 'affordance' of technology in education studies, which facilitates an understanding that interactions with technology naturally shape people's wider interactions in society and learning. However, these 'affordance' studies do not explain how or why people come to use technology in 'natural' ways nor discuss how divergent interactions occur: "The rest of the elements of the practice – the people, their purposeful action, their values and concerns – are ignored, perhaps because so many of them are ephemeral, whereas the technology remains once activities finished" (Oliver, 2011, p. 375).

He equates these affordance accounts of technology in learning as providing an essentialist discourse that allows people to see technology as natural. Oliver (2011) locates this discourse around ICTs and learning to be partly based on cognitive psychology euphemisms of the mind's comparability to a computer. He stipulates these oversimplified accounts have been reversed to explain learning with ICTs – if the mind functions as technology does, then a technology used in education must complement the mind. It is this deterministic, essentialist, 'affordance' discourse around learning and ICTs that Oliver (2011) finds so damaging, as it neglects the complex interplay that comes with using technology in any learning situation. It misses the finer details of context, to which he argues the need for more social-constructivist theoretical perspectives such as CHAT which has a rich tradition of being used in technology-in-education studies, including m-learning/ MALL (Pimmer et al., 2010).

2.3. Moving Towards CHAT understandings to study MALL

So far, I have identified how the barriers to access education in South Africa which underpin current language learning can be reconfigured with the introduction of mobile learning into language pedagogy aims (see Section 1.5 & 2.2). I have also addressed the difficulty MALL studies have in accounting for finer details, such as power relations, within technology and learning interaction (see Section 2.2.3). The lack of these intricacies of interaction has led to a disguising, deterministic discourse of 'affordance' surrounding MALL studies which stipulate the need for a more critical focus to be uncovered (Oliver, 2011).

CHAT as an analytical frame can overcome this deterministic focus of other studies in its strong explanatory power of learning contexts, (Oliver, 2011; Pimmer et al., 2010). It is based upon Vygotsky's (1962, 1997) fundamental presupposition that tools shape all human activity

alongside working with a more knowledgeable other. His original work has gone through two significant developments; each further contextualizing how deeply our interactions with one another and the tools/ artefacts we have developed are ingrained into our relationship with society.

The first of these developments being Leont'ev's (1981), who more adeptly stipulated how deeply 'collective' activity is in that while individual actions are short-termed and goal-oriented, they are always directed toward a wider, collective social motive – the object of an activity system. Also known as second-generation CHAT, this development demonstrates a hierarchical model of activity that places the collective object at the pinnacle of any activity system, with individual actions taken towards accomplishing the collective objective being afforded or constrained by the tools used (Kaptelinin & Nardi, 2006).

At the same time intrinsic to this focus on tools is how they have been shaped culturally and temporally, allowing analyses the ability to 'track' how understandings have been shaped and formed (McAndrew, Taylor, & Clow, 2010; Oliver, 2011; Taylor et al., 2006). This ability to track and uncover is facilitated by third-generation CHAT in how it highlights the complex interplay of society and mediation in its elaborations of 'community', 'rules', and 'division of labour' (Y. Engeström & Miettinen, 1999).

In this model, the 'subject' is an individual or group (student or teacher or class) who act(s) upon a socially shared motive or problem space, an 'object' (a learning goal), to realise a desired outcome from an activity (Y. Engeström, 1987). This object is attained through the 'mediation of artefacts', which is impacted by how the task or activity is divided among members of the community ('division of labour'); as well as how 'rules' of the activity (such as curriculum, policy, classroom parameters) allow and constrain actions towards the object (Y. Engeström, 1987). The 'community' is the group of people who all work towards a shared object, for example, the teacher and students engaged in the EFL class activity system (Kaptelinin & Nardi, 2006; Lund, 2006).

Central to Y. Engeström's model (1987, 1999a) is the problematic and disruptive force of 'labour' as to how labour is divided and commoditised within a community leads to all aspects of activity attaining a dual nature of *worth* value and *exchange* value which lead to contradictions. These contradictions take several forms, which move in complexity from primary contradictions which occur within a node to quaternary contradictions that occur

between activity systems (Y. Engeström, 1987, 1999a). As these contradictions occur, new perceptions, understandings, or the search for artefacts that can compete with the changing activity system's objects are uncovered or problematized, seen within the expansive learning cycle (Hardman & Amory, 2015, see Section 2.4.1 below). McAndrew et al. (2010) note that this use of dialectical double-binds is a particular strength of CHAT in technology-in-education studies as it provides a means to facilitate understanding of how novel and shaped practices with technology and technology-users/learners occur.

2.3.1. CHAT's contributions to MALL and Emergent Technology in Education

Given these unique constructs, several studies have highlighted the potential of CHAT to aid how emerging technologies can transform pedagogy. A case study conducted by Wood, Tedmason, Underwood, Minutjukur, & Tjitayi (2015) discussed how a CHAT perspective could provide unique insights into redressing the difficulties experienced by Australian aboriginals in an EFL program. Another more recent CHAT study of architecture students found that the move between activity systems can enhance learning (Garraway & Morkel, 2015). They found that in the move between a hierarchical to a collaborative 'authentic' learning environment, where architecture students were able to utilise the knowledge they had gained, led to higher learning potentials.

Other studies which specifically focus on mobile phones have demonstrated the ability of anonymity to aid collaboration in higher education mathematics classrooms, or how drawing on mobile resources can help authenticate learning practices (Bozalek et al., 2015). Another MALL application study built upon the constructs of mediation and mobile phones as artefacts in CHAT is the case of *Move Idioms!* (L.-H. Wong, Chen, & Jan, 2012). It demonstrated how artefacts transform the roles language learners play, as well as develop students' agency in how they work with mobile phones across both formal and informal learning contexts (L.-H. Wong et al., 2012; L. H. Wong, Song, Chai, & Zhan, 2011).

The research above demonstrates the radical potentials of understanding mobile phones through CHAT can develop into aiding and transforming educational practices. They demonstrate how competing activity systems; anonymity and the deployment of mobile resources can develop a deeper appreciation of power relations in understanding MALL. However, none of these studies developed this focus on power relations, specifically using CHAT.

Other CHAT studies that have drawn closer to analysing power have used CHAT's ability to track subjects' motives and agencies in using artefacts within activity systems (Hardman, 2005a, 2005b; Lantolf & Genung, 2002; Russell & Schneiderheinze, 2005). These studies demonstrated how subjects' agentive use could lead to potential expansions or reductions of participants' actions in activity systems. For example, Bartlett (2005, 2008), Holland & Cole (1995), and my own master's study note that understanding the agentive use of artefacts and the mediations these artefacts embody, promote conceptualising artefacts as being imbued with social meaning as well as deeply embedded in relations of power. I used these understandings in my own master's research, which drew upon CHAT and Critical Discourse Analysis (CDA) as complementary critical lenses to investigate mobile phone meaning-making practices in an advanced South African EFL classroom. I found that as mediating artefacts, mobile phones lead to potential contradictions in lessons' foci and learners approached them through deeply embedded relations of power within the classroom, resulting from teachers' uptake of CLT principles and their institutional roles. It allowed a detailed understanding of the complex interplay between how the mediation of artefacts is contained within relations of power between students and teachers and the subsequent effects this had on the activity of language learning as a whole.

This research builds upon Amory's (2007, 2010, 2012, 2014) research with CHAT that takes a more etic perspective of how broader discourses have influenced technology in education. He argues that the power relations and difficulty of pedagogical change found within technologies in education to-date, directly relate to wider hegemonic discourses found within their actual material design and production. He argues that while power is usually regulated within division-of-labour, the design of learning technologies as part of the increasingly globalised economy circumscribe technology in education as the ‘object' of activity, rather than the mediating agent/ tool. The result is that instead of new technologies offering new pathways to learning, their inscribed designs continue to perpetuate past practices and power structures of education, allowing technology in education to work as means of surveillance and control rather than tapping their posited transformational possibilities.

It is in this sense that he argues it is fundamental for learning designs with technology to move to a ‘learn with’ technology rather than a ‘learn from’ technology. To do so, he advocates that learning with technology design must be informed with a CHAT framework that regulates

technology in its mediational role as well as centralises a focus on collaborative and authentic tasks for learning (Amory, 2014).

2.3.2. Adapting CHAT as a framework for Mobile Learning: The Task Model

At the same time, there have been noted criticisms towards CHAT as a research perspective. Most notably is its lack of simplicity in aiding designers, policymakers and practitioners to easily exploit its constructs as well as the difficulty in operationalising CHAT's constructs to fit within complex technology-in-education phenomena (Amory, 2010; McAndrew et al., 2010; Pimmer et al., 2010). To illustrate, in my master's research I had to draw on both CHAT and CDA to fully elaborate on the complex ways the semantic nature of language learning intersects with students' agency in using technology in an EFL classroom (Lilley, 2014).

Taylor et al. (2006) overcome these issues by adapting CHAT's original constructs as two parallel triangles of one emerging learning activity system containing a technological side and semiotic side (Taylor et al., 2006). In doing so, the authors wish to capture activities where learning in technology occurs and how the technical activity is underpinned and reflected in semiotic activity (Pimmer et al., 2010). So, while I drew upon both CHAT and CDA to elaborate on the complexity of mobile learning, semantically and technologically, the Task Model elaborates both more accurately into a single model of activity, emphasising their dialectical correspondence.

To explain, consider how Taylor et al. (2006) have renamed aspects of their adapted model to aid ICT designers and developers (McAndrew et al., 2010). While the constructs of 'object', 'subject' and 'tool/ mediator' remain unchanged, it is observed that they operate on both a semantic and technological levels of activity. In order to clarify this in other constructs, specific labelling of CHAT nodes changed. This is reflected in the change of 'community' in CHAT to 'context' which was done to emphasise both the physicality of technology and the semiotic nature of human learning. It relates to how a system may include a wider range of functions (technological), or the broad range of users' learners may implicate in their use (Frohberg et al., 2009). While 'context' refers to how the system is orchestrated around communities and how they use it, the change of 'rules' refers to 'control' issues in understanding the technological limits the system imposes without denying the societal or community limits groups of learners may stipulate (McAndrew et al., 2010). Furthermore, 'division of labour' is transformed into 'communication' to further stress the dialectical nature of the interaction

between technological and semantic aspects of activity – how technical systems enable communication, enables particular shifts in the communication between users (Taylor et al., 2006).

In effect, the creation of two paralleled activity spaces to understand learning-with-technology, the Task Model subsumes the dialectical relationship between technology and the learner (Taylor et al., 2006). It further underscores that in any learning situation with technology, learners: "know what kinds of functionalities (resources for learning) they would like to have available to them to be effective and will seek out particular tools as and when they need them" (McAndrew et al., 2010, p. 239). In effect, this places the learner and their mobility at the centre of technology-in-education, underscoring how learners' move in and between the spaces of the technological (the mobile phone) and semantic (the classroom) within their classroom learning (Pimmer et al., 2010).

The usefulness of these changes cannot be understated, especially in regard to understanding agentive use of mobile technology in the classroom. Analyses using the Task Model as found in Frohberg, et al.'s (2009) categorisation of the m-learning design implementations highlight the range MALL designs can employ in providing restrictive or expansive agency for the learner. Moreover, I was able to utilise this categorisation to create a language of description of power relations in MALL to provide insight into the complex ways mobile devices can operate within a language classroom (for a full account, see Appendix 1).

2.3.3. A Theoretical Framework to Analyse (and Transform) MALL in Higher Education

To summarize then, I have demonstrated that South Africa finds itself in a contradictory, *glocal* tension between its need to 'decolonize' and 'internationalise'. Intricately tied within these tensions is firstly the role that emergent technology, like mobile devices, will play and secondly, the place of English language learning. I have also stressed that mobile language learning, which draws on both the emergent and language aspects of these tensions may have the potential to facilitate new pedagogical pathways in transforming English educational access in South Africa. Namely, in its ability to redress resource allocation, it may offer new understandings of language learning, as well as propose alternative types of learning experiences.

However, to do so, I have argued, necessitates the use of a theoretical framework that can take into account the deeper interpersonal aspects that influence MALL, in particular, power

relations. I have positioned CHAT and its adaption for mobile learning in the Task Model as such a theoretical framework that not only allows insight into cultural-historical orientations that inform how technology is used, but also emphasises placing the mobility of learners in their use of technology at the forefront.

2.4. Revolutionary, Local Pedagogical Change? Expansive Learning Transforming MALL

As stated earlier, TESL/ TEFL has long struggled with the placement of English and the appropriacy of its pedagogical models in local contexts. This struggle has been related to the problematic diffusion of research findings not filtering into contemporary teaching practices and that most research is restricted to the Northern hemisphere (i.e. America, United Kingdom, and more recently Asia) (Hyland & Wong, 2013).

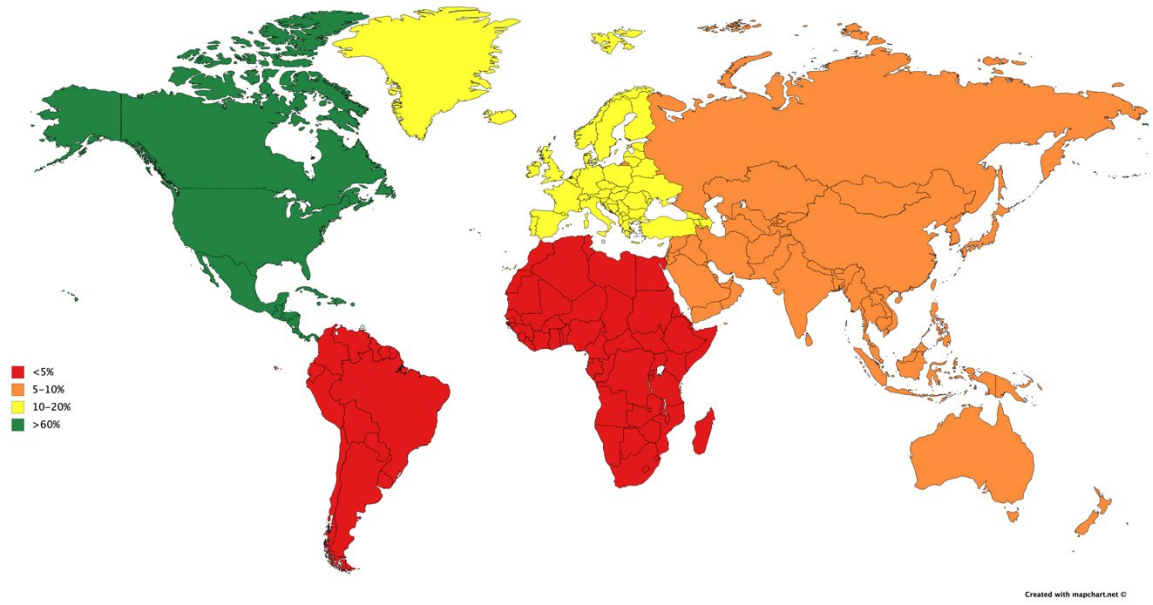


Figure 2: Mapping of Expert Panel of New Horizon Report 2005-2019

Table 1: Percentage Totals of Expert Panel locations of New Horizon Reports 2005-2019

AFRICA	SOUTH AMERICA	AUSTRALIA	ASIA	EUROPE	NORTH AMERICA
1.53%	3.72%	6.87%	7.82%	16.13%	63.93%

In the case of emergent technology research and recommendations, this could equally be said to be the case, as demonstrated in Figure 2 above. The figure represents my review of expert panel locations of the *New Horizon Report* from 2005 – 2017 (see Appendix 2), one of the most highly regarded international publications of emergent technology in education. As can

be seen, the majority of 'experts' are located in 'Northern' or 'developed' territories. Figure 2 lends further credence to the lack of engagement with 'Southern' or 'developing' territories regarding research or expert opinion of how technology in education interacts with their local communities. More importantly, it further asserts Amory's (2007, 2010, 2014) claims of the increasing technological hold that these countries maintain in emergent technology development in education and their use. It is little wonder then that Hyland & Wong (2013) stress facilitating change and innovation in teaching requires "change agents [to] recognize the complexity and importance of local situations" (p. 3). As seen above, this can be said to be lacking, especially concerning South Africa (as well as the rest of the 'developing' world).

Gong & Holliday's (2013) study of secondary English textbooks in China provides a recent example, demonstrating how the lack of local awareness in the international production of learning resources impacts on the effectiveness of learning artefacts and tools in local English language education settings. In line with China revising its curriculum and incorporating a Task-Based Teaching (TBT) approach in TESL/ TEFL to Chinese students, a new internationally-produced textbook was incorporated into the curriculum. However, what Gong & Holliday (2013) discovered was that the topics and lessons did not translate well to all students, in particular, confusing and demotivating those in rural areas. Furthermore, they found that for some students, their lessons seemed to highlight the superiority of Western lifestyles over Eastern ones, which is deeply disconcerting.

Studies like these are not new in TEFL/ TESL (see Hiep, 2005; Wallace, 2006). However, they do suggest the critical importance of local contexts in any implementation of pedagogic change (Hyland & Wong, 2013). In addition to this, it stresses the need of perspectives on change that can account for the conflicting tensions that local, 'developing' sites experience, especially in incorporating emergent technologies like mobile devices for learning.

2.4.1. Dialectics and Expansive Learning: Conflict leads to Innovation for MALL

With the above in mind, it is no wonder why theorists such as Kennedy (2013) argue that "no model can capture the reality and complexity of change, its messiness and unpredictability" (p. 15). I disagree completely though. CHAT can offer such a frame in its understanding of dialectics in the form of contradictions found within its conceptualisation of expansive learning (Y. Engeström, 1987). In fact, CHAT, its methodologies and underlying theory are predicated on their unpredictability, no matter which site they are used in (Virkkunen & Newnham, 2013).

The ability to capture the complexity of change stems from CHAT's basis in dialectics. Earlier, I mentioned that contradictions have been noted as particular strengths of CHAT in its understanding of learning (McAndrew et al., 2010). However, contradictions and their dialectical underpinnings bear equally as much weight in their conceptualisation of understanding and navigating change, to which I now turn.

Hegelian dialectics subsumes every activity is composed "of parts each of which in varying degrees ‘mirrors’ that whole negatively" (Weiss, 1974, p. 7). In other words, it means that in order to completely grasp what something ‘truly’ is, means to identify and consider it in all of its parts and that these parts can and will be opposed to each other. This opposition is crucial, as it is in this inherent conflictual nature of all elements that has spurred all historical, as well as forthcoming development and change. Marx's (1979) dialectical materialism builds upon this by illustrating how human activity within capitalism as well as the process of tool/ artefact development, commodifies all aspects of activity through the division of labour. Thereby, any aspect of activity takes on two conflicting values at one time: their worth/ use-value and value in exchange.

CHAT's contradictions within third-generation activity theory build upon both these understandings of dialectics in its conceptualisation of expansive learning (Y. Engeström, 1987). It posits that contradictions (that is the internal conflicts/ antithetical elements/ double binds) within each element of activity begin to increasingly externally display their inherent, hidden conflictual nature through a cycle of developing intensity (Virkkunen & Newnham, 2013).

For instance, take an English for Academic Purposes (EAP) writing course that uses paper dictionaries as a reference tool and for vocabulary development. Herein, the teacher and/or student(s) would be denoted as the ‘subject’; the paper dictionaries as ‘the mediational artefacts/ tools’; the entire class as the ‘community’; the course design, the class' and wider institution's regulations as ‘the rules’; the lecture interaction with the teacher instructing and students listening as ‘division of labour’. The object would be the ‘socially-shared problem space’ that motivates the activity, such as the difficulty students experience in writing English prose following Western academic conventions.

When setting up the course, the lecturers may have had a discussion surrounding which learning resources would be best suited to the course. Consider these lecturers deciding on the

use of paper dictionaries. In making this decision, the lecturers posited that the *use-value* of paper dictionaries was denoted in them being readily available for all students. While the lecturers were aware more modern, mobile dictionaries may allow better translation for students, the paper dictionaries *value in exchange* over the course still facilitated the learning outcomes, as well as teachers feeling more comfortable with the definitions the paper ones imparted. This trade-off is considered a potential primary contradiction, between an element of an activity's worth and exchange value in managing the activity (Y. Engeström, 1987; Virkkunen & Newnham, 2013).

Now, as the course goes on, the lecturer may find that students are not using the paper dictionaries and are instead using their mobile dictionaries on their phone. The students state that using their mobile dictionaries is more efficient and allows them a deeper insight into understanding the course material and vocabulary for their English-academic writing than the paper ones, which are time-consuming, dated and monolingual. In this case, the paper-based dictionaries' *value in exchange* is questioned in terms of the mediation they afford for students in approaching the object of the course. In this instance, the primary contradiction is starting to be externalised, as the paper dictionaries ability to meet the object of activity is seen as incompatible by the students. They feel the paper dictionaries cannot meet the difficulties they have with the course content and writing in English. This conflict is a secondary contradiction, where the two elements of the activity (in this case, the mediational tools and object) do not correspond (Y. Engeström, 1999a).

The secondary contradiction may be overcome by the rules of the course changing, in the lecturers for EAP writing course allowing mobile dictionaries by the students. However, in implementing mobile dictionaries, some lecturers or students may find it difficult to reconcile the use of mobile dictionaries. For instance, lecturers may see mobile use impacting the set nature of classes (division of labour changing) in needing to manage students continually looking at their phones in class or other unexpected changes in the elements making up their teaching activity. Tertiary contradictions are seen when changes in the system (in this case, the use of mobile dictionaries) are felt throughout all the elements of the activity system (Virkkunen & Newnham, 2013). The external display of these inner contradictions will culminate in quaternary contradictions when different activity systems contradict each other (Foot, 2001). An example of this could be when the use of mobile dictionaries impacts other

courses on the campuses. It is only when this stabilises and is resolved that a new form of the activity system is said to have emerged (Virkkunen & Newnham, 2013).

The above example provides a simplistic version of the contradiction process, as the dialectical development in expansive learning, is considered to be a progression that occurs over a long period (Y. Engeström, 1987; Virkkunen & Newnham, 2013). However, Y. Engeström's (1987) CL methodology attempts to condense this process by illuminating the potential inner contradictions with participants of an activity system, forcing the expansive learning actions for development to be taken within a limited amount of time. In this case, the 'messiness' and 'unpredictability' of change is harnessed by the CL interventionist as they help navigate the participants involved in the activity system towards the formulation of activity that suits their site at that particular time.

It bears particular relevance to this study that CLs, or otherwise known more broadly as DWR, can only be done in local sites where the activity is found with the participants involved with that activity at that particular point in time (Virkkunen & Newnham, 2013). The reason for this is that inner contradictions are unique to every activity system and their point of expression will only be available to those that are involved with that specific activity and where that activity is in its own historical development.

2.4.2. Change Laboratory Research: Uncovering Novel Practices in Local Sites

This ability to draw on dialectics to help aid development in local sites of practice is a particular strength of CLs and has found remarkable success in the sites where it has been used. These range from a diverse set of industries such as libraries (Y. Engeström & Sannino, 2010; Virkkunen & Newnham, 2013) to apple orchard industries, government (R. Hill, Capper, Wilson, Whatman, & Wong, 2007) and even hospitals (Y. Engeström & Sannino, 2010; Virkkunen & Newnham, 2013). Within all, the use of CLs has supported researchers and their participants in the formulations of new practices or ways of working to better sustain their navigation in their particular environments.

The same can be said for CL research in education. Much work has been done with pre-service teachers and helping them navigate their entry into work (Finlay, 2008; Rantavuori, Engeström, & Lippone, 2016). One particular study is that of Ellis (2008, 2010) who provided a 'lite' version of DWR in order to a create shorter, more manageable sessions to facilitate a boundary-crossing zone between teacher mentors and pre-service English teachers as they entered work.

She found that this 'DWR-lite' framework provided a means to 'harness' the complexity of the school environment and facilitate new understandings for both mentors and pre-service English teachers in their roles and practice. Another pertinent example to this study is that of Glover & Miller (2009), who used a CL methodology of university and school mathematics teachers to develop materials for interactive whiteboards. The work done facilitated social policy planning as well as the development of support materials, and was positively seen by those involved, especially in terms of professional development.

The research above using CL and DWR research demonstrates the effectiveness of these methodologies in driving change in local sites of practice in a variety of industries. It bears particular relevance to this study as I find South African English language learning in higher education to be wedged within its own particular double-bind, looking for a driver to implement pedagogical change that places MALL at the forefront. I believe the use of CHAT; its understanding of expansive learning and its methodology of CLs provides the mechanism needed to find innovative pedagogical solutions for the dilemma South African academia is currently experiencing. I discuss these aspects in explicit detail in the next chapter.

2.5. Summary

Dewey's (1937) quote at the start of this chapter overtly links educational change to broader social change. For South African higher education this means that while emerging technologies, like mobile phones, have been lauded as a panacea for our issues of access to quality education; their ability to do so can only be harnessed by understanding their use through cultural-historical perspectives such as CHAT. In doing so, I argue novel, local pathways for implementing MALL can be found to address the many social and linguistic barriers South African and international students entering South African universities face.

Chapter 3: Methodology

> …interventions in human beings' activities are met with actors with identities and agencies, not with anonymous mechanical responses. If agency is not a central concern in the methodology, there is something seriously wrong with it. (Y. Engeström, 2011b, p. 603)

3.1 Introduction

This chapter illustrates how the research in this study was undertaken. Here, I highlight how the interplay between the research methodology and theoretical perspective informed this study's inquiry into the research questions regarding the use of MALL at the research site. Furthermore, I discuss the ethical considerations taken, as well as introduce the research context and its participants.

3.2 Research Approach: Uncovering an Argumentative Grammar for the Research Study

This study focuses on how mobile technology is drawn upon by teachers and students as a learning tool in the language classroom. Particularly, it concerns how power is (re)negotiated in the classroom and conceives if mobile use and its accompanying relations of power in educational practice can be transformed. In light of this study's foci on meaning, relations of power and educational change, the need for a cultural-historical perspective (Y.-J. Lee, 2011) is put forward. This would see teachers' and learners' use of technology as a social practice that is (re)constructed / (re)structured from the meanings which are created, negotiated and transformed over its everyday use (Lipponen, Hakkarainen, & Paavola, 2004).

These foci posit a need for qualitative methodology as both the research questions and research design must take into account how teachers and learners frame their understanding and use of technology in the classroom (Maxwell, 2008; Merriam & Tisdell, 2016). More specifically, these understandings must be understood regarding what use of mobile devices is authorised, how this use is understood and shaped by the participants within the wider learning context, as well as how this use may be contradicted or challenged, further dictating the need for a socio-political account. In particular, an interprevist research approach (Hoepfl, 1997) that highlights both an in-depth account of participants' various subjectivities towards MALL and mobile devices, as well as a detailed inquiry into the structure of the learning context(s) in which MALL is deployed, including an emphasis on how both inform each other to produce relations of power and change is integral.

It is from this starting point I further develop what Kelly (2004) describes as an 'argumentative grammar' for this study's research approach that provides the rationale behind the research method and analysis to this study's theoretical orientation. As stated earlier (see Section 2.4), CHAT and its DWR research methodology of CLs provides a theoretical framework that can provide a rich and detailed account for technology use as social practice and transformation in education, respectively (M. S. Kim, 2012; Y.-J. Lee, 2011; Lipponen et al., 2004; Oliver, 2011). I locate this to two key features of it as a research approach that underscores its attention to cultural-historical and interprevist understandings outlined above. Firstly, its use of the activity system as the primary unit of inquiry and analysis and secondly, its emphasis on dialectics and reflexivity as espoused within its understanding of expansive learning (Y. Engeström, 2011a; Virkkunen & Newnham, 2013).

3.2.1 An Exploratory Case Study: Mapping the Stage for an Intervention

As stated previously, CHAT stresses that learning is a cultural-historical activity directed towards a collective object, wherein individuals' actions conducted to attain the object are mediated through the use of artefacts that are bound within how the learning context is structured in terms of its rules, community and how labour is divided within it (Foot, 2001; Roth, Radford, & La Croix, 2012). The object is the true motive of the activity, supplying all the participators in the activity with their purpose for partaking in the activity under study, as it holds all the elements of an activity system together in their existing formulation(s) (Yamagata-Lynch, 2007). These existing formulations are central to any research-intervention, as the present structure of an activity is seen to facilitate the issues or troubles, participants are experiencing (Virkkunen & Newnham, 2013).

Therefore, to cut through to discerning these problematic features of an activity system and how they are all interwoven, it is the researcher's primary objective to rediscover the object of the activity, which may have become 'lost' due to the systemic internal contradictions present in subjects' participation within it over time (Y. Engeström, 2011b; Virkkunen & Newnham, 2013). In this sense then, the activity system not only directs the choice of participants for the research study but, in order for the research to identify all of the system's features, requires an investigation into how its participants' structure and interpret their individual actions within their collective activity system (Yamagata-Lynch, 2007).

Following these needs, this study's first priority was then a 'mapping' of the current activity system, and the existing potential contradictions of teachers' and learners use' of MALL at the research site(s). As Martin & Kamberelis (2013) state:

> mapping is required to understand how the various structures and forces of schooling experiences function together to manufacture particular kinds of citizen subject and particular kinds of social-political learning spaces. (p. 672)

In order to realise this, I adopted an exploratory, critical ethnographic methodology to identify and map the activity system of the research site(s) with me, as the researcher, functioning as the primary data collection instrument (Delamont, 2007). The methodology undertaken aimed to provide a 'thick description' of the research site to capture the complexity of the activity system in its natural context (Chapelle & Duff, 2003; Hammersley, 1994). In doing so, it aimed to help identify potential contradiction sites and deviations in the daily work actions taken by individuals that were initiated in order to realise the object/ motive of the collective activity (Y. Engeström, 2011a) with a specific focus on the relations of power observed.

However, it would be disingenuous to label this part of the research study as an ethnography. My specific focus on relations of power and MALL demonstrated a specific focus of my 'thick description' and not the creation of a holistic account of the entire research site (Watson-Gegeo, 1988). Neither was there an extensive engagement with the research site over a prolonged period, as data collection occurred intermittently over two months following participants' preferences and schedules (Delamont, 2007).

Instead, I liken this part of my research to an exploratory ethnographic case study, as it uses ethnographic methodologies to describe and map a bounded system (an activity system of teachers' and learners' use of MALL) that is intrinsically-tied to its context (Merriam & Tisdell, 2016; Yazan, 2015). Thus, the investigation was conducted on-site in classes that were not artificially set-up for observation (Lillis, 2008). Moreover, while my research questions were predisposed towards power-relations, my case study's focus on exploration required the use of multiple data sources (Yin, 2009) as well as 'open-ended' questions and observations to aid the development of my 'thick description' of learning with MALL at the research site(s) (Kantor, Kirby, & Goetz, 1981; Merriam, 2002).

These multiple data sources took the form of observation field notes, video recordings of the classroom interactions, as well as semi-structured, audio-recorded interviews with key

participants. The use of these sources highlighted an attempt to gain insight into mapping the complexity of the multiple forces that may influence MALL in the classrooms observed (Martin & Kamberelis, 2013), as well as validate the interpretations made (Guion, Diehl, & McDonald, 2011; Seale, 1999). These data were subjected to CHAT analysis to identify the elements of the activity system, including a focus on relations of power in MALL use between teachers and students. In an effort to further validate interpretations made, these data were constantly compared, cross-referenced and revised in accordance with participant interviews and new data, as the study continued, (Kantor et al., 1981; Wolcott, 1975) to ensure participants' understandings of their activity and actions remained in focus.

This mapping of the research site's activity system is a particular strength as it can be seen as the "first step in imagining and working toward how reality might be reconfigured in desired/ desirable ways" (Martin & Kamberelis, 2013, p. 672). CL research holds that all the data collected over this period, as well as the development of an initial mapping of the activity system under consideration, is the first step towards the development of local change in practices (Virkkunen & Newnham, 2013). This 'first step' can be seen in how the collected data serves an integral function within the intervention, where its ability to 'mirror' present activity is used as a stimulus for change by the participants (Y. Engeström, 2011b, see Section 3.4.2). Furthermore, this part of the research study supported the investigation of my research question of '*what potential contradictions are evident in the use of mobile phones as artefacts in the activity of language learning at the ALC?* (RQ 1.1.)?' The data and analysis from this part of the study, further informs my inquiry into my last research question on '*What potential changes in the use of MALL occur when these contradictions are collectively drawn upon and addressed by the participants and researcher in a CL* (RQ 1.3.)*??'*

3.2.2 Towards a Participatory, Formative-Interventionist Methodology

One of the greatest strengths of DWR research methodology, specifically CLs is their focus that developmental change in any activity system stems from the participants themselves (Eri, 2013). Y. Engeström (2011b) and Y.-J Lee (2011) have both highlighted how other educational change research perspectives are flawed in their inability to fully account for the complexity of education sites, as well as the lack of agency on the part of participants in directing the change process.

The dialectical dimension of CHAT and DWR research found within CLs overcomes these limitations on two fronts. Firstly, it is identifying the potential locations of these contradictions or double binds participants experience that fuels the entire change process (Y. Engeström, 2007b). The use of video recordings, interviews, and field notes as 'mirror data', together with the researcher's initial inquiry into mapping the activity system which captures participants' complex experiences of these disturbances or ruptures are used to initiate the change process (Virkkunen & Newnham, 2013). Secondly, the intervention is built around how participants respond and build upon these contradictions, which leads them to new formulations of their activity as they see fit (Y. Engeström, 1987).

These new formulations are achieved through the process of double stimulation. Initially conceived by Vygotsky (Sannino, 2015), it involved confronting a participant in a controlled setting that contained various neutral objects which could act as potential mediators (such as pictures or manuals for example) that the participant could use to solve a problem that was beyond their current capabilities (Eri, 2013). This problem-object acts as the first stimulus, and it is the participant's appropriation of one (or more) of the neutral objects to mediate their solution to the current problem-object that acts as the second-stimulus (Nuttall, Thomas, & Henderson, 2018).

Double-stimulation engenders, as Y. Engeström (2011b) notes, a non-linear dialectical understanding of causality for human actions. Thus, while an individual's logical interpretation of their activity may make sense for themselves (interpretive layer of causality), their participation in a greater historically-evolving activity leads to a conflation of contradictory motives and objects that all participants seek resolution to, often through participants taking up unpredictable or irrational actions (a contradictory layer of causality). In this state, the individual may eventually take new actions to try and transform their activity by creating new artefacts or reformulating their activity's structure to control these changes (an agentive layer of causality).

Four understandings are crucial to double stimulation, especially concerning Y. Engeström's (2011a) further developments. Firstly, CLs deal with collective organisational change, and given the explanations above, it would appear that while individual agency is highlighted, collective intentionality is disregarded. This is not the case. Seminal to CHAT is that the acquisition of any mediator (such as a second-stimulus) towards higher-psychological functions appears first in collective and collaborative action (interpersonally) and then later is

internalized by the individual (intrapersonally) (Vygotsky, 1962, 1997). Secondly, is that the researcher need not necessarily supply the second stimulus. Instead, it is the researcher's objective in CL sessions to rather 'trigger' the development of a second-stimulus formation by the participants (Virkkunen & Newnham, 2013). Thirdly, is that the formation of this second-stimulus is more than just a way to solve an immediate problem, rather it is about instilling a drive for expansive agency of participants to realise the construction of entirely new and novel approaches to their existing activity systems formulation (Y. Engeström, 2011a). Lastly, and perhaps most importantly, is that the ability to instil a drive for expansive agency can only be harnessed through double-stimulation if there is a conflict of motives (Sannino, 2015; Sannino & Laitinen, 2015).

To illustrate, consider a CL session where teachers are given 'mirror data' in the form of a disturbance or problem expressed in an interview by one of their students. This problem-object is the 'first stimulus' the group is presented with. The researcher then acts to question the teacher-participants on their understandings and reactions towards the disturbance/ problem the student has expressed. In their reflective discussion with each other, participants may deliberate how the learning materials they use often do not engage students in their class. This lack of engagement can be deemed a conflict of stimuli as the use of learning materials are not realising their purpose (Sannino, 2015). In their ensuing discussions, in light of the student interview, they may clarify how the learning materials do not serve the same motivations the student has - echoing the contradictory layer of causation. At this point, participants' discussions are echoing a realisation of the underlying competing motives of who these learning materials *actually* serve (Sannino, 2015) – the student or the teacher?

It is from this point, participants' volitional actions, i.e. expansive agency, to mitigate this conflict of motives takes hold (Sannino, 2015). Participants then move to discuss potential changes to the rules, or the implementation of new materials that more closely align with students' motives. Here the agentive layer of human causality can be demonstrated, as a search for something new to entirely change or modify these disturbances, a 'second stimulus', is fostered that will later be made more concrete as the CL sessions proceed.

The collective reflection discussion around the mirror data of the student's experience also highlights another crucial aspect of the CL – reflexivity. As Ritva Engeström (2014) argues, the CL process such as that captured in the examination of mirror data by participants functions as a method that both 'distances' participants from their experiences in their activity, as well

as brings it ‘closer’ for reconstruction, analysis and reflection (Virkkunen & Ahonen, 2011). In their reflection, the communication of participants' social realities through language is explicated where prior understandings of events meet new collective understandings which are interrogated behind the tensions emanating from within their current activity (R. Engeström, 2014). However, this interrogative process is handled by the researcher-interventionist whose role is to handle and shape this interpretive process through the language and tools they bring to this reflective exchange in response to participants' interpretations of their activity (Virkkunen & Newnham, 2013).

In turn, such an understanding places the researcher and the participants in the CL proceeding through a participatory sense-making process of three inter-related activities, which R. Engeström (2014) stated culminate towards the ‘inter-object’. This contains the practical activity focus (the participants' current object in their work-related practice), the developmental activity of the research (the CL session's object in transforming current practice), and the reflective activity of the subject(s) (the object in making sense of the current activity they are exposed to throughout the intervention). The notion of ‘inter-object’ positions the CL process as a profoundly participatory and reflective project for both the participants and researcher-interventionist involved. Studies such as Hennessy, Mercer, & Warwick (2011) have illustrated how research which positions educational transformation through dialogic reflection can hold profound transformational potential in teacher practices with technology by facilitating the creation of an intermediate theory that approaches a synthesis of theory and classroom practice that teachers can readily uptake.

However, Sannino, Engeström & Lahikainen (2016) also caution against overly emphasizing the role that conversation and dialogic reflection plays in the authorship of change within CLs as: "organizations may emerge through conversations, but they do not emerge for the sake of conversation" (p.247). While they agree that discursivity and participants' dialogue are seminal to providing insight into the ways historically developed contradictions can be articulated, they are not the only ways these deeply structural tensions play out. A conflict, a disturbance or even a new conception is not only spoken about or discussed - it is also seen in the actual material practice and embodiment of the activity in order to be oriented towards the object of activity (Virkkunen & Newnham, 2013).

This interplay between the use of mirror data for actual practice, the reflexive analysis of activity and the development of the second stimulus in the double stimulation that takes place

in CL sessions are all required in getting to the heart of initiating expansive change, to what CHAT deems as the 'germ cell' (Sannino & Engeström, 2017; Virkkunen & Ahonen, 2011). In other words, this entire process evoked through double stimulation can be labelled as 'theoretical-genetic reflection', where the goal is to arrive at the most simplistic original form of the current formulation of activity participants are experiencing - the 'germ cell' - to see how its current activity shape has evolved through time and from this to envision a new way of formulating activity (Virkkunen & Ahonen, 2011; Virkkunen & Newnham, 2013).

This envisioning is tied to the expansive agency developed through the CL research strategy of 'ascending from the abstract to the concrete' (Postholm, 2015). This principle holds that throughout the double stimulation process within the CL, new envisioning of activity by participants will first be abstract in their conceptualization or understanding (Virkkunen & Newnham, 2013). However, over continual theoretical-genetic reflection, these initial abstracted visions will become more concretized through the participants' modelling and naming these initial abstractions in order to reach a more stabilized model (Y. Engeström, 2011b). The role of the research-interventionist in these steps is to track these initial abstractions' conceptualisation, question them and get participants to begin modelling and testing them in their actual practice (Virkkunen & Newnham, 2013). In so doing, the participants reach a tested and usable model that works within their actual practice, once again highlighting a research methodology that foregrounds the participatory and agentive nature of DWR research of CLs in educational interventions.

This entire change process, encapsulating both 'double stimulation' and 'ascending from the abstract to the concrete' is seen in Y. Engeström's (1987) Expansive Learning Cycle which the CL process is modelled upon as shown below in Figure 3. There are six key stages in the development of any activity system, each modelled upon the use of different kinds of contradictory states that force transformation (Virkkunen & Ahonen, 2011; Virkkunen & Newnham, 2013).

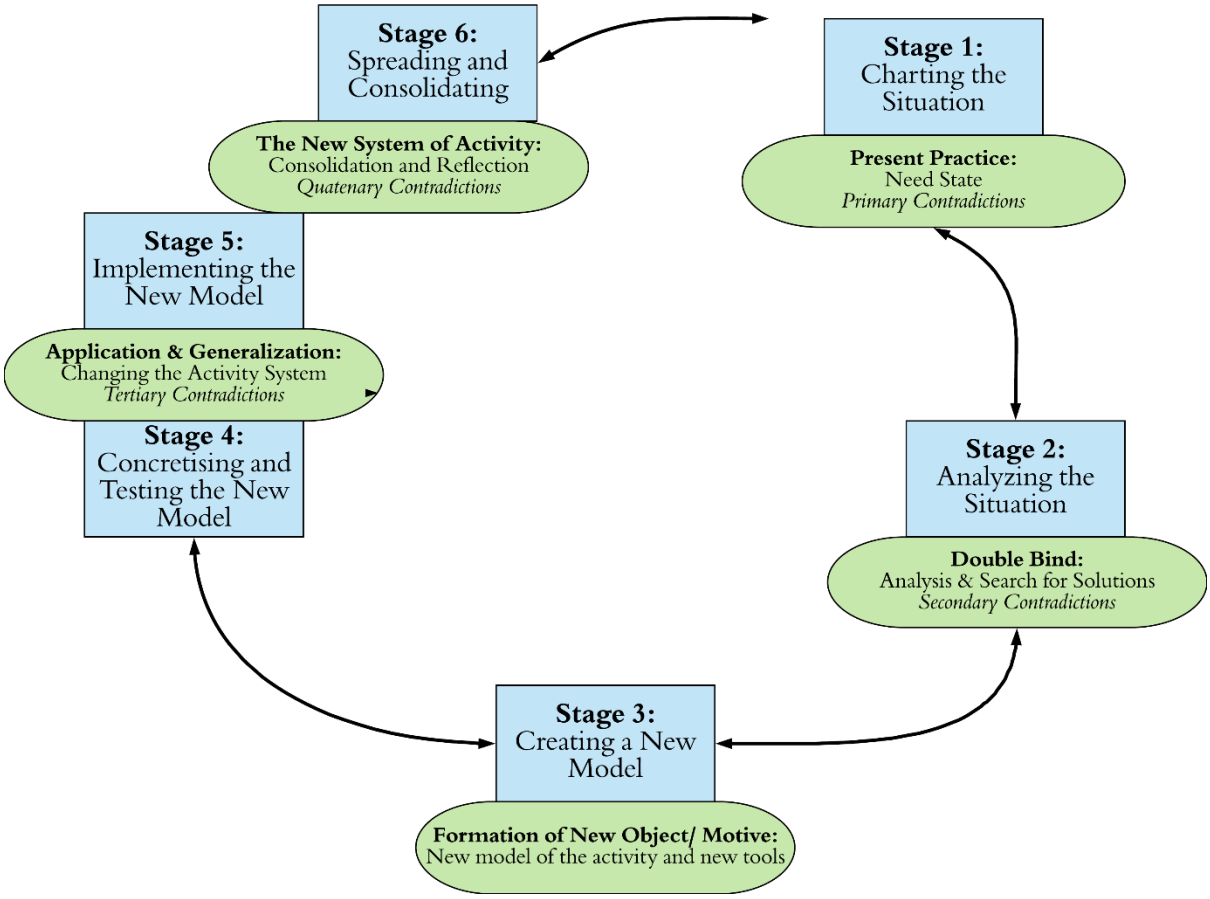


Figure 3: Change Laboratory & process of Expansive Learning actions adapted from Virkkunen & Newnham (2013, p. 75)

The first stage is the *Charting the Situation/ Present State*, where the contradictory current practice of the activity system is uncovered in the CL session(s) (Virkkunen & Newnham, 2013). In this stage, participants are led by the researcher-interventionist into questioning their current practice based around the 'mirror data' that was collected. The aim herein is for participants to see the need for change in their current practice and become committed to fulfilling this change (Selaolo & Lotriet, 2014). This commitment is provoked by making the 'unseen' primary contradictions visible to the participants through exposing them to evidence of situations (mirror data) that contradicts their current interpretations of their activity (Virkkunen & Newnham, 2013). To make these contradictions clear to participants, a problem (the first-stimulus) is brought to the focus of participants which they must jointly begin to solve, and which the researcher-interventionist harnesses towards the next stage of intervention.

In the *Analysing the Situation/ Double Bind* process, this joint problem-solving activity geared towards the first stimulus begins to become unpacked (Y. Engeström, 1987). In this part of the

CL, focus shifts from identifying contradictions to a systemic analysis of from when, where and why these contradictions have originated (Virkkunen & Newnham, 2013). In turn, it places a significant focus on uncovering the historical antecedents from where these contradictions have arisen, as well as the need to closely model the inner contradictions that are currently occurring (Ridgway, 2010). From here, the goal is to initiate the emergence of secondary contradictions which show how one element of activity has changed and already conflicts with another element(s).

This will eventually lead the participants to the need to redesign or re-orientate their current activity in the form of a new model, theory, principle as the expansion of the object becomes the focus of the third stage of Change Laboratories, *Creating a New Model/ Formation of New Object and Motive* (Virkkunen & Newnham, 2013). In this stage, the questions move from analysis to setting up a future envisioning of how participants would like to work in the form of a new model (the second stimulus) (Virkkunen & Newnham, 2013). From this model, participants raise new possible tools, procedures and actions for potential future experimentation.

In the next two stages, tertiary contradictions become the driving force. After designing the new model comes The Concretising and Testing of the New Model/ Application and Generalization (Y. Engeström, 1987; Virkkunen & Newnham, 2013). In this stage, the new model and its tools are evaluated on their efficacy of handling new actions in comparison to previous/ older ways of the activity. This evaluation leads directly to experimenting with the model which links to the stage of Implementing the New Model. Here experimental implementation with the model is taken with participants actively engaging it in their work practices and then reflecting on the ways the new activity is working. It is vital in this stage to question the initial inner contradictions that became prevalent and whether new problems and possibilities have come to light (Virkkunen & Newnham, 2013).

Finally, as the new activity becomes crystallized, it leads towards the final phase of *Spreading and Consolidating/ The New System of Activity*. In this stage, the new model is consolidated and stabilised in participants' actual practice. Quaternary contradictions take root here, as the new system will encounter and facilitate changes in other activity systems, therefore how participants organise and initiate the activity within their organisation becomes of critical importance (Virkkunen & Newnham, 2013).

3.2.3 Enactment of the Participatory, Formative-Interventionist Research Approach

Taking into account the following features of CLs, I now turn to how I enacted them within my research approach in the second part of my study. Initial findings from the case study indicated that teachers' instructional practices with MALL were limited and there was a desire to explore how MALL could be implemented at their learning site. Furthermore, it was apparent that teachers and their line-managers were not acutely aware of the underlying contradictions of their practices. Given how CLs respond to the needs and contradictions underscored by participants' actual practice, I initiated a *Need State/ Knowledge Work* Change Laboratory. More specifically, a research-intervention method focusing on transforming teachers practices with ICTs akin to those described by Engeström, Engeström, & Suntio (2002, 2008) and Virkkunen & Newnham (2013).

A total of seven CL sessions over seven weeks were held with the three teachers' whose classes were observed during the case study phase. These sessions covered all aspects of Expansive Learning and CL process from creating the need state to the eventual creation of a new model of instructional practices with MALL at the research site. I ran all the sessions and therefore functioned as the primary data collection instrument and sole researcher-interventionist. This role was deemed necessary as by being a participant-observer in the case study, I had collected and analysed the data giving me unique insight into the teachers' practices (Delamont, 2007). Secondly, it is recommended that one researcher-interventionist handle the CL process (Virkkunen & Newnham, 2013), as the complexity, multi-voicedness and emotional involvement of the CL becomes even more difficult should there be more than one clear leading researcher-interventionist. I also believed that due to my familiarity with the research setting and participants, sessions would be heightened by me acting as the sole research-interventionist.

Due to my sole researcher-interventionist stance, my critical focus on power relations present in the initial case study and this study's research questions, I grounded my research approach in this phase of my study, similar to those in Participatory Design Research (PDR). Of seminal importance in this approach to educational research is the highlighting of the multi-voicedness of the intervention, (re)negotiated collective change and the notion of learning and intervention spaces as being politicised (Gutiérrez, Engeström, & Sannino, 2016). Furthermore, such an approach aims to highlight how the research-interventionist and research participants are also within a constant negotiation, highlighting the need to make visible these tensions as well

(Vakil, McKinney de Royston, Nasir, & Kirshner, 2016). In order to ensure this was stressed in my data collection and analysis, I emphasised critical reflexivity (Cunliffe, 2004) throughout my data collection process and analysis.

Data were collected through video recordings, field notes and observations of every CL session. The collection of critical reflection and analysis tasks done by participants throughout sessions also formed part of the data collection process. These pre, during and post tasks took the form of a variety of visual reflection tasks (O'Brien, Varga-Atkins, Umoquit, & Tso, 2012), participant disruption diaries (Virkkunen & Newnham, 2013) and a researcher-interventionist diary, which were used to aid the critical reflexivity in both the participants and the researcher-interventionist, enhancing insight into participants' current activity system as well as the change intervention process. However, as O'Brien et al. (2012), make clear about the use of visual techniques within CLs, is their ability to affect both the nature of the research and the final product of the CL process, which means visual tasks require proper management, analysis and design by the researcher-interventionist.

As stated earlier, data analysis of a CL includes: analysing participants' own analysis and interpretations of their activity (Y. Engeström, Sannino, & Virkkunen, 2014); their analysis and co-interpretation of tasks (O'Brien et al., 2012) as well as the discussion of each CL session (Virkkunen & Newnham, 2013). Data analysis thus occurred constantly throughout the CL process, where at the end of each session I reviewed the video recordings of the session, participants' visual tasks, dialogue and interpretations made during sessions for discursive indicators (Y. Engeström & Sannino, 2011) and/ or Expansive Learning actions (Sorensen, 2014) to identify contradictions sites and track participants' progress through the Expansive Learning process. As Virkunnen & Newnham (2013) note, the researcher-interventionist must continuously respond to and facilitate the contradictions evidenced in the CL sessions in order to direct the intervention process. Thus, my constant analysis helped shape the direction in line with participants needs, allowing me to further tailor my planned sessions in line with where participants were currently located in the Expansive Learning process. Furthermore, this constant analysis also afforded me points in which participants' transformative agency was heightened, allowing them to further direct the CL process (Y. Engeström et al., 2014). In this sense, the participatory and formative nature of the intervention was facilitated in this research approach, enabling participants to 'own' the changes and teaching model that was created.

In closing this section, in Table 2 below, I provide an overview of how the data collection and analysis was enacted within the above research approach to answer the research questions of this study. Following this, I then first move to discuss the research site in detail, which is then followed with a more explicit description of data collection and analysis methods.

Table 2: Overview of Study's Research Methodology mapped to study's research questions

<table>
<tr><th>Research Questions</th><th>Research Methodology</th><th>Data Collection</th><th>Analysis</th><th>Aim</th></tr>
<tr><td rowspan="3">What potential contradictions are evident in the use of mobile phones as artefacts in the activity of language learning at the ALC?

(RQ 1.1)</td><td rowspan="3">Exploratory, ethnographic case study</td><td rowspan="3">• Non-participant observations,
• Artefact Collection,
• Video recordings of Lessons,
• Audio recordings of participant interviews
• Participants placement along Teaching Change Frame (Tarling & Ng'ambi, 2016)</td><td>Identification of Critical Episodes</td><td rowspan="3">CHAT mapping of ALC activity system

Identification of potential contradiction sites</td></tr>
<tr><td>Hardman's (2008) Activity Checklist</td></tr>
<tr><td>Lilley's (2018) adaption of Frohberg, Göth, & Schwabe (2009)</td></tr>
<tr><td rowspan="2">To what extent can the Change Laboratory method facilitate Expansive Learning Actions towards meaningful MALL integration?

(RQ 1.2)</td><td rowspan="3">Change Laboratory Research-Intervention</td><td rowspan="2">• Participant Observation
• Video recordings of intervention sessions
• Observation Notes
• Digital Artefact collection
• Disruption Diary
• Researcher-Intervention Diary</td><td>Preliminary & Post Change Laboratory Session Analysis</td><td rowspan="2">Track development of participants' Expansive Learning Actions over course of the intervention</td></tr>
<tr><td>Engeström & Sannino's (2011) framework of discursive manifestations of contradictions</td></tr>
<tr><td>What potential changes in the use of MALL occur when these contradictions are used with participants in a Change Laboratory?

(RQ 1.3)</td><td>• Final Session Recording
• Post-Intervention tracking of developments of the ALC
• Artefact collection</td><td>Analysis of Final Session & development at the ALC</td><td>Identify changes in ALC work practices</td></tr>
</table>

3.3 The Research Context

3.3.1 The Research Site: Academic Language Centre (ALC)

Research was conducted at a newly established language centre unit affiliated to a higher learning institution in Cape Town, South Africa. The centre focuses on English Language instruction for foreign nationals and is described by the managerial staff as created to function as an income-generating unit for the higher learning institution's Humanities department. At the time of the research study, it had been in operation for just under two years.

The ALC advertises itself as centre affiliated to a higher learning institution. It highlights that the centre offers teachers with the highest qualifications with very low teacher to student classroom ratios. Furthermore, it also emphasizes that staff and students of the ALC are located at one of the higher-learning institution's campuses enabling them to access the same learning resources and facilities as other departments in the institution's academy. This accessibility is further stressed in its advertisement of the design of its newly refurbished modern classrooms that contain technologies for teaching and learning.

The centre also provides teacher-training courses for people wishing to enter the Teaching English as Foreign Language (TEFL) field. These four-week intensive courses, which I have helped conduct in the past, are held four times a year, with a specific teacher-training staff drawn from the ALC.

3.3.2 The Learners/ Students

The ALC, as a unit within a higher learning institution, mainly caters to adult international students. As such, the student population age ranges from eighteen to sixty years old, with most students in their early twenties.

Most of the students who attend classes at the ALC are from the Middle East, Central Africa, South America and Western Europe. In line with the centre's affiliation to a higher-learning institution, most learners' motives for attending language classes are to improve their English for further study or to facilitate better job prospects in South Africa or abroad.

Student enrolment is mostly short-term, with most attending classes for two months. However, some students do stay for over a year. The centre offers students several accommodation options, with most choosing the student residence managed by the ALC. Some students do choose a ‘homestay' option that is managed by an independent contractor where students live with a local English-speaking family nearby the campus where the centre is located.

3.3.3 Management and Teachers

The staff at the ALC are all teachers who have previous TEFL experience, except for the ALC's Senior Secretary. The organisation prides itself on hiring teaching staff who have gained higher qualifications in TEFL or education (such as DELTA or Honours in Education) as well have

extensive experience of TEFL with a minimum requirement of two years of teaching experience (ALC Handbook, 2016, 2017, 2018).

Teaching staff are organised into two different levels: those who are permanent staff and earn a basic salary each month and the rest who are 'paid-on-claim' (POC). Permanent staff are generally those employed full-time, who teach classes and often have a managerial position in the organisation such as managing the social media profile, supervising accommodation of students or acting as the assistant director. POC staff are generally part-time teachers who handle the majority of the courses taught. They are paid in line with the hours they have taught over a given month.

The line managers of teachers are also the permanent staff. However, they rarely do any teaching unless a substitute teacher cannot be found. These managerial staff include: The Principal, who has the highest authority at the centre and is responsible for the overall management of the ALC; the Programme Co-ordinator, who runs and plans the day-to-day teaching schedules as well as teachers and students; the Marketing Coordinator, whose role is to market the centre, handle student inquiries and any other market-related requirements; and The Senior Secretary who helps all managerial staff as well as handles student requests. This is shown in Figure 4 below.

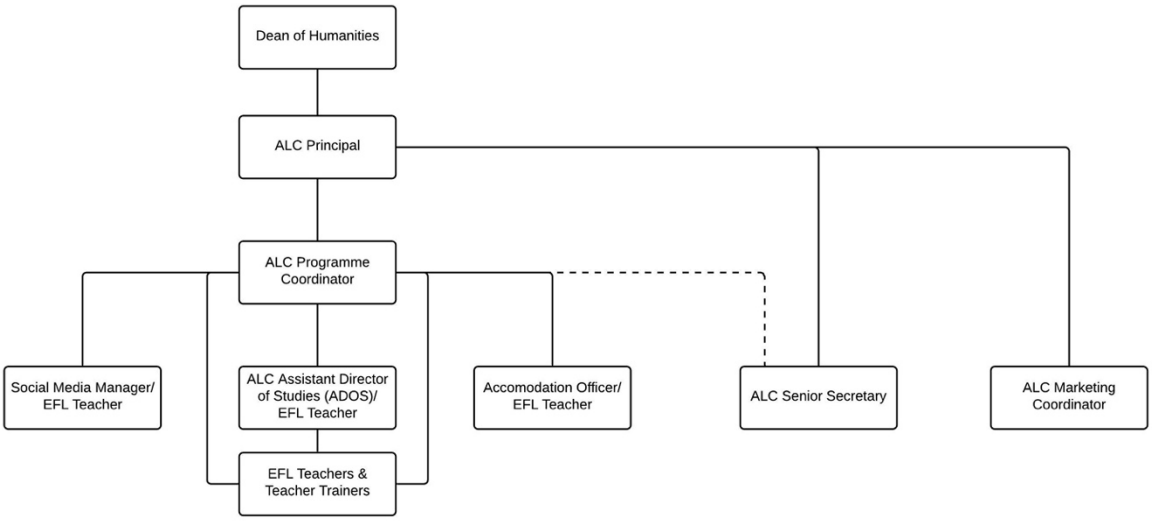


Figure 4: ALC Staff Organisation Chart (based on ALC Handbook and Data Collection, 2017)

3.3.4 ALC Classes and Procedures

Similar to other TEFL centres, at the time of the research inquiry, teaching staff were asked to base their teaching methodologies on the Communicative Approach. ‘Global' EFL textbooks are used in every course that the centre offers, most commonly featuring titles from Pearson Longman and Oxford University Press, such as: *Speak Out* and *Headway,* respectively. These course books are given to all students and teachers upon starting a new course, with the teacher given an additional Teacher's Book that offers lesson plans.

Teachers are also asked to make use of the extensive library of additional materials available in the Teacher's Room. These materials include other textbooks, communicative language games, as well as the online ‘G Drive’ that offers some internet-obtained PDF materials or inhouse teacher-created materials that can be printed for class.

Upon entering the centre, every student is assessed and placed in a language level corresponding to the CEFR framework (see Table 3) according to the language skills they demonstrate in ‘Reading', ‘Writing', ‘Speaking' and ‘Listening' placement tests. These assessments are conducted by the ALC Programme Coordinator, usually on a Monday when students arrive for their first day, which is followed by an orientation tour for the new students. The results of the placement tests are placed in a ‘student portfolio’, which tracks every student's progress during their time at the ALC. These paper-based student portfolios reflect students' personal information (age, nationality, date of first attendance, etcetera. See Appendix 2.1) as well as their end of course assessment results.

Table 3: Common Reference Levels: global scale (adapted from Council of Europe, 2001, p. 33) with link to ALC's General English Placement levels

CLC's levels	CEFR Framework		
Advanced/ Proficient	Proficient User	C 2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
Upper Intermediate		C 1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/ herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Intermediate	Independent User	B 2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
Pre-Intermediate		B 1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.
Elementary	Basic User	A 2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
Beginner		A 1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/ she lives, people he/ she knows and things he/ she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

These portfolios are included in a 'Teacher's Folder' that every teacher is given when starting a new course. These folders include a weekly outline plan for lessons focusing on lesson aims, materials and the textbook page(s) used for each lesson. The folder also includes a weekly attendance sheet for all students attending a particular course.

Courses run for ten to eleven weeks throughout the year, resulting in five 'term' cycles. There are four major categories of courses the centre offers: General English; Exam Preparation; Conversation Class and Electives. Most students take the General English courses that run in the morning. These General courses are divided into five different levels that are related to the CEFR framework: Elementary, Pre-Intermediate, Upper Intermediate and Advanced. These classes run in the morning from 09:00 to 11:50 and teachers are required to use the specific coursebook related to that level. Students are placed in one of the five levels of the General English course based on their initial placement test scores.

The other option that many students take is the Exam Preparation courses that run concurrently with the General English courses in the morning. These exam preparation classes are focused on preparing students to take one of the many international English Language benchmark tests,

such as IELTS, FCE, CAE and CPE. For students to attend these classes, they must place in their initial placement test as 'upper intermediate' or make a 'special case' with the Programme Coordinator. For students who do not place immediately as 'upper intermediate', they are directed to attend General English classes until their English language skills reach the 'upper-intermediate' level. Students and teachers in this morning-session course are also required to use a specific EFL course book that has been designed to prepare learners for the specified exam.

From noon, all students go to a 'Conversation Class' in line with their current CEFR level; for example, Elementary General English learners go to Elementary Conversation lessons. These classes provide more 'speaking practice' for the students, focusing on vocabulary, pronunciation and further speaking practice. There is no set coursebook for these sessions and teachers are required to use alternative resources so to make these engaging and stimulating lessons tailored to students' needs.

The last course offering the centre provides is Afternoon Electives which run from Monday to Thursday afternoons. These courses are for students who have enrolled for a more rigorous language experience and are denoted as 'semi-intensive' and 'intensive' students. The courses are selected by these students upon arrival at the centre and focus on either developing core language skills (such as Reading, Speaking, Listening or Writing) or focus on English for Specific Purposes (such as Business English or Academic English). 'A Elective' courses focus on Grammar and Writing, while 'B Elective' courses focus on Listening, Pronunciation and Speaking. There are no set coursebooks for these courses and teachers are required to develop the course content in line with students' needs and interests.

Every Friday afternoon, teachers are required to attend the weekly staff meeting, run by either the Programme Coordinator or Assistant Director of Studies. In these meetings, teachers are given a brief breakdown of the current week and expectations for the forthcoming week regarding students and lessons, as well as any other relevant information. Once every 6 to 8 weeks, the weekly meeting is followed by an in-house professional development workshop, where a member of staff focuses on a particular teaching strategy or pedagogy they wish to share with the others. The weekly schedule of the ALC is depicted below in Table 4.

Table 4: ALC Weekly Timetable

Time	Monday	Tuesday	Wednesday	Thursday	Friday
09:00 – 10:40	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation
10:40 – 11:00	BREAK 1				
11:00 – 11:50	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation
11:50 – 12:00	BREAK 2				
12:00 – 12:50	Conversation Class				
12:50 – 13:50	LUNCH				
13:50 – 15:00	Elective A	Elective B	Elective A	Elective B	Staff Meeting & Professional Development Programme
15:00 – 15:15	BREAK 3				
15:15 – 16:10	Elective A	Elective B	Elective A	Elective B	

3.3.5 Classrooms

The classrooms of the centre are situated at three main sites of the higher institution's campus: the 'Main Centre' where the majority of the classrooms are located, including management and the secretary; the two 'New' Classrooms that are located in another building on campus; and the 'small' classroom located in a building on the far side of campus. Figure 5 below provides an overall map of the research site, with the main features of each room.

Outside Classroom 1, is a noticeboard for students and teachers that displays a class list informing students which classrooms they are in for the morning, conversation and elective lessons. The noticeboard exhibits other important information regarding the Wi-Fi login, attendance policies, information on upcoming events, as well as special interest tours and recreation activities students may want to experience during their time in Cape Town.

The secretary's desk is an essential area for teachers. In the morning before class, they collect their Teacher's Folders on the desk. At day's end, teachers leave these folders at the desk again, so the attendance register can be updated for students by the secretary. Students also frequently visit this desk for any complaints or concerns they may have.

The Teacher's Room includes the photocopier and additional book resources the school has on offer. Teachers frequently plan their lessons there, and it is one of the main areas for managerial meetings or student placement testing. It also contains the centre's black and white photocopier, where teachers photocopy and print their lesson resources. Furthermore, it includes a

whiteboard yearly planner that lists: important dates, teachers' requested leave times, and term schedules. At times, whenever space is limited, this room is also used as a classroom.

The management office is where the Programme Coordinator and the Marketing Coordinator are located. Students may enter here outside of classroom hours for any special requests or complaints. Other managerial duties by other permanent staff members such as the Social Media Manager or Accommodation supervisor are conducted at the third desk in the office. A small room in the back office contains extra resources such as laptops, coursebooks and paper.

The Principal's office is located behind the secretary desk, with a separate entrance just before the door to the Main Centre. The Principal's door remains open to students and serves as a meeting area for more informal meetings the Principal wishes to have.

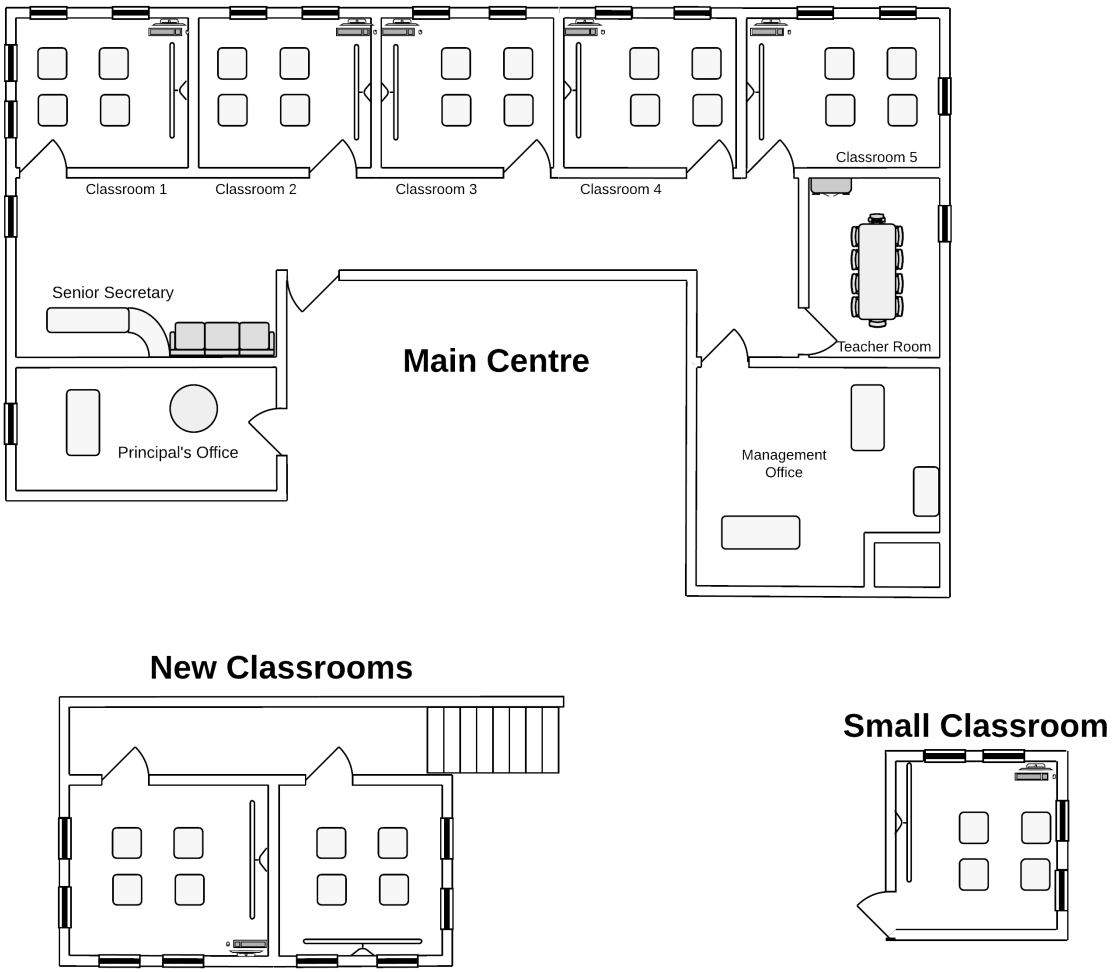


Figure 5: ALC Research Site Overall Map (not to scale)

Every classroom at the research site contains a whiteboard (either an actual whiteboard or a wall that has been coated to function as a whiteboard), a teacher's computer or laptop with online access, a teacher's desk, speakers (fixed or portable), and tables or desks with seating for the students. All classrooms have been extensively repainted and refurbished to update the rooms, especially those in the 'New Classroom' area. All classes in the Main Centre and Small Classroom also feature the inclusion of a digital projector. Furthermore, the Main Centre classrooms also feature EFL posters, depicting grammar rules or tips for learning English. These posters are absent in the New Classroom and Small Classroom areas. A generic depiction of a 'typical' classroom is shown in Figure 6.

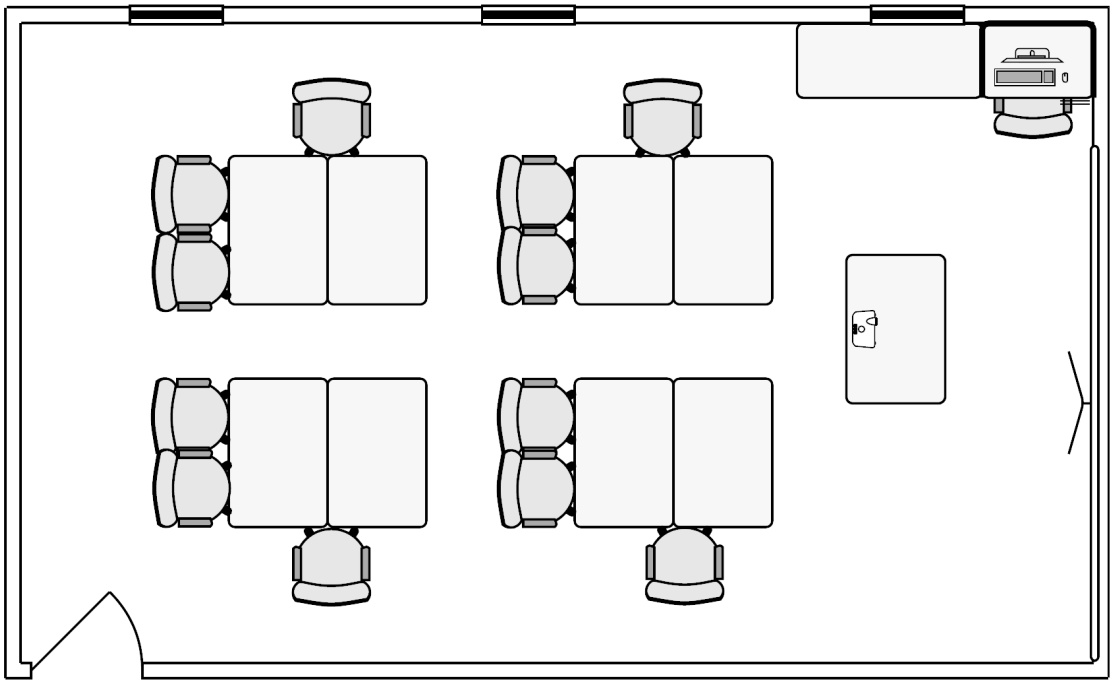


Figure 6: Generic Classroom Configuration at ALC (not to scale)

3.3.6 Current Context at ALC

Currently, the centre is entering a new phase in its development as an organisation. The first is the need for expansion as the number of students has been and is continuing to increase. The addition of the two 'New Classrooms' and 'Small Classroom' are still not keeping up with the expansion in student numbers and space remains a critical issue for the centre's Principal (James Interview, 2017) and the other managerial staff (Briana Interview, 2017).

An additional change that occurred during the research inquiry was that the previous Programme Coordinator stepped down to focus solely on TEFL teacher-training course offerings at the ALC. In this move, a new Programme Coordinator has stepped in from outside the organisation, despite several applications from current in-house members of ALC staff. The new Programme Coordinator at the time of the research inquiry was proceeding to assess and establish herself in the organisation (Briana Interview, 2017).

Of critical concern to this research-inquiry was the timing and place in which the CL occurred. The ALC is affiliated to a higher education institution which has been, and during the second part of this research inquiry was impacted by the *Fees Must Fall* movement. During this time the centre experiences a displacement of its classes which were moved to other sites that were not affected by the student protests. At the time of the initial research project of class observations, managerial planning was already underway for possible venues in which classes could be held. In light of this, changes to the CL design were implemented (see Section 3.8) to accommodate the intervention process so that it could flexibly relocate to where teachers were temporarily teaching.

3.4 Methods and Techniques for Data Collection: Preliminary Case Study

Data for the case study phase of this research inquiry were obtained from three main sources. It is based on over 11 hours of observations and video-recordings of ten lessons in four different classrooms; and audio recordings of selected individual interviews of teachers, students and line managers of the ALC as well as the initial research study information session.

3.4.1 Observations, Field Notes, Lesson Artefact Collection of Classroom Practice

In order to aid the 'thick description' in mapping, the activity systems of classroom practice at the ALC, observations and the taking of field notes was implemented. The researcher used unstructured, non-participant observations (Mulhall, 2003; Savenye & Robinson, 1996) that used a 'salience hierarchy approach' to field note-taking (Wolfinger, 2002).

By not fully 'participating' in classroom observations and not 'structuring' what was to be observed, the use of unstructured non-participant observations was used to record and uncover aspects that the researcher may or may not have considered before in light of the study's research questions (Mulhall, 2003). This approach allowed a particular 'opening up' of the observations of classroom practice for the researcher that did not regulate what was to be

observed, helping develop a more in-depth insight and 'fuller' account of the actual classroom settings and practices of teacher and student interaction (Savenye & Robinson, 1996).

This approach was further heightened with the addition of a 'salience hierarchy approach' of field-note recording of observations, which acknowledges the researcher's own background knowledge and experience within the field to record interesting or deviant interactions of classroom practice (Wolfinger, 2002). Undertaking such an approach allowed me the ability to note any critical episodes during observations that appeared particularly noteworthy *in situ* that were to be followed up in data analysis. Moreover, to further aid the 'thick description' of classroom activity in data collection and analysis, all lesson material such as lesson plans, worksheets or any other pertinent elements deemed valuable from observations, and field notes were collected for further analysis.

The use of such an approach to data collection emphasises that "it is impossible to separate researcher from 'researched'" (Mulhall, 2003, p. 307). This saturation of the data collection with my own interpretations and biases recognises the need for data triangulation, to which I turned to the use of recordings of classroom interaction and the information session as well as interviews with selected participants (Guion et al., 2011; Paterson, Bottorff, & Hewat, 2003).

3.4.2 Video-recordings of classroom interaction

The use of video-recordings served two purposes during the case study phase. The first was to verify observations and recorded field notes of classroom interactions, as well as its second purpose in which to generate 'mirror data' for the CL sessions to be used the second phase of the research study (Virkkunen & Newnham, 2013).

All lessons were video-recorded with a single Sony HDR-PJ50 video camera provided from the researcher's hosting institution. The use of a single camera was deemed to be the most appropriate as it would the least invasive method to record classroom interaction and could easily be appropriately positioned in classrooms where there was limited space.

The use of video recordings provided a permanent and comprehensive record of classroom activity that was used for transcription as well as aid the validity of data analysis (Hammersley, 2006; Paterson et al., 2003). It further aided the capturing of incidents that were not initially recorded in observations and field notes. The use of multiple video recordings of classrooms

was also used in order to allow participants to feel more comfortable with its use in the classroom.

3.4.3 Audio recordings of the information session and selected individual interviews

Data collection was further triangulated with the use of audio recordings of the initial case study's information session with all ALC staff as well as post-observation interviews with selected key participants (Maxwell, 2008, 2013; Polkinghorne, 2005; Seale, 1999).

The recording of the initial case study information session was done to firstly develop trustworthiness and transparency of the research study with all ALC staff, as well as document a wider range of teachers' perspectives on teaching and the use of MALL at the ALC other than those that were observed (Shenton, 2004). This session lasted under 25 minutes, and all staff were present in order to highlight any concerns, questions or insights they might have concerning the study's research questions and actual study.

Seven to thirty-minute, one-on-one, semi-structured interviews with selected students, teachers and managers were conducted at times convenient for all participants interviewed (Gardner, 2010). The semi-structured nature of the interview was open-ended to allow for potential questions and insights that would facilitate deeper clarification of classroom practices and interactions (Corbin & Morse, 2003; DiCicco-Bloom & Crabtree, 2006). Conscious of the socio-political nature of semi-structured interviews and classroom settings (Corbin & Morse, 2003; Fontana & Frey, 2000), I chose more ‘neutral’ spaces such as the ALC's Teachers Room and sat next to respondents in a classroom during interviews.

The recognition of this socio-political nature of interviews and research spaces resonates with post-structuralist critiques of interviews (Hammersley, 2006) that sees the interview between the researcher and participant as a joint construction that cannot be labelled neutral or objective (Fontana & Frey, 2000). This joint-construction can be seen throughout the interview process, most specifically with students where questions were reworded or reconfigured for understanding, or when teachers and managers would highlight my status of a ‘teacher’ to help configure their interpretations of their classroom practices. This discursive positioning of me by respondents (i.e. teachers and managers) and my positioning (i.e. of students) of respondents highlight this co-productive and political nature of the interview process.

In addition to the interview questions asked for teachers and the Programme Coordinators, was the use of the Teaching Change Frame (TCF) (Tarling & Ng'ambi, 2016) during the post-observation interviews. The TCF identifies four quadrants of classroom practice where teachers' practices fall. Quadrants A and D focus on lower-order thinking skills where interaction is tightly regulated by the teacher, suggesting more symmetrical power relations. Quadrants B and C focus more on higher-order thinking skills and participatory relations between teacher and students, suggesting more asymmetrical relations of power. The TCF was used to see how the teachers and programme coordinators at the time of the research inquiry locate their own teaching practices, allowing insight into their teaching beliefs around classroom practice. After this, both teachers and the programme coordinators were asked where they would like their teaching practice to be on the TCF.

3.4.4 Transcription

All lessons and interviews were transcribed to enable critical analysis in conjunction with field notes. As activity is the unit of analysis as well as the need to track discursive contradictions, the transcription key below (Table 5) firstly emphasises 'lexical integrity' and 'legibility' for both the researcher in analysis and the intended readership (O'Connell & Kowal, 1999).

Table 5: Transcription key of classroom observations and interviews

. , ? !	Punctuation used to help reading of transcript
…	Significant pause
Bold	Hyper-stressed words
[action taking place]	actions occurring during speaking
Name:	Name of speaker
(inaudible/ unclear)	Indicates that section of dialogue proved difficult to transcribe/ inaudible
(word?)	Indicates a word heard in a difficult section of transcription

3.5 Ethical Considerations: Preliminary Study

Before the research commenced, permission was sought and obtained from both the University of Cape Town's Research Ethics Committee as well as the Principal and Coordinator of the ALC. Furthermore, to highlight the transparency of the research study undertaken, a formal, verbal, information session presentation was held with all members of staff during a Friday staff meeting. Following this, more informal and 'lighter' information sessions for students

were held in classes that were selected for the case study phase of the research with the teacher of that class present.

All participants were given a plainly-worded informed consent form and project information sheet (Lahman et al., 2015), detailing the aims of the research study, their voluntary choice to participate and ability to withdraw at any time. The consent form explicitly detailed that their language learning and teaching would not be affected in any way, nor would their participation disadvantage them in any way. Participants were also given choices regarding what information could be collected or analysed, as well as their decision to be selected for post-observation interviews. The consent form emphasised that participants would not have to answer any questions that would make them feel uncomfortable.

To further ensure anonymity, participants were given the option to create their own pseudonyms or be assigned one, so that they could not be easily identified (Lahman et al., 2015; Nyamnjoh, 2007). They were also explicitly told that any pictures would be extensively altered so that they would not be identifiable.

3.6 Research Participants and Sampling: Preliminary Case Study

As the research study highlighted activity as the primary unit of analysis, and my research questions emphasized the socio-political nature of classroom interaction, it dictated the need for the use of purposeful sampling (Hoepfl, 1997; Merriam, 2002). This purposeful sampling required student-participants who would be able to proficiently discuss abstract and complex concepts, as well as teacher-participants who actively used or were open to using mobile technology in their classroom practice.

In an effort to align the research study with ethical considerations, teachers who wished to participate were allowed to decide which classes the researcher was allowed to observe over two months. In total, four different classes were observed, resulting in over 11 hours of video recording and observations of classroom practice.

3.6.1 Student Participants

The need for student participants who could discuss abstract and complex concepts led to my focus on observing Advanced (B2-C1), Upper-Intermediate (B1-B2) and Examination (B1-

C2) classes in the General English/ Exam Preparation and Conversation periods in the morning and early afternoon periods of the weekly timetable, respectively.

From this, three different students from three of the four classes were selected to participate in post-observation interviews. These students were within the age range of 25 – 35 years old, and all students' motives for language study were either linked to the need for university entrance for further study or the enhancement of work prospects.

3.6.2 Researcher-Student Relationship: Effects on Research

My status as a part-time teacher trainer and limited teaching of students as an EFL teacher meant I had little to no previous interactions with all the student-participants, except for Henri whom I had taught earlier in the year as a substitute teacher for one lesson.

I believe this limited interaction with the students helped facilitate my observations as a 'non-participant'. However, an unexpected effect of this was that many students were reluctant to volunteer for post-observation interviews or were initially uncomfortable with my presence on the first days of any classroom filming. Students' discomfort meant that in some classes, such as Marjorie's, I had to switch off the camera in line with the consent students had given me for video recordings and observations. In other classes, this was much less a problem as students became very comfortable (and often ignored) my presence in the classroom such as Ned's. In this way, my status as a non-participant researcher, my video recordings and observations impacted upon student behaviour and classroom interactions, and therefore my findings.

3.6.3 Teacher Participants

Teachers who wished to participate were selected based on my purposeful sampling criteria of teaching either Advanced, Upper Intermediate, Exam Classes or Conversation classes and expressed a desire or interest in using technology for TEFL. From these, four teachers' classes were selected.

John and Ned have been with the ALC either since its inception, or very early on in its development. Marjorie and Arya are more recent additions to the staff, with Arya leaving shortly after the data collection period before post-observation interviews could be conducted with her. Due to this Arya's lessons, while preliminarily analysed, were not included in this study.

Table 6: Teacher Demographic Information

Teacher	Gender	Age	Nationality	Qualifications	Experience
Marjorie	Female	39	South African	Master's Degree, TEFL certificate	1-3 years of TEFL
Ned	Male	38	South African	Bachelor's degree, Honour's (current), CELTA	4-7 years
John	Male	34	British	Bachelor's degree, Honour's, CELTA, DELTA	8 – 10 years

As can be seen, all teachers have advanced degrees in higher education and TEFL with a minimum of 2 years of TEFL teaching experience. All the teachers had experience teaching overseas. John also acts as the Assistant Director of Studies and is considered permanent staff. Ned and Marjorie are part-time teachers who are POC.

3.6.4 Researcher-Teacher Relationship: Effects on Research

I have a close relationship with all my colleagues, which impacted significantly on my observations and interviews. After observations or in interviews, teachers used my status as a teacher and teacher-trainer to ask for lesson-critique or to further re-assert their positions taken. Their questions signalled that my status as a non-participant, researcher and teacher was in constant negotiation with my teacher participants.

3.6.5 Managing Staff Participants

Interviews were also conducted with managing staff. This included the Principal (James), the previous Programme Coordinator (Dani) and the newly hired Programme Coordinator (Briana) prior to the implementation of the CL phase of the study.

All managing staff have extensive experience and qualifications in TEFL as well as in the management of TEFL centres. Except for the new Programme Coordinator, both the Principal and previous Programme Coordinator had been integral in the creation and set up of the ALC at the higher educational institution.

3.6.6 Researcher-Managing Staff Relationship: Effects on Research

I have a close relationship with the managing staff who are all my line managers, especially with the previous Programme Coordinator, whom I work throughout the year in the facilitation of teacher-training at the ALC. The newly-hired Programme Coordinator and I have both worked for an international language teaching group, and we had met previously before her employment at the ALC.

The Principal and I have not worked closely before, and we have had limited interactions during my part-time work at the centre. Throughout the study, the Principal made it clear that he was apprehensive of the use of MALL in TEFL, noting that similar benefits in the past were claimed with Computer-Assisted Language Learning (CALL). However, he acknowledged that a study might be useful to ascertain the direction for technology-use at the centre as long as it did not impact upon teachers' teaching. Due to this, I felt immense pressure to accommodate and alleviate any interference my study might have on the teachers or the students.

3.7 Methods and Techniques for Data Analysis: Preliminary Case Study

My method of analysis followed a method similar to the one I employed in my pilot study (see Lilley & Hardman, 2017). Observational field notes, transcripts of recorded classroom interaction and selected participants' interviews were used for analysis. In reviewing observational field notes and recorded transcripts, overt and significant episodes of student and teacher interactions with mobile phones or other technology in all lessons were identified.

Three episodes drawn from Marjorie's and Ned's classes, demonstrating overt and significant teacher and student interactions with mobile devices were nominated for detailed analysis in order to map and identify mobile phone use in the classroom and relations of power. These episodes were then contrasted with selected participants' interview transcripts and self-positioning of the TCF (see Figure 7) to further validate and clarify the researcher's interpretations of the activity system and classroom interaction.

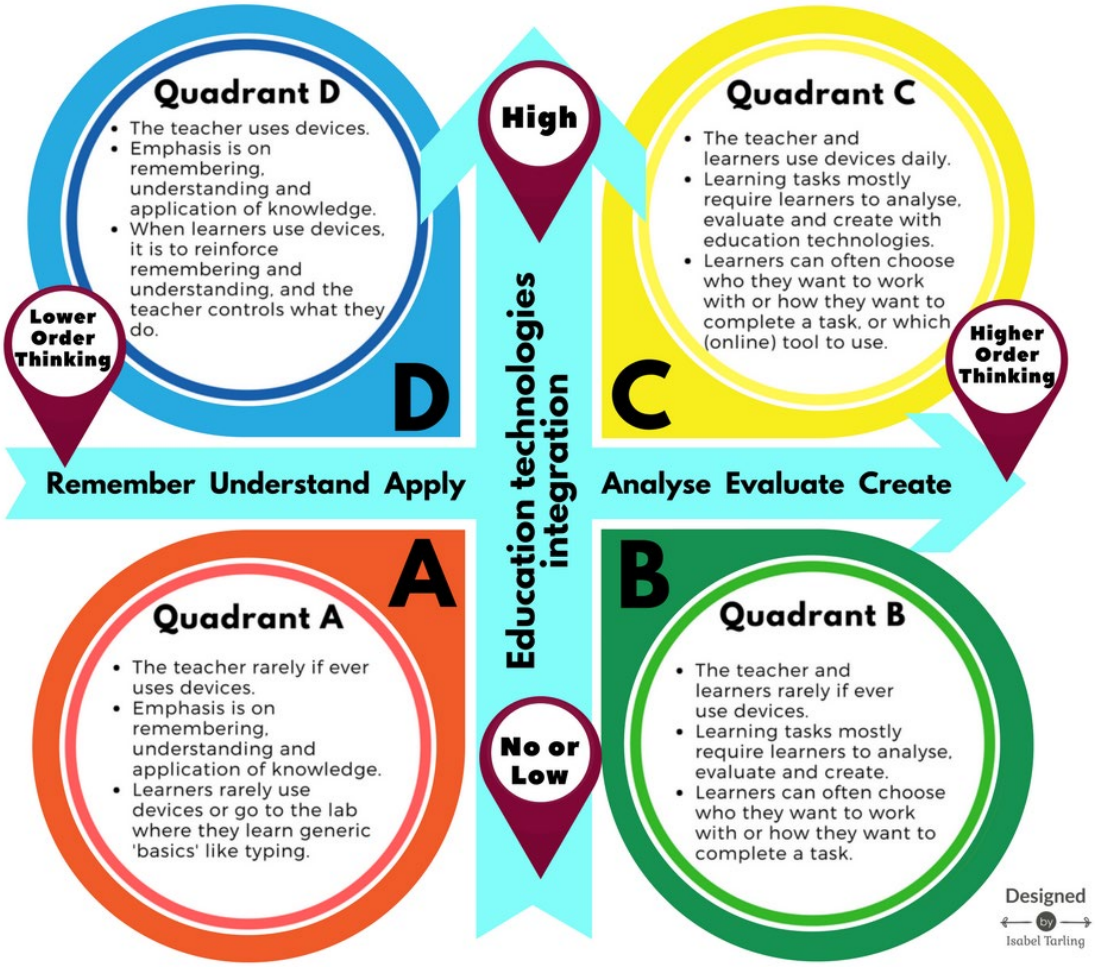


Figure 7: Teaching Change Frame (I. Tarling, personal communication, March 4, 2019)

Hardman's (2005a, 2008) Activity Checklist was then used to map each episode to detail the classroom activity system and highlight potential contradiction sites (see Table 7 below).

Table 7: Hardman's (2008) Activity Checklist (p. 75)

Activity Theory Concepts	Questions to ask when evaluating procedures
OUTCOMES	What is produced in the episode?
MEDIATING ARTEFACTS	What tool(s) are being used?
OBJECT	What is the object/ focus of the episode?
	What is the purpose of the activity for the subject?
	What is the teacher working on?
	What is the student working on?
	Why is he/she working on it?
DIVISION OF LABOUR	Who does what in this episode?
	Who determines what is meaningful?
COMMUNITY	What community/communities are involved in this episode?
	What group of people work together on the object?
RULES	What kinds of rule: instructional rules: evaluative rules and pacing rules? Social order rules: disciplinary rules and communicative interaction rules?

After mapping the system and potential contradiction sights, the same data were then analysed using my elaboration of Frohberg et al.'s (2009) *Scale of Issues* (see Appendix 1) as shown in Table 8. This analysis was used to further corroborate and elaborate on areas of potential primary contradictions present in classroom activity with mobile devices, especially concerning the division of labour, rule and object.

Table 8: Lilley's (2019) adaption of Frohberg, et al.'s (2009) Scale of Issues

Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules*	*Technological* Full Teacher Control *Semiotic*	*Technological* Mainly Teacher Control *Semiotic*	*Technological* Scaffolded *Semiotic*	*Technological* Mainly Learner Control *Semiotic*	*Technological* Full Learner Control *Semiotic*
Communication *Division of Labour*	*Technological* Isolated *Semiotic*	*Technological* Loose Couples *Semiotic*	*Technological* Tight Couples *Semiotic*	*Technological* Communication within Groups *Semiotic*	*Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

The application of these analytical lenses of significant episodes facilitated an analytical process whereby I was able to constantly compare and move across different data, analysis and theory in my account of ALC teachers' and students' use of mobile technologies in the language classroom (Westbrook, 1994).

When all episodes had been analysed and extensively mapped, the researcher's depiction of the ALC activity system was created. This model of activity synthesised primary contradictions sites across all cases and was further analysed using my theoretical framework to detail areas for possible participant engagement and analysis during the CL process. This final process echoes Yin's (2009) call for the need for reflexivity to be ingrained within multiple case-design research, as it continually reinforces revaluation and analysis of research data and the researcher's interpretation of it (Delamont, 2007; Zaharlick, 1992).

3.8 Methods and Techniques for Data Collection: Change Laboratory Intervention

3.8.1 Change Laboratory Intervention Methodology

The CL, as an intervention methodology, consists of a specific set of tools and setup in order to invigorate the Expansive Learning process (Virkkunen & Newnham, 2013). The first of its nuances as a methodology revolve around the use of the 3x3 Frame to represent work activity that features a horizontal plane which focuses on three aspects of abstraction and theoretical generalization ('Model, Vision', 'Ideas, Tools', and 'Mirror') and a vertical plane of movement through time ('Future, Present/ Now, Past') (Y. Engeström et al., 2014). Both planes are used in combination with each other throughout the process to enable the socio-cognitive processes needed to engage the participants in the Expansive Learning Cycle (Y. Engeström, 1987). The generic model and socio-cognitive ingrained within a CL session are depicted below in Figure 8 and 9.

The 'Mirror' frame in the far right is used to represent a reflection of data of participants' activity through time. For instance, the Mirror/ Present frame examines current formulations of work activity and practice that are problematic, or offer novel solutions (Virkkunen & Newnham, 2013). Mirror/ Present data may take the form of videotaped episodes of disturbances in classroom interaction that are to be analysed by the intervention-participants. On the other hand, Mirror/Past showcases data of historical antecedents of the current activity while the Mirror/Future showcases intervention-participants' experimentation with new tools, models or anticipated changes in their activity (Virkkunen & Newnham, 2013).

To the far left is the 'Model, Vision' that represents participants' modelling of the activity system in the past, present and future periods, including the inner contradictions present at those particular times (Virkkunen & Newnham, 2013). In the middle is the 'Ideas, Tool' surface which offers an intermediary space for cognitive tools and techniques for analysis or representation of insights as intervention-participants move between the Mirror and Model frames through time (Virkkunen & Newnham, 2013).

The intervention-participants and researcher-interventionist are positioned in front of the 3x3 frame in order to collectively discuss, negotiate, reflect, and emotionally confront current and past formulations of activity, as well as engage in modelling and imagining future novel ways of working (Y. Engeström et al., 2014). To further this process, the use of video to show captured mirror data episodes, as well as an archive of collected data is available to the

researcher-interventionist and participants. Furthermore, one participant in every session is demarcated as the 'Scribe' who is to note down what was discussed and any other important elements mentioned in that CL session.

Another crucial aspect to CL methodology is that the CL process must occur on the 'shop room floor' (Y. Engeström et al., 2014; Virkkunen & Newnham, 2013). By this, it means that CL interventions take place within the organisation in which the activity system under investigation occurs. The location of the CL thereby requires a dedicated space in which sessions must be held.

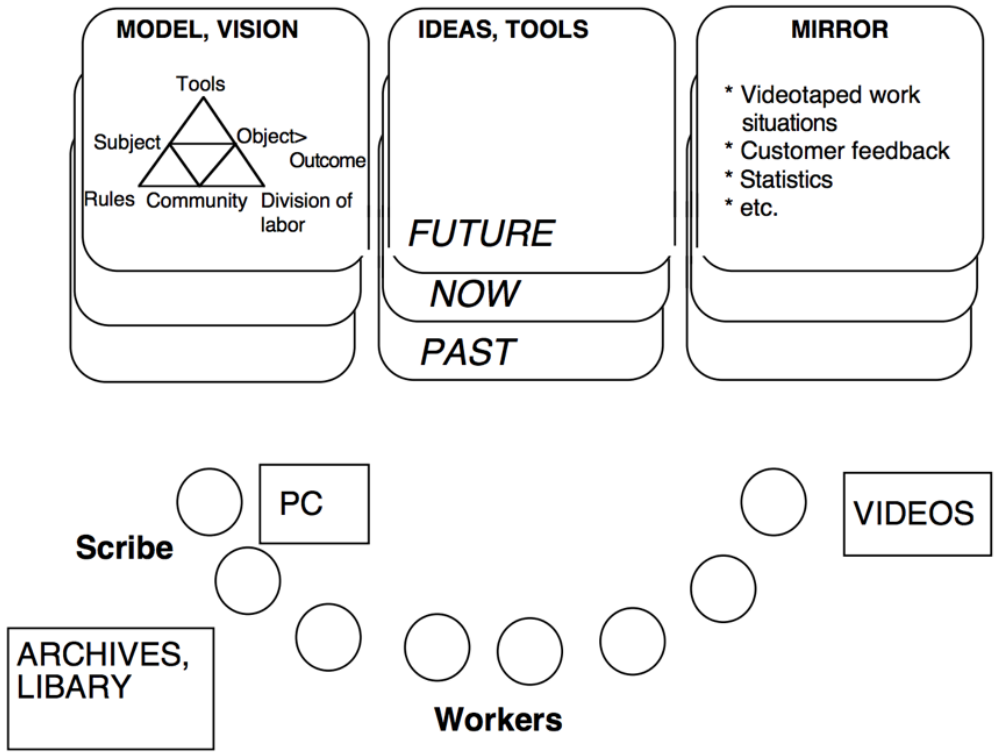


Figure 8: Prototypical layout of the CL (Y. Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996, p. 12)

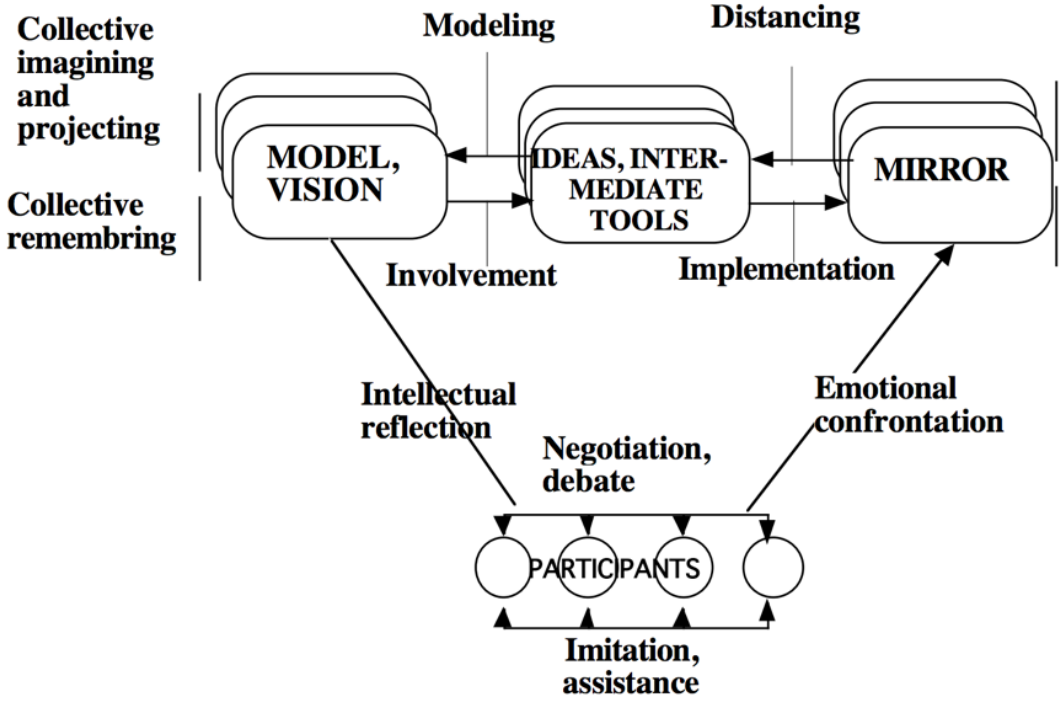


Figure 9: Sociocognitive processes called for in the CL (Y. Engeström et al., 1996, p. 18)

3.8.1.1 The Need for a 'Flexible' Change Laboratory Intervention

As stated above, during the case study phase, planning was already underway to prepare the ALC to move classrooms to other sites outside of campus due to the *Fees Must Fall Protests*. In addition to this, space was a problematic aspect for the ALC, as even though new, additional classrooms such as the 'New Classrooms' and 'Small Classroom' had been added to curb these concerns, there was still not enough space for all learners and teachers.

These concerns around limited classroom spaces are not new in any South African educational setting (Christie & Gordon, 1992; Mavhunga & Kibirige, 2015; Modisaotsile, 2012) or in other developing African contexts (Thomas & Salema, 2017). Space and flexible timings in order to keep up with the dynamic shifts in South Africa's political-educational landscape at the time was a primary concern for the ALC and its hosting institution, which had resorted to online and distance learning teaching methods to meet academic requirements.

With these concerns in mind, in preparing for the intervention, there would be an added complication of finding a fixed CL locale on-site where intervention-participants could attend sessions and records of data and mirror material could be stored. To this end, I needed a flexible CL intervention site that could mitigate any potential affects the student disruptions could pose

during the intervention phase of this research. A CL site which participants and I could easily gain access to and set up, no matter their teaching location around Cape Town.

3.8.1.2 A 'Blended' Change Laboratory Intervention

I thus turned towards adapting the fixed nature of the CL method into a flexible, virtual one that could be easily be accessed, updated and transported to any site the intervention-participants were located to engage participants in the Expansive Learning process. I created a virtual, Google Classroom CL, that would act not only as a virtual repository and archive for material and mirror data but also as a space in which teachers could access analysis tasks and the 3x3 frame during the intervention process. An image of the virtual aspects of this 'blended' CL, as well as several images of research-participants interaction with it, can be seen below.

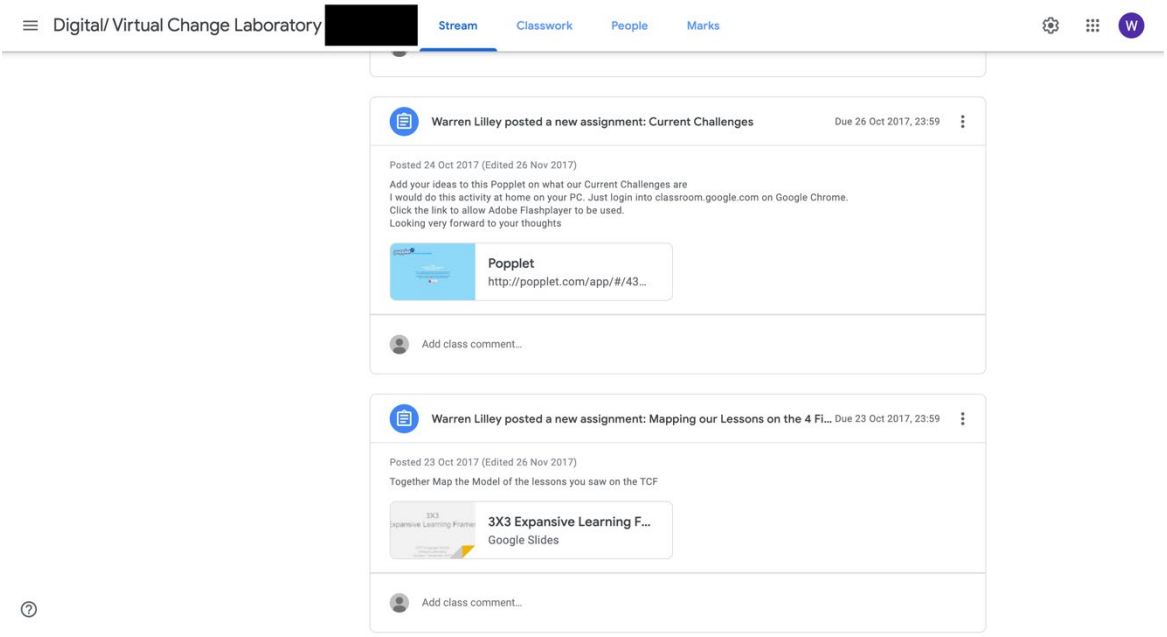


Figure 10: 'Blended' CL showcasing access to the Virtual 3x3 Learning Frames and mirror data videos



Figure 11: Teachers mobile device access to virtual aspects of Blended CL in research site B (Off campus)

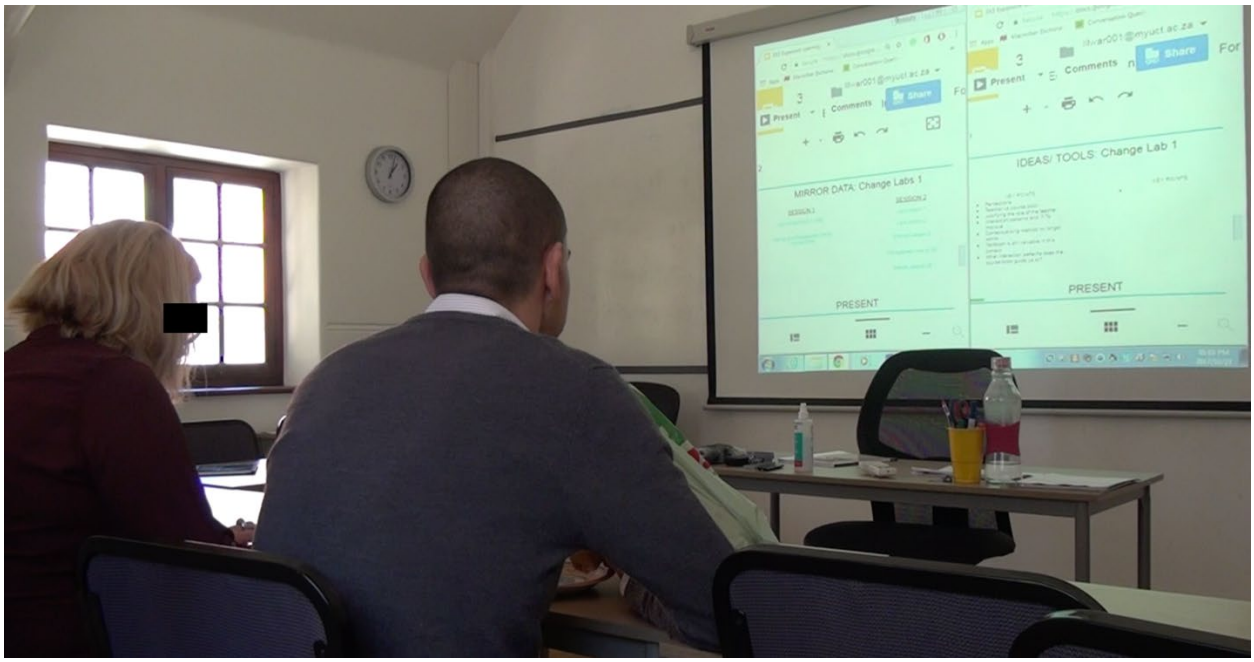


Figure 12: Teacher participants use of virtual 3x3 Frame of the Blended CL in research site A (ALC)

The images show how the 'blended' CL was used throughout the CL process at some of the several sites in which the intervention took place. Central to all of them was the ability to virtually access the CL from wherever research-participants were currently located in their teaching practice, or spaces which the ALC management designated for the CL.

Of particular relevance are Figures 11 and 12, which show the application of the Blended CL during the intervention. By using the online capabilities of Google Classroom and its associated applications, such as Google Slides being used as the 3x3 Frame, intervention-participants were able to flexibly and reliably gain access to all previous session material no matter where previous sessions were held. Furthermore, rather than the 3x3 Frame, mirror data and analysis being physically distanced from participants, the use of the virtual CL allowed participants the ability to move through the 3x3 Frame on their mobile devices in their face-to-face discussions and pick up on ideas from previous sessions. Thus, while the 3x3 Frame or data was presented on the whiteboard or projector, participants were given further agency in directing and expressing their understandings using their access to digital CL resources available on Google Classroom and the 3x3 Frame on Google Slides contained within it.

These adaptations towards a more traditional CL design following the issues at research site resulted in a change to RQ1.2: 'To what extent can an adapted 'blended' CL method that suits the current local context of the research-intervention site, facilitate Expansive Learning actions?'

3.8.1.3 Setup of the CL Intervention

As noted by Virkunnen & Newnham (2013), CLs require careful and meticulous planning. In line with this, following the initial case study phase of this research, I identified that teachers were not acutely aware of the potential inner contradictions of their current activity system regarding division of labour, object and rules. From this, I modelled the initial plan of the CL on the Need State Change Laboratory sessions held at Molefi Secondary School (see Virkkunen & Newnham, 2013).

Session	Week	Hour	Content	Participants	After Session Task
1	**16 -20 October**	1	Introduction to: - Change Laboratories, - Theory - Ways of working in the MALL CL (Google Classroom, Google Suite, Disruption Diary)	**Teachers, Management**	Disruption Diary, Review Google Classroom
		2	Questioning: - Current Practices & Thinking - Teachers joys, worries, disruptions,	**Teachers**	Disruption Diary, Concrete examples
2	**22 - 27 October**	1	Questioning: - Current Practices & Thinking - Student & Management Perspectives - Power Relations with Mobile Phones and other artefacts Central Challenges: - Lesson Observations - Interviews	**Teachers**	Disruption Diary
		2	Central Challenges: - Continued from above Collecting data on changes in activity	**Teachers**	Historical Data Collection
3	**29 - 3 November**	1	Historical Analysis: - Analyzing the development of the Activity System - Developing & outlining central contradictions	**Teachers**	Further Analysis
		2	Modelling: - Central contradictions - Power Relations	**Teachers**	Disruption Diary
4	**5 - 10 November**	1	New Activity System: - Tentative Model - Ideal model - Exploration of Mobile applications? (Nearpod etc.)	**Teachers**	Exploration of Uses, Ideas Questioning own Practice
		2	Overcoming contradictions - Proposed ideas	**Teachers**	Disruption Diary
5	**12 - 17 November**	1	Discussion and elaboration of change ideas	**Teachers**	Exploration of Uses, Ideas
		2	Discussion with wider school community and Management - Presentation of ideas - Anticipating problems, obstacles and support	**Teachers, Management**	Creating concrete Model
6	**19 - 24 November**	1	Model: - New Activity System - Concretizing new practices for experimentation	**Teachers**	Preparing Presentation
		2	Discussion of the proposed experiments with management	**Teachers, Management**	Further exploration & development of model
7	**26 - 1 December**	1	Planning: - Carrying out of proposed changes in Advanced level - Experimentation procedure	**Teachers**	Disruption Diary
		2	Planning: - Realization - Evaluation of experimental changes Certificates of Attendance given	**Teachers, Management**	Specific Goals/ Roadmap to Change?
FOLLOW UP SESSIONS WILL BE PLANNED MORE CONCRETELY AT A LATER DATE					

After	**To be planned**	Implementation of new model - Teachers - Management Researcher Data Collection	**Teachers, Management**	Disruption Diary
Follow up	**To be planned**	Evaluation and Further Development - Looking at issues - Creating solutions	**Teachers, Management**	Disruption Diary
Follow up	**To be planned**	Evaluation and Further Development - Looking at issues - Creating solutions	**Teachers, Management**	Disruption Diary

*The following preliminary plan is based upon Virkunnen & Newham's (2013) case study of the Change Laboratory at Molefi School in Botswana (p. 129).

Figure 13: Initial research-intervention plan

The initial timeframe of the CL was to be held over seven weeks, with each CL session divided into two, one-hour shorter sessions. Dividing the sessions was aimed to lessen the demands of participants' time following management's concerns regarding the CL, taking too much of participants' time in line with their teaching duties. However, as Y. Engeström et al., (2014) note that as intervention-participants' transformative agency expands, they take over more of the CL process. Their expanded agency resulted in the initial plan changing quite extensively, with the addition of several sessions such as 'Teacher Planning of Lessons' based on their new model and the incorporation of an 'Ask the Expert Session' due to participants' request to understand Project-Based Learning with digital tools. The finalised plan is shown the Table 9 below.

Table 9: Overview of CL Sessions once the research-intervention was completed

Session	Session #/ Date	Hour	Content	Participants	After Session Task
1	**Session 1.1** 16 October	1	Introduction to: • Change Laboratories, • Theory • Ways of working in the MALL CL (Google Classroom, Google Suite, Disruption Diary)	**Teachers, Management**	Disruption Diary, Review Google Classroom
	Session 1.2 20 October	1	Questioning: • Current Practices & Thinking • Teachers joys, worries, disruptions,	**Teachers**	Disruption Diary, Concrete examples
2	**Session 2.1** 23 October	1	Questioning: • Current Practices & Thinking • Student & Management Perspectives • Power Relations with Mobile Phones and other artefacts Central Challenges: • Lesson Observations • Interviews	**Teachers**	Disruption Diary
	Session 2.2 26 October	1	Central Challenges: • Continued from above Collecting data on changes in activity	**Teachers**	Historical Data Collection
3	**Session 3** 1 November	1.5	Historical Analysis: • Analysing the development of the Activity System • Developing & outlining central contradictions	**Teachers**	Further Analysis
4	**Session 4** 6 November	1.5	Modelling: • Central contradictions • Power Relations	**Teachers**	Disruption Diary
5	**Session 5.1** 8 November	1.5	Modelling: • Central contradictions New Activity System: • Tentative Model • Proposed Ideas Overcoming contradictions	**Teachers**	Disruption Diary Teacher Presentation Preparation Review of Process and Comments on 3x3 Frame

			• Proposed ideas		
	Session 5.2 17 November	1	Discussion with wider school community and Management • Presentation of ideas • Anticipating problems, obstacles and support	**Researcher Management**	Creating concrete Model
6	**Session 6.1** 20 November	1	• New Activity System • Concretizing new practices for experimentation	**Teachers**	Preparing Presentation
	Session 6.2 22 November	1	• Ask the Expert	**Teachers**	
	Session 6.3 27 November	1	• Model Concretization	**Teachers**	
Implementation	29 November	Demo	• New Practices: Mobile Learning Technologies	**Teachers**	Lesson
	4 December	LP 1	• Lesson Planning Session 1	**Teachers**	Lesson Plan 1
	6 December	LP 2	• Lesson Planning Session 2	**Teachers**	Lesson Plan 1, 2
	11 December	LP 3	• Lesson Planning Session 3	**Teachers**	Lesson Plan 2
	14 December	Lesson	• Lesson Implementation in Convo (Marjorie & Ned) & EAP (John)	**Teachers**	Conduct
7	**Session 7.1** 18 December	1	• Reflections of Experimental Lesson Implementation • Experimentation procedure	**Teachers**	
	Session 7.2 20 December	1	Planning: • Realization • Evaluation of experimental changes Certificates of Attendance given	**Teachers, Management**	Specific Goals

FOLLOW UP SESSIONS WILL BE PLANNED MORE CONCRETELY AT A LATER DATE				
After	**To be planned**	Implementation of new model • Teachers • Management Researcher Data Collection	**Teachers, Management**	Disruption Diary
Follow up	**To be planned**	Evaluation and Further Development • Looking at issues • Creating solutions	**Teachers, Management**	Disruption Diary
Follow up	**To be planned**	Evaluation and Further Development • Looking at issues • Creating solutions	**Teachers, Management**	Disruption Diary

Furthermore, every session was planned based on Virkunnen & Newnham's (2013) template, as shown below in Figures 14 and 15.

Change Laboratory

Detailed Session Planning Sheet

Time	Themes	Procedure	Purpose	Tools, Mirror, 2 Stimuli	What if? Alternatives?
0 - 10 min	REVIEW	*What do you think about the last sessions?* *In what ways do you think we on things or problems that are worth discussing further?*	Review process See participants view of the system so far and current challenges		
10 - 20 min	QUESTIONING	*Show Marjorie's Lesson Plan briefly* *Show Marjorie's Lesson* *Get participants to view task* *Discussion - What interested you in this video?*	Begin questioning of the system.	Lesson Plan, Video, Task	Show only video/ Lesson Plan
5 - 10 min	QUESTIONING	Show John's Lesson Get participants to view? What was different	Develop questioning of the system	Lesson video excerpts	Get Ps to write and hand-in next session
5 - 10 min	ANALYSING	Show 4 field model	Analysis of System	4 Field Model on 3x3	Participant can draw this

Figure 14: Detailed CL Sheet (Session 2.1)

Change Laboratory

Session Planning Sheet

Change Laboratory Session	1	2	3	4	5	6	7
To do list				Completed?			
What is the Main Purpose of the Session in the cycle of Expansive Learning?							

Time	Min	Themes	Tools, Mirror, 2 Stimuli	Purpose

Participant's Task for next session
For Moderator's Attention

Figure 15: CL Planning Sheet Template

3.8.2 Observation Notes of CL Sessions

During and following each session, the use of observation notes by the researcher was used. These were used to firstly help analyse and identify any disturbances or disruptions evidenced in research-participants during their discussion and negotiation as they progressed through the Expansive Learning Cycle. A 'salience hierarchy' was also used to identify any areas that seemed noteworthy for taking up in further sessions.

These notes were used to direct to any re-planning of further sessions, as well as any re-design of analysis tasks that were to be conducted later in the intervention (see Figure 16). This notetaking also helped develop the responsiveness of the design of the CL sessions due to what was witnessed by participants at the time sessions were held (Virkkunen & Newnham, 2013).

Participant's Task for next session
Participants to create Popplet - record of problems/ tensions - moved to next session
For Moderator's Attention
1. Timing of session - if required leave out Marjorie Lesson 1 for next session 2. Privileging of T-S not accounted for. Get participants to draw the structure of the classroom/ setup of the classroom 3. Ts feeling uncomfortable - Discussion about no value! 4. Management and Teacher Mirror Data on Coursebook to bring up Notes: - Marjorie lesson moved to next Session - Task moved to next session

Figure 16: Research-Interventionist's Post Session Notes for Following Session (Session 2.1)

3.8.3 Video-Recording of CL Sessions

The use of video-recordings served the same purposes as done in the case study phase. Recordings were used to further verify observation notes of CL sessions. The second function of video recordings was to capture potential 'mirror data', demonstrating contradictory or disruptive episodes in participants' analysis of their activity system (Virkkunen & Newnham, 2013).

The sessions were recorded with the same Sony HDR-PJ50 video camera provided by the researcher's hosting institution during the case study phase. The camera was consciously placed behind participants for it to not be noticeable or distract participants from engagement in the

CL sessions. These recordings were used for later transcription and analysis for disruptive episodes.

3.8.4 Collection of Visual Analysis Tasks conducted by participants

Collection of visual analysis tasks pertaining to activity completed by participants were also collected to help identify participants' current trajectory along the Expansive Learning Cycle. These were used to help direct and inform further session planning as well as analysis.

These tasks were often given to participants after the first-hour sessions and were to be completed before the start of the second-hour session. These tasks were delivered through the virtual aspects of the CL on Google Classroom (see Figure 17).

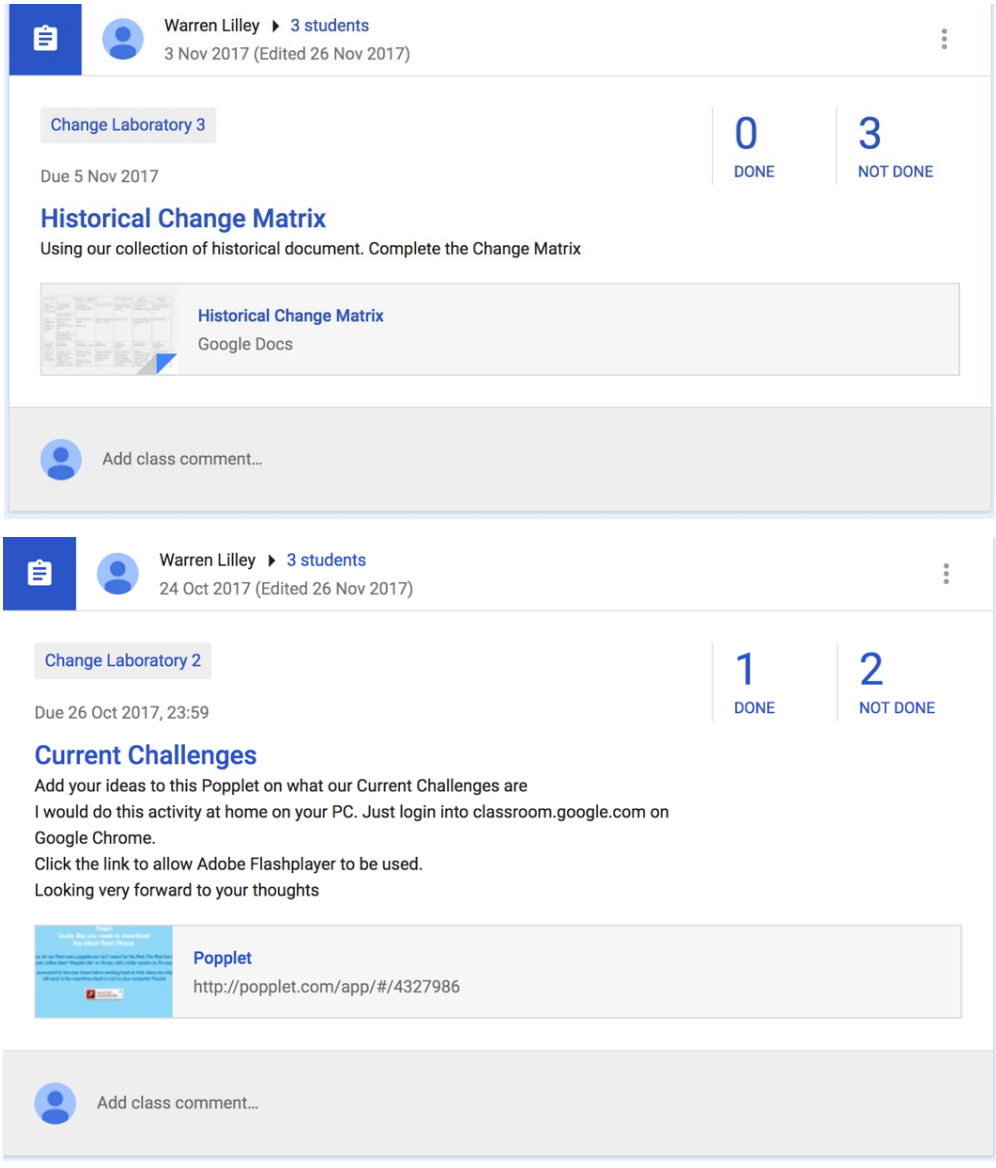


Figure 17: Virtual reflection tasks on virtual aspect of Blended CL

3.8.5 Disruption Diary of Participants

The use of a disruption diary was also trialled at the beginning of the CL. The disruption diaries were created to chronicle research-participants' experiences of any potential conflicts and disruptions they experienced in their work activity.

However, these diaries were never actually completed or filled by any participants. Early on in the CL intervention, the Principal became worried about the extent to which documenting was taking up of research-participants' time. While clarifying their use, and repeated requests to ask participants to make use of them, they never were.

3.8.6 Researcher Diary of CL Sessions

To further aid critical reflexivity (Cunliffe, 2004), not only on participants' part but my own in the conduction of CL sessions, a researcher-interventionist diary was completed by myself. It was used to document my own experience of disruptions, conflicts and dilemmas I experienced during the intervention sessions. These diary entries were used to further aid data analysis and transcription of my own participant-observer-interventionist reflections of the CL process as it occurred over the eight weeks.

3.8.7 Transcription

All CL sessions were transcribed to enable critical analysis of disruptions and conflicts expressed by participants. They were used alongside session observation notes. The same transcription key used for the case study phase of this research inquiry was used to transcribe sessions (see Table 5 above).

3.9 Ethical Considerations: Change Laboratory Intervention

The same permissions as sought in the case study phase were obtained from the university and ALC management. The use of an information session was also held to highlight transparency and trustworthiness of the intervention in a verbal presentation alongside the use of an information sheet and jargon-free consent form. All these measures informed participants explicitly that neither their teaching nor participation in the intervention would disadvantage them in any way. Participants were also given the option to withdraw at any time.

Similar to the case study, participants were also assured that they would not be identifiable either by the use of their name or in any visual representations used in the study and its publication (Lahman et al., 2015; Nyamnjoh, 2007). Furthermore, the use of teaching mirror data was only made available for teachers to review and analyse, to ensure that teacher-participants would not be affected in any way at work (R. Engeström, 2014).

3.10 Research-Intervention Participants

The three teachers (John, Ned and Marjorie) whose classes informed the case study research analysis were asked if they wished to participate. All teachers willingly expressed interest in participating in the intervention.

Furthermore, to align the intervention with the aims and goals of the ALC, the management staff (The Principal and new Coordinator) were also included. Moreover, the previous Coordinator was asked if she would be willing to participate in the intervention study. Her inclusion was due to her featuring extensively in teacher-participants' interviews as well as her seminal role in the historical antecedents of the current formulation of the ALC's TEFL activity. These intervention-participants were labelled as 'Managers' in the design and planning of the CL. They were only invited to attend crucial turning points to help direct and assess the current progress of the CL intervention (Virkkunen & Newnham, 2013).

3.10.1 Researcher-Teacher Relationship: Effects on Change-Laboratory Intervention

There were noticeable differences in the researcher-teacher relationship during the CL intervention. One of the main effects is that teachers had thought these sessions were professional development sessions that would 'teach' them to use mobile technology, instead of an inquiry into possible pedagogies the ALC could employ in using technology for teaching and learning with B2-C1 students.

The other main effect of this assumption on the research was that teachers initially often looked to me for answers because of my own experience using technology for teaching and learning in EFL. However, I made consistent efforts to further renounce my expertise and stressed the need for them to find locally appropriate solutions to their own practice, which was one of the main aims of the CL. In subsequent sessions, their reliance on me or asking for guidance lessened and by the end of the CL they took extensive agency in the design and creation of their own lessons using mobile technologies for EFL based on the model they designed.

3.10.2 Researcher-Managers Relationship: Effects on Change-Laboratory Intervention

It is important to note that usually CLs are requested to be done by workplaces or educational institutions on instruction from managing staff. This was not the case with this research intervention study, as it was requested to be conducted at the ALC by me, which ultimately had repercussions on the researcher-manager relationship experienced during the intervention process.

While there was a similar relationship, as seen in the case study phase with Coordinators, there were marked changes between the Principal and myself. There was an obvious concern on his part about the extensive use of the teacher-participants' time by participating in the CL, as well as added expressed apprehension about the use of more modern technologies at the centre. This apprehension took the form of a follow-up meeting that specifically requested the presence of my supervisor to further elucidate 'what exactly was being attempted' by the intervention and resulted in an extensive move to be explicitly transparent with the conduction of all sessions, as well as provide frequent updates of session progress. Ultimately, planned follow-up sessions fell outside the research time that had been demarcated by management for the research-intervention, resulting in these sessions not being facilitated.

3.11 Methods and Techniques for Data Analysis: Change-Laboratory Intervention

As stated earlier (see Section 3.2.2), seminal to enacting double stimulation and participants' expansive agency lies in provoking a conflict of motives (Y. Engeström, 2011b; Sannino, 2015). To demonstrate this requires an analysis that systematically traces how these conflicts of motives develops into the creation of an auxiliary stimulus (Y. Engeström et al., 2014). In order to systematically track this transition, my data analysis made extensive use of Y. Engeström & Sannino's (2011) framework for the analysis discursive manifestations of contradictions (see below).

3.11.1 Preliminary Post-CL Sessional Analysis

The relatively short time for this CL (7 weeks) resulted in the need for an analysis which could help guide the formative nature of this intervention. This need resulted in the use of a preliminary analysis of each session, which recorded explicit disturbances to guide the design of forthcoming sessions further. This preliminary analysis was drawn from both my observation notes and review of each recorded session (see Figure 18 below).

As can be seen in Figure 18, this analysis focused on participants' discursive exchanges, highlighting instances of agreement, disagreement as well as other overt and significant episodes which were identified for potential, extensive analysis once transcription could be completed. The recording of these instances drew extensively from two languages of description: Y. Engeström's (2011b) layers of causality (see above) and Y. Engeström & Sannino's (2011) framework of discursive manifestations of contradictions (see below).

Preliminary Analysis of Change Lab 4

CL Analysis/ Key findings	MATRIX • Everything has to do with resources • Instead of resources - we're trying to share resources • Community is very much teachers and management - its very communal space not much top down • Ned - disagree - in a way students aren't involved at all • Marjorie agrees with Ned • You would guess a Student would be involved • There isn't a time when Ss would be. • The students vary so much, no united student body - what you have on the day • Disruptions twice • Disruptions tend to zero us - we go back to what we know we can do • Grab a book, any resource, something that is concrete and walk to • That the division of labour is very teacher-oriented • It all starts with teachers, if you look at the history • It links with the rules directly - time to initiate training - unrealistic expectations. There is no slack in the system to make any gains. • Teacher orientated so it for them and if they are reimbursed not enough • The disruption is a sudden and extreme version of what is going on. We obviously go back to the very basic things that we do OBJECT-TOOL • This conundrum we keep coming back to the whole time • The teacher has to do that - this kind of 'have to'. It's not that we are bound to the

Figure 18: Research-Interventionists Preliminary Analysis Notes (Session 4)

3.11.2 Extensive Analysis of Discursive Manifestations of Contradictions

Once sessions had been transcribed, a more extensive analysis using Y. Engeström & Sannino's (2011) framework of discursive manifestations of contradictions was conducted. The framework identifies four main ways a contradiction may manifest in participants' discourse: dilemma, conflict, critical conflict and double bind. Each of these manifestations can be identified by certain discursive and linguistic features that signal its presence in participants' discourse (see Table 10 below).

The framework posits two main phases for analysis. The first is the identification of linguistic cues in participants' discourse which may signal a significant presence of contradictions that

are underlying their discourse at specific points in time (Y. Engeström & Sannino, 2011). To this end, only sessions which explicitly entailed double-stimulation and CL work about their activity were analysed. This focus meant sessions such as 5.2 and 7, which focused on participants presenting their work and session 6.2, where participants engaged with an expert were not selected for this part of the analysis.

Table 10: Types of Discursive Manifestations of Contradiction (Y. Engeström & Sannino, 2011, p. 375) along with RegX coding for transcripts using Atlas.ti

Manifestation	Features	Linguistic cues	Coding for cues using RegX on Atlas.ti
Double bind	Facing pressing and equally unacceptable alternatives in an activity system: Resolution: practical transformation (going beyond words)	"we", "us", "we must", "we have to" pressing rhetorical questions, expressions of helplessness "let us do that", "we will make it"	\bwe\b \bus\b \bwe must\b \bwe have to\b \bwe need to\b \bwe will make it\b
Critical conflict	Facing contradictory motives in social interaction, feeling violated or guilty Resolution: finding new personal sense and negotiating a new meaning	Personal, emotional, moral accounts narrative structure, vivid metaphors "I now realize that[...]"	\brealise\b|\bnow I realise\b Coding discretion to identify emotional, moral, narrative or metaphorical language.
Conflict	Arguing, criticizing Resolution: finding a compromise, submitting to authority or majority	"no", "I disagree", "this is not true" "yes", "this I can accept"	\bno\b \bI disagree\b \bthis is not true\b \byes\b|\byeah\b|\bja\b
Dilemma	Expression or exchange of incompatible evaluations Resolution: denial, reformulation	"on the one hand[...] on the other hand"; "yes, but" "I didn't mean that", "I actually meant"	\bon the one hand\b \bon the other hand\b \byes but\b \bI didn't mean that\b \bactually\b|\bI mean\b

The identification of linguistic cues was aided through the use of Atlas.ti (Scientific Software Development GmbH, 2018), a Qualitative Data Analysis Software, to code for the presence of each linguistic cue. Using RegEx expressions, the software was able to identify all instances of specific linguistic cues. The terms coded for can be seen in Table 10, showcasing how this coding also took into account local colloquialisms, such as 'Ja' or 'yeah' equating to 'yes'.

As can be seen in Table 11 below, some linguistic cues were more prevalent than others, such as 'that is not true'. Moreover, instances of 'critical conflict' that demonstrated emotional, metaphorical or personal instances had to be coded as the transcript was reviewed.

Table 11: Number of instances of contradiction manifestations' linguistic cues present in participants turns over research-intervention sessions

	LINGUISTIC CUE	SESSION								
		1.1	1.2	2.1	2.2	3	4	5.1	6.1	6.3
DILEMMA	"but"	32	32	37	41	53	55	105	58	39
	"I actually meant"	20	33	30	36	38	54	78	55	35
	"on the one hand"	0	0	0	0	0	1	0	0	0
	"on the other hand"	0	0	0	0	0	2	0	0	0
	"yes but"	1	1	0	0	0	0	0	0	1
CONFLICT	"I disagree"	0	0	0	1	0	0	0	0	0
	"No"	13	17	8	18	28	17	38	20	12
	"that is not true"	0	0	0	0	0	2	0	0	0
	"this I can accept"	1	0	0	0	0	0	0	0	0
	"yes"	39	55	72	72	21	101	143	110	65
CRITICAL CONFLICT	emotional language	0	0	0	5	3	8	2	0	1
	metaphor use	0	3	0	5	5	7	3	1	0
	"now I realise that"	0	1	1	0	4	2	3	2	0
	personal language	1	5	8	10	16	12	8	3	3
DOUBLE BIND	"let us do that"	0	1	1	6	6	10	5	4	0
	"us"	3	4	2	7	6	2	15	8	2
	"we have to"	1	3	0	1	3	1	7	0	5
	"we must"	3	0	0	0	1	1	5	0	1
	"we will make it"	0	1	0	0	0	0	0	0	0
	"we"	0	40	29	33	80	56	84	55	36

However, these linguistic cues do not specifically identify a discursive manifestation occurring. A 'yes' or 'we have to' can operate on many different levels and does not necessarily indicate a discursive manifestation which indicates a 'conflict' or double-bind', respectively. For example, Marjorie stating "Ja, and we have to get involved in the whole thing. They will go teacher, teacher come I want you to" (Session 5.1) neither discursively expresses an argument or criticism, nor the facing of an unacceptable alternative. Instead, Marjorie's turn here is further adding to the group's discussion of how teaching in the classroom occurs with students attempting to get the teacher's attention.

To this end, a further discursive analysis was taken to identify specific participants' turns which showcased particular types of discursive manifestations of the contradiction. Key to this analysis was discerning between participants' turns, which showcased a discursive manifestation which matched the linguistic cue (see Figure 19) and those which did not (Figure 20).



Figure 19: Coding where linguistic cue matched presence of 'dilemma' discursive manifestation of contradictions using Atlas.ti (Session 5.1)

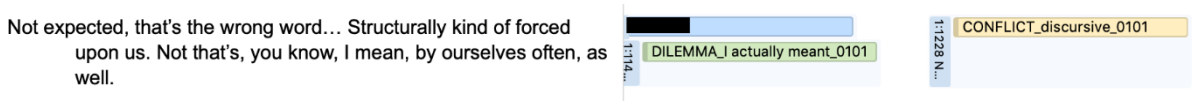


Figure 20: Coding where linguistic cue did not match similar discursive manifestation of contradictions using Atlas.ti (Session 5.1)

Finally, once all participants' turns had been discursively coded, a final interpretive analysis was undertaken to centralize upon the main contradiction participants were articulating. In this analysis stage, manifestations were constantly compared to participants' current formulations of the activity system, at that time during the research process, to highlight possible disruption sites and the evidence of potential contradictions. It further drew upon participants' visual representations and other digital reflective tasks which were given throughout the CL. As with the preliminary case study, this constant comparison between different data, analysis and theory reinforced my revaluation of the research data and my interpretations (Delamont, 2007; Westbrook, 1994; Zaharlick, 1992).

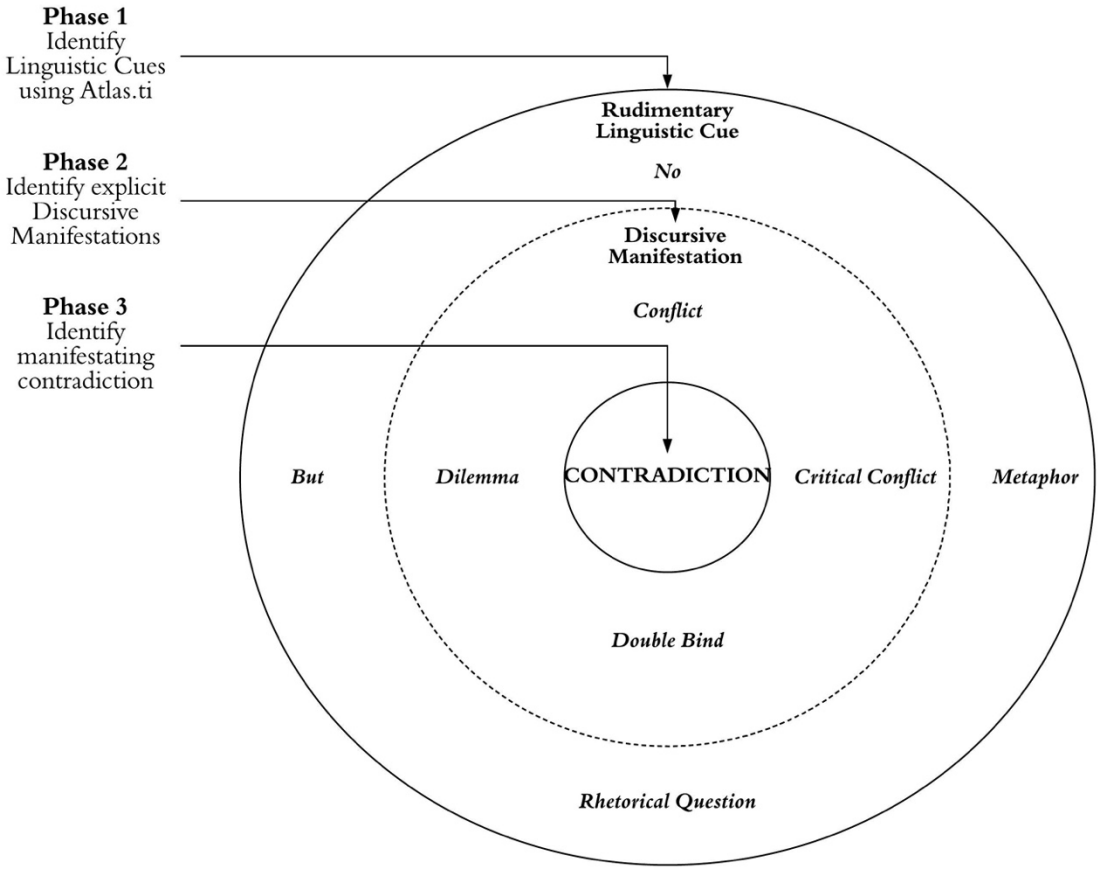


Figure 21: Analysis methodological framework (adapted from Y. Engeström & Sannino, 2011, p. 375)

3.12 Summary

This chapter has described a participatory, formative research-intervention that is complemented by a preliminary, exploratory ethnographic case study of the intervention site. This study was aimed at facilitating the creation of new pathways to enable meaningful integration of mobile technologies at the ALC. To this extent, there are limitations in its generalisability to other sites. In order to assuage these difficulties, this study's analysis drew upon multiple data sources to further support its ability to trace the development of participants' expansive learning actions throughout this research-intervention.

Chapter 4: Dimensions of Teaching & Learning

A CHAT Analysis of ALC teaching and learning practices

"How can you create something new if you know ahead of time what it is?"

(Y. Engeström, 2009, p. 311)

4.1 Introduction

So far, I have discussed how emergent technology-in-education initiatives, such as MALL, have been positioned as potentially transforming the *glocal* tension South African higher/ adult language education faces in its need to both *globalise* as well as embrace *local* knowledges, practices and understandings. However, I warned that the possibilities of these technology initiatives for educational transformation rest on the need for critical inquiry of the unique, local contexts these initiatives are, or will be, deployed in. To *not* do so, runs the risk of equating *real* educational transformation with technological determinism.

In response to this, this chapter aims to supply a deeper, critical understanding of the ALC's context of how technologies, such as mobile phones, are understood and used for language learning. Specifically, it details looking at: what technologies or artefacts, are used; when (or if) technology is authorised for use; who authorises this use; how technology is drawn upon, and more importantly how this is framed by students, teachers, as well as managers at the centre, in terms of language education. In other words, I endeavour to map the context, or rather the activity system (Y. Engeström, 1993) of the ALC by tracing its structural components, its features, as well as the multitude of enculturated and disparate viewpoints of its participants.

Through such an analysis, I aim to plot out not only the activity system, but also to discover latent, potential pathways its subjects could use to inform their activity's transformation in the CL intervention. This can only be done by further tracing and initially linking these contrasting participants' views of the structural elements of the ALC's activity to its own underlying, contradictory history of larger development (Y. Engeström, 1993; Y. Engeström, Kerosuo, & Kajamaa, 2007). In turn, this chapter starts to approach my research question of: what potential

contradictions are evident in the use of mobile phones as artefacts in the activity of language learning at the ALC (RQ1.1)?

4.2 Uncovering the Vertical Dimensions of Work Practices: The ALC and the University

In any attempt to delineate the features of an activity system relies on uncovering the 'true' motive or object of the activity (Y. Engeström, 1987). However, as Popova & Daniels (2004) make clear, in order to ascertain the object of an activity system one needs to account for how the different participants involved in the activity, approach or understand 'the problem space' (or object) they are working toward. For example, a school managerial team's goal may be working towards the standardisation of teaching practices, while teachers will be working on the implementation of these designated methods in their classroom. Both teachers' and managements' goals, in this case, work towards approaching the common object of their school activity, which could be improving students' desired learning outcomes.

This example illustrates that in classroom practice, as in any organisation, there are a variety of actions, goals and conditions that are hierarchically structured in order to realise the collective object of activity (Leont'ev, 1981). In turn, identifying any school's activity then necessitates a clear understanding of how the activity itself is hierarchically organised, as well as the organisational workflow along both vertical (managers to teachers and students) as well as horizontal dimensions (teachers to students/ students to teachers) (Blacker, 2009). Figure 22, below outlines how this process of how the rules mediated by management flows towards and impacts on rules teachers use in the classroom (Y. Engeström, 2009).

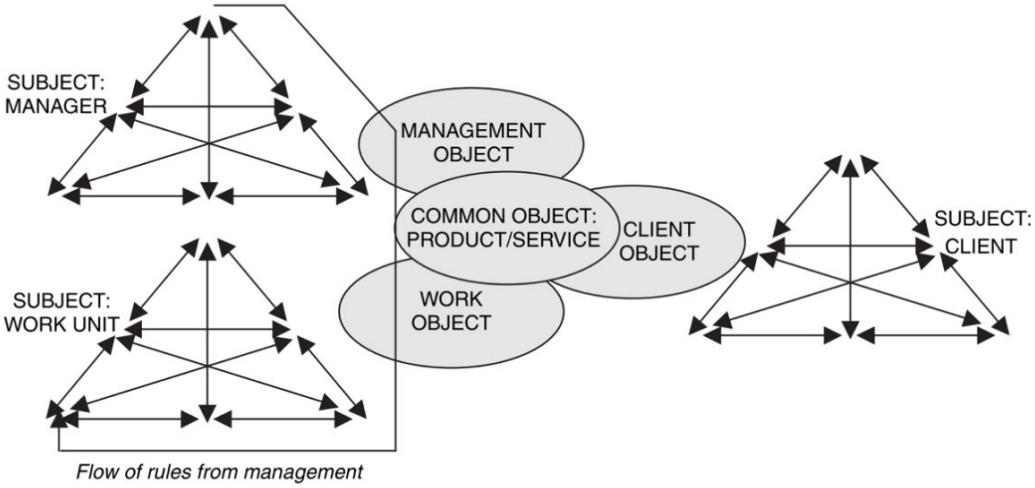


Figure 22: Hierarchical structure of school activity (Y. Engeström, 2009, p. 307)

Furthermore, Y. Engeström (2009) suggests that the managerial aspect of school activity should be analysed separately, as it operates relatively independently of the productive work carried out in the classroom by the teachers and students. I first turn to this in the independent analysis of management activity below.

4.2.1 Accomplishing the Aims of the Academy: Tracing an Object for Managerial Activity

At the ALC, the staff organogram supplied in Figure 23 provides insight into the hierarchical structure of the ALC's activity. Here we can identify five levels of increasing responsibility. From Level 4 to Level 3, we see the ALC Principal and ALC Programme Co-ordinator who manage the overall responsibility for the centre, including the setting of rules, procedures and the running of the centre and staff. Below this, we see Level 2 and Level 1, wherein teachers' responsibilities mainly rely on implementing the rules and procedures from above in their classrooms. These differences in responsibility are also linked to financial compensation and work wherein most Level 1 teachers are 'Paid on Claim' (POC) and work part-time, while from Levels 2 to 4 are full-time teachers who earn a salary and are on a two-year contract (see Section 3.3.3).

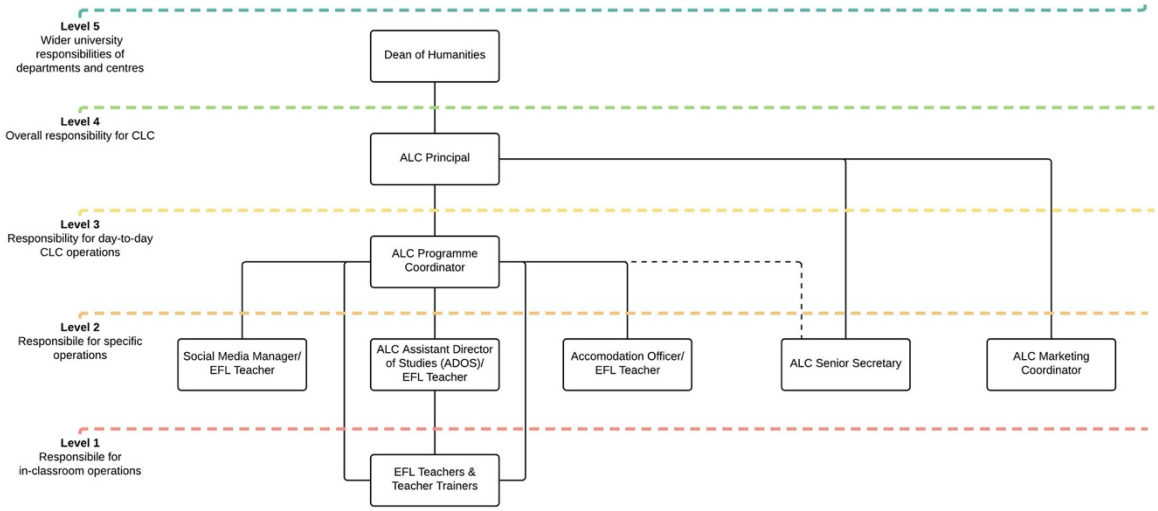


Figure 23: Adapted ALC staff organogram (adapted from ALC Teachers Handbook, 2017)

A further feature that Figure 23 illustrates is the centre's positioning within the wider university infrastructure and hierarchy. As noted by the Principal, one of his key responsibilities lies in managing the centre in line with the university's expectations: "because we're part of [the university] we need quite rigorous assessment…. to make sure what we are doing is actually working" (James, Interview).

This critical link with the university was further supported in interviews with the managerial team, namely the founders of the centre: the Principal (James) and the first Programme Co-ordinator (Dani). When asked what their primary purpose was, it was stated: "financially, our goal is to make money… we're supporting the Humanities. That's our primary role" (Dani Interview). This primacy of support for the academy where the centre is located was further clarified by the Principal in his description of the ALC's aims:

> we were setup to make money… so in order to do that we want to grow… our growth [is] space as what we were talking about before so my aim is to keep creating problems for myself in terms of space and to keep outgrowing the space and… keep growing our existing offering. (James Interview).

I find many similarities within this description of the centre's purpose to Y. Engeström's (1999b) definition of the object wherein it is:

> understood as a project under construction, moving from potential 'raw material' to a meaningful shape and to a result or an outcome. In this sense, the object determines the horizon of possible goals and actions. But it is truly a horizon: as soon as an intermediate goal is reached, the object escapes and must be reconstructed by means of new intermediate goals and actions. (p. 65)

In this sense, the ALC's underlying motive of generating profit for the university is linked to the 'problem space' the Principal experiences in his object of realising growth opportunities for the centre. Here the intermediate solutions he achieves in 'finding more space' for the centre result in the need for additional actions on his part to continue furthering this 'growth' in terms of finding more space and more opportunities to grow the centre's educational offerings. In this sense, the centre's object of financially supporting the university can be traced as being a never-ending horizon that is continuously reconfigured in every intermediate goal realised, resulting in new 'problem-object' reformulations by the Principal in terms of space and growth to (re)capture generating supplementary financial support.

Similar reformulations of the object in terms of 'generating income' and 'expanding the offering' of the centre were also present in the other managerial staff's interviews. There was an emphasis on the contrast between the centre's financial motive and their "linguistic" purpose of improving foreign students' English language abilities in order for them to enter an English-medium university (Dani Interview). In management's reflections of their movement towards accomplishing their secondary 'linguistic' object, their progress was juxtaposed with the centre currently meeting its financial obligations. This juxtaposition was present in Dani's responses regarding how the centre is currently meeting its objectives and responsibilities: "It's fulfilling its objective financially, yes […]. From a point of view of preparing students for [the university] I think we are *part* (emphasis mine) of the way but not the full way" (Dani Interview).

This partial progress in the centre's current efforts to adequately prepare foreign language students for English-medium university entry was first linked to the difficulty these courses have in "bridging the gap between the EAP and the real university setup" (Dani Interview). Secondly, is that while the centre can prepare students, if given enough time (Briana Interview), the difficulties the centre's students would have in meeting the time- and coursework demands of the university are difficult to replicate in student preparation programs at the centre (Dani Interview).

One way the centre's management has potentially seen to overcome this is the development of 'pre-sessional' or re-designed courses for the students. Of particular interest in terms of the development of these courses was the new Programme Coordinator, Briana, who saw potential in developing these EAP courses for the local South African market, stating: "some locals don't have English as their mother tongue, and I think there's huge scope to do some kind of like a bridging course" (Interview). However, these efforts in expanding their existing offering have not been taken up due to the high risk and low reward for the centre in developing these courses (James Interview) as well as the lack of market interest in these courses (Dani Interview; James interview).

Taking this into account suggests that within management activity's object there is an underlying tension in its financial motive of generating income for the university being inextricably tied to its linguistic goal of preparing foreign language students for English-medium higher education. To further realise its financial motives, requires growing its linguistic purpose not only in terms of more students (space) but also by further developing and expanding the courses it has on offer. However, the ability to sustain this growth is constrained, as Briana states: "there are huge limitations in what I can do because of financial and operational limitations" (Interview).

4.2.2 Management Rules: Towards Student Satisfaction

Correspondingly, this tension between the centre's development and its linguistic aims can be seen to filter down the established rules around attendance and assessment. As stated above by the Principal, in being a part of the academy the ALC has to prove what it does "is working" through its "quite rigorous assessment processes" (James Interview) as well as its attendance policy of students being present for 85% of the course (ALC Handbook 2017, James Interview, Dani Interview, Briana Interview). This does not, however, mean that the university ultimately sets the ALC's policies as the Principal explains:

> senate policy on continuous education says that there has to be 80% attendance rate, so we set 85% [...] to pass a course, to receive a certificate […] actually that 5% is just a buffer zone. In terms of assessment it's pretty much up to us how we do it, but the senate policy just says there has to be assessment and there has to be quality assurance processes […] but how we implement that is more or less up to us. (James Interview)

Here, an important distinction is made between the university and the centre. While the university

sets the obligations for the centre, how the centre fulfils these obligations is up to its discretion. In other words, while assessment and required attendance must be present in order to assure the quality of the program and the students' exiting certifications, the university does not dictate how this is done. Moreover, this ability for the centre to cultivate its activity independently within the established rules of the broader academy, suggests that there is flexibility within the vertical dimensions of work practices at the centre.

An example which demonstrates this is the rules of classroom instruction. In response to my questions about rules relating to their courses, teachers, management and students responded that there were not any or many rules, as can be seen in the following managers' interview excerpts below:

> They can do any they want… as long as the students are getting the outcomes that they've expected. (James Interview)

> They do have quite a lot of freedom to **do what they see fit** […] as long as they are in the parameters of teaching the syllabus and using communicative methods, what communicative methods they use is up to them… as long as their students are happy then I am happy. (Dani Interview)

In both excerpts, two crucial elements are noteworthy. Firstly, is the strong emphasis on students' satisfaction with the course, and the other is in teachers operating within the parameters of a 'communicative' pedagogy following the teaching syllabus as set out by the managerial team. As Dani clarifies: "We sell our courses on communicative methods… the idea behind that is that we are going to teach students to communicate not just read or write and they're gonna be encouraged to participate in class" (Interview). Her response suggests students' expected outcomes/ satisfaction with courses and the subsequent emphasis on 'communication' are strongly associated with the school's financial motives, as by selling the course on the premise of active learner participation and communication is seen to encourage enrolment (as shown in Figure 24). However, what is meant by such an approach is not specified: "we don't specify it [communicative methods] further than that [communicative methods] in any of our marketing or indeed when we hire our teachers" (Dani Interview).

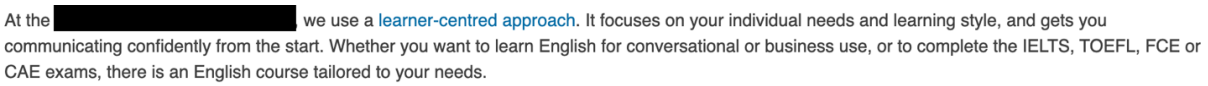


Figure 24: ALC Course Information Web page emphasizing communication and active learner participation

This ambiguity around the centre's communicative approach is seen to further emphasise that students learn in different ways (Dani Interview, Briana Interview). This generalised form of 'communicative approach' and 'learner-centeredness' that is not strictly clarified to prospective students or teachers, is seen to enhance language teachers' abilities to employ pedagogies that "embrace the fact that different students respond well to different methods" (Dani Interview). In turn, this is seen to approach the individual student's needs and learning styles the centre advocates in its marketing (see Figure 24).

Added to this, focus on the rules of communication and learner-centeredness in class is also present in that the 'principles' the ALC advocates are adhered to inside the classroom. They are taken up as intercultural respect; turn-taking and the use of English-only in the classroom (James Interview; ALC Handbook, 2017). Students at the centre come from many different countries and cultures (see Section 3.3.2). To not have principles, such as intercultural respect in place, could potentially impact on the communication in class as students may feel discouraged if their own cultures and values are not respected. Furthermore, the emphasis on English-only centralises the use of the centre's linguistic object into students' behaviour and communication. Taking this into account, these 'principle-rules' for classroom communication and learner-participation in the classroom can be seen as enabling the centre's linguistic object as well as management's view of student satisfaction with courses, as they enforce student communication and participation in English in the classroom.

An added step towards encouraging students' satisfaction with the courses at the ALC is in the use of a set coursebook for each term. The use of the coursebook operates both as a learning resource, as well as the set syllabus for the course over a particular term (Dani, Briana and Interviews): "You know we're not gonna design our own like a whole like 52 weeks of course material so we're dependant on a coursebook someone's already done that work for us" (James Interview).

These coursebooks and their complementing teacher's notes used at the centre, often emphasise a communicative and active-learner-participatory approach in their construction. To illustrate,

consider this extract from an Advanced course teacher's textbook: "*New Language Leader* is based on a broadly communicative approach, with language contextualised in texts and a task-based approach to practice and language exploration" (Alexander & Kempton, 2016, p. 1). For management, these coursebooks provide a much-needed structure for students (James Interview) as well as addressing the expressed student desire to 'complete' them: "there is a certain amount of demand from the students who want to get through the book […] if they've only got half the book, the students are generally dissatisfied" (Dani Interview).

In this sense, the choice of these coursebooks as mediational artefacts, and the set syllabus of the ALC suggest that they are closely seen to be aligned towards the centre, achieving students' expected outcomes. Furthermore, their use attracts more students to the centre and thus helps the ALC to achieve their financial and linguistic object. Moreover, James' reference above towards the time and development ("52 weeks") suggests a link to the 'high-risk, low-reward' referenced earlier concerning the re-design of courses (James Interview). Again, the financial risk of developing their own material versus the actual rewards from such an investment is debated, when there are materials, such as international EFL communicative coursebooks, already designed that the centre can use in its instruction. In other words, why should management invest time and resources into developing materials which could potentially not work, when there are international coursebooks that advocate a similar approach? Especially since these international coursebooks can function both as a syllabus and as instructional material which emphasise the ALC's 'communicative-learner-centred' approach. Again, the tension between the ALC's financial and linguistic motives that prioritise 'communication' centralise the textbook's dual-functionality as both the syllabus for their courses as well as the primary learning resource.

4.2.3 Approved-Mediating Artefacts: 'Unbooking' the classroom?

This primacy of global language teaching textbooks as both syllabus and mediator is common in contemporary TEFL centres (Hadley, 2014). Nevertheless, this dual role of these communicative approach coursebooks as mediators, as well as the set syllabus, is not without their own underlying tensions in the system. As James explains: "Now the way that coursebooks are structured I think is awful because it's all like grammar point after grammar point. So that so we've tried to combat that […] grammar focus is having our assessment… skills-based" (Interview). The idea of fighting

the overt grammar focus of these coursebooks through communicative skill assessment is telling, as it suggests that the use of coursebooks may not be developing the communication skills in English these courses are aimed to achieve. This is despite the fact that while "grammar is presented through, you know, reading tasks and listening and speaking […] students are still doing a lot of grammar" (Briana Interview). The problem with this is that the use of the coursebooks may not in certain instances, ultimately, satisfy students' language development needs:

> There's a student who started on Monday and he's here for three weeks. And, you know, he works as some financial advisor for some big bank in Angola and he's got three weeks and he said he needs to attend conferences, and he needs to understand international delegates and he needs to sometimes present things or he needs to, you know, speak to people. And to be honest after 3 weeks and he's pre-intermediate. I don't think he's gonna achieve that. But then, you know, what do we do for him? (Briana Interview)

Briana's example of an individual student suggests that while these international coursebooks cover English language development in and through communicative skill practice, they still are not always tailored towards the individual needs and time-demands of students at the ALC. In the coursebook's priority placement as both syllabus and mediator, i.e. a 'coursebook-fits-all' regarding student requirements and needs, there appears to be a danger of students' personal needs slipping through the cracks.

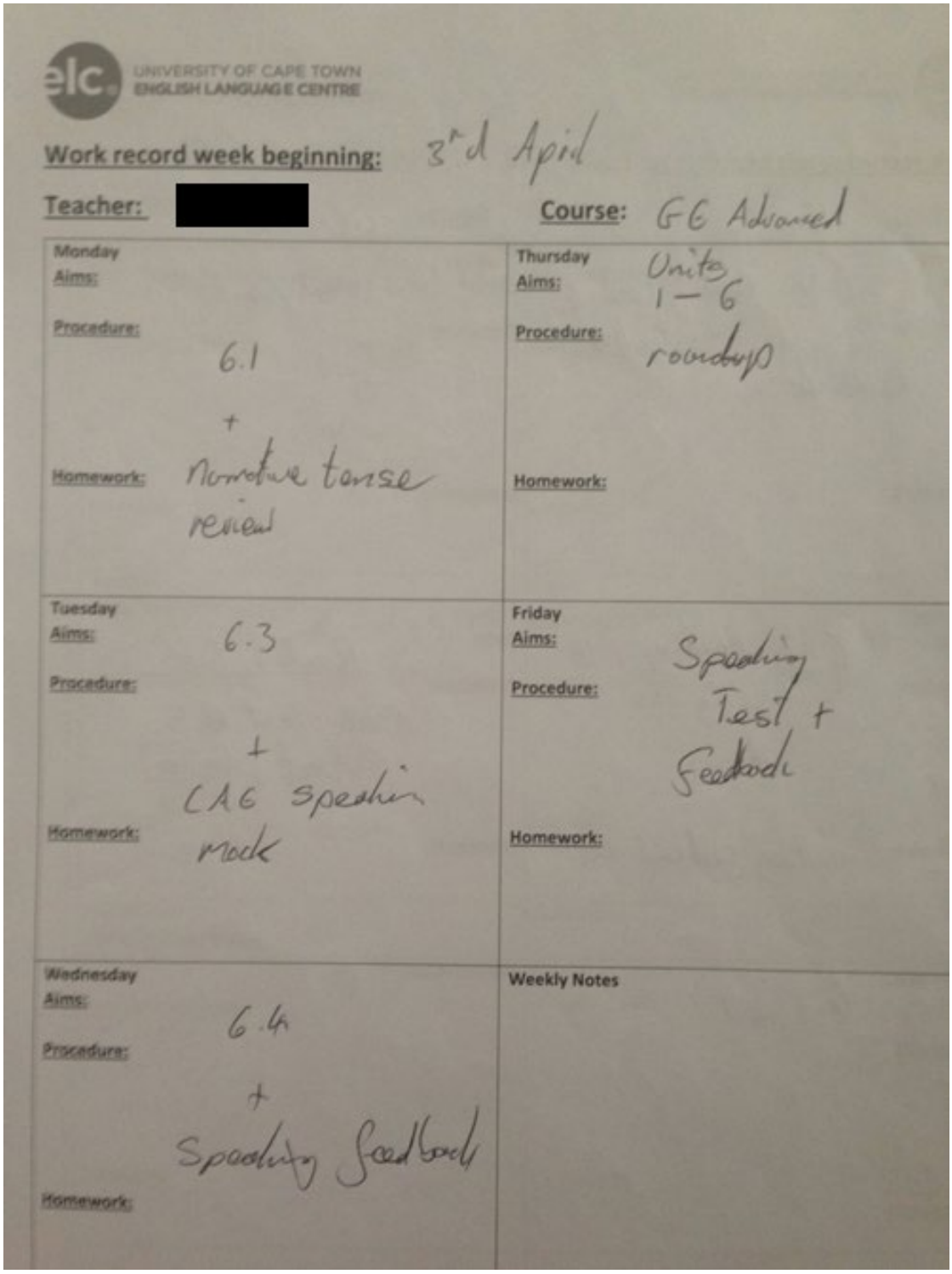
To counteract these issues regarding teaching with the coursebook, professional development attempts to 'unbook' coursebook content to be "well and teach it [the coursebook] properly [rather] than to get through everything" (Dani Interview) were introduced to further entrench the centre's aim of teacher's teaching with the coursebook content. These sessions have worked on getting teachers to "use the resources from the book without ever opening the book" (Dani Interview). However, the extent to which this method was being used into the classroom by more than two teachers at the centre was unclear as Dani was "not convinced it [unbooking] is happening in other classes" (Dani Interview).

My lesson observations supported these observations, as most lessons showed either an explicit focus on coursebook use or the use of paper worksheets derived from the internet TEFL sites as Table 12 below shows (see Appendix 7). These insights correlate with Dani's assessment of

learning resources or mediational artefacts at the ALC: "at this stage, mostly it is paper-based, or I want to say dogma-based" (Dani Interview). It is further reflected in teacher's weekly planning sheets (see Figure 25) and Teacher's course outlines (see Figure 26) that showed a predisposition of working through coursebook materials throughout the majority of the week. Both Figures 25 and 26 show a weekly move through each unit of the set coursebook, as in Figure 25, where Ned works within Unit 6 of his textbook, or in Figure 26, where each week of Marjorie's course is dedicated to each thematic unit of the textbook.

Table 12: Hardman's (2008) Activity Checklist Analysis of ALC's lessons

TEACHER		Ned				Marjorie			John	
LESSON		Lesson 1: General Preparation	Lesson 2: General Preparation	Lesson 3: General Preparation	Lesson 4: General Preparation	Lesson 1: General Preparation	Lesson 2: General Preparation	Lesson 3: General Preparation	Lesson 1: Conversation	Lesson 2: Conversation
OUTCOMES	*What is produced in the episode?*	Comprehension of a reading and listening Text on Wikileaks/ Online journalism	Completed practice in multi-word verbs	Comprehension of an online article on weather and its effects	Passive language general knowledge questions	Review of students completion/ production of inversion questions	Review of Unit test from the previous week	Review of fashion vocabulary from coursebook	Hypothetical responses of what would happen if stranded on a deserted island	Listen for details on the rules of a gameshow
		Class discussion on issues of journalism emphasising the use of specific discourse markers: 1) to indicate a point and 2) manage a conversation	Word-transformation in gap-fill text, similar to CAE exam	Exposure to pronunciation and use of weather word-collocations in English		A discussion of the fashion industry and a listening comprehension of the future of the fashion industry	Reading an academic article and writing a short paragraph on *the relationship between youth culture and denim trends in my country*	Creation of a flowchart summary of an article in the coursebook	Evaluation of effectiveness of hypothetical responses	Presentation of own gameshow idea
MEDIATING ARTEFACTS	*What tool(s) are being used?*	Primary: *Advanced SpeakOut* coursebook Unit 5.3 and whiteboard for answers Secondary: Mobile phones to look up words and definitions (student)/ mobile phone to check language and tone (teacher	Primary: *Advanced SpeakOut* coursebook Unit 5.2, Text and whiteboard for answers Secondary: Mobile phones to look up words and definitions (student)/ mobile phone to check language and tone (teacher	Primary: Printed online worksheet resource from *British Council* on the weather; whiteboard for language demonstration Secondary: Mobile phones to look up words and definitions (student)/ mobile phone to check language and tone (teacher	Primary: *Advanced SpeakOut* coursebook Unit 5 extra resources Secondary: Mobile phones to look up information to inform question construction; look up words and definitions	Primary: *New Language Leader Advanced* coursebook Unit 5 (exercises)/ Google Classroom (questions and materials)/ Video of listening from coursebook online Secondary: mobile phone to access Google Classroom/ to look up new words or language	Primary: *New Language Leader Advanced* coursebook Unit 5 (exercises)/ Google Classroom (questions and materials)/ Video of listening from coursebook online Secondary: mobile phone to access Google Classroom/ Google Docs to submit paragraph/ to look up new words or language	Primary: Whiteboard for reviewing vocabulary, *New Language Leader Advanced* coursebook for summary exercises Secondary: Mobile phones to look up words and definitions (student)/ mobile phone to check language and tone (teacher	Primary: *TeachThis Island Adventure* teacher's notes, PowerPoint of worksheet tasks for students, deserted island scenario cards, whiteboard Secondary: minimal use of mobile phones to look up words and definitions (student)	Primary: Photocopy of *SpeakOut Upper Intermediate* on gameshows, YouTube video of gameshows; audio clip from textbook on gameshows, whiteboard Secondary: Mobile phones to look up words and definitions (student)
OBJECT	*What is the object/ focus of the episode?*	Develop students abilities to use journalism vocabulary in a discussion	Develop students abilities to form multi-word verbs	Develop students *abilities* to respond to detail and gist questions of an academic text on weather	Develop students abilities to identify and use passive language to construct general knowledge questions	Develop students abilities understanding and use of inversion	Revise students' language errors and provide corrections from Unit test	Review students understanding, use and pronunciation of fashion vocabulary	Speaking practice of using hypothetical language to describe	Speaking practice of presenting their ideas
		Develop students abilities to have a discussion using the target discourse markers in Unit 5.2	Develop students abilities to transform words appropriately in a text [based on English for Academic Purposes Exam]	Develop students abilities to use weather collocations accurately and appropriately in discussing the weather		Develop students abilities to listen for detail/ infer detail from a video discussion on the future of fashion	Develop students abilities to read an academic article for detail and respond to a writing prompt	Develop students abilities to read for understanding, write effective summaries for university	Develop students abilities to listen for detail and respond to others ideas	Develop students abilities to listen and infer from a video and audio source on gameshows
	What is the purpose of the activity for the subject?	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language speaking proficiency	Develop Advanced student English language speaking proficiency
	What is the teacher working on?	Presenting coursebook material, ensuring students understand exercise instructions, managing audio text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	Presenting coursebook material, ensuring students understand exercise instructions, managing text, reading text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	Presenting worksheet material, ensuring students understand exercise instructions, checking students pronunciation and language usage, managing text, reading text, checking and evaluating student understanding of text or satisfactory student completion of coursebook exercises	Presenting extra resources material, reviewing student abilities to produce passive questions/ statements, evaluating student production of passive questions, enforcing rules of activity	Presenting coursebook material, ensuring students understand exercise instructions, managing coursebook/ Google classroom use/ listening text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	Presenting coursebook material, ensuring students understand exercise instructions, managing coursebook/ Google classroom task setup/ reading text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	Presenting coursebook material, ensuring students understand exercise instructions, managing coursebook, checking and evaluating student language production or satisfactory student completion of coursebook exercises	Presenting worksheet activity to students, ensuring students understanding task instructions, noting down students language, ensuring satisfactory completion of worksheet activities	Presenting coursebook activity to students, ensuring students understanding task instructions, playing video and audio appropriately, noting down students language, ensuring satisfactory completion of coursebook activities
	What is the student working on?	Completing exercises in coursebook as instructed, participating in class discussion, demonstrating correct language use in accordance with teacher's evaluation	Completing exercises in coursebook as instructed, participating in class discussion, listening for text, attempting word transformation as instructed	Completing exercises on worksheet as instructed, participating in class discussion, reading text for meaning, completing comprehension, attempts at using language accurately	Participating in passive question and answer activity, creating passive questions, correcting their passive language constructions in line with teacher's feedback	Completing exercises in coursebook as instructed, participating in class discussion on Google Classroom, listening for meaning, completing comprehension, attempts at using language accurately	Completing exercises in coursebook as instructed, participating in class discussion on Google Classroom, reading for meaning, completing comprehension, writing of short paragraph	Completing exercises in coursebook as instructed, participating in class discussion , attempts at using language accurately	Completing worksheet activities as instructed, participating in pair and class discussion, attempts at using language accurately	Completing activities in coursebook as instructed, listening and watching for detail, participating in class discussion around game shows, working with their partner on gameshow idea
	Why is he/she working on it?	Teacher: Developing English Language skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Developing students vocabulary and speaking skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Developing students vocabulary and speaking skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Developing students grammatical skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Developing students vocabulary and listening skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Develop students vocabulary and reading, writing skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Develop students vocabulary and reading, writing skills in accordance with syllabus and student language aims Student: Developing English accuracy and speaking skills	Teacher: Develop students speaking proficiency and use of hypothetical language structures Student: Developing English accuracy and speaking skills	Teacher: Develop students listening for detail and speaking proficiency in presenting their ideas Student: Developing English accuracy and speaking skills
DIVISION OF LABOUR	*Who does what in this episode?*	Teacher: Presents coursebook exercises and material	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ selects text for word transformation exercise/ marks out text	Teacher: Presents worksheet exercises and material	Teacher: Prompts and participating in language activity and student passive construction	Teacher: Presents coursebook exercises and material/ sets up tasks on Google Classroom sets up feedback from tasks/ presents learning materials	Teacher: Presents coursebook exercises and material/ sets up tasks on Google Classroom sets up feedback from tasks/ presents learning materials	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ evaluates students flow charts and reading	Teacher: Presents worksheet activities through PowerPoint/ monitors students language and completion of activities	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ evaluates students flow charts and reading
		Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for all activities before class feedback	Student: Completes coursebook exercises and material/ participates in language tasks set by teacher. Work collaboratively in multi-word task during feedback phase; work individually in word transformation. Pair check for all activities before class feedback with teacher	Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for all activities before class feedback	Student: Participating in passive language activity	Student: Completes coursebook exercises, watches video; participates in Google Classroom tasks on their mobile phone;	Student: Completes coursebook exercises, watches video; participates in Google Classroom tasks on their mobile phone;	Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for most activities or discussion	Students: Work in pairs to come up with hypothetical responses; students as class evaluate their ideas	Students: Listen for detail of audio; Work in pairs to come up with hypothetical responses; students as class evaluate their ideas
	Who determines what is meaningful?	Teacher	Teacher	Teacher	Teacher; Students in their passive question construction	Teacher	Teacher	Teacher	Teacher and Students	Teacher
COMMUNITY	*What community/communities are involved in this episode?*	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom
	What group of people work together on the object?	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object	Students and teacher work together on the object; Emphasis on student-student/ student-students in this episode
RULES	*What kinds of instructional rules: evaluative rules and pacing rules?*	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace
	What kinds of social order rules: disciplinary rules and communicative interaction rules?	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident except for those as set out by the activity which the teacher has counterpointed	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Disciplinary rules evident in how students should use Google Classroom in the completion of tasks	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Disciplinary rules evident in how students should use Google Classroom in the completion of tasks	Teacher initiates, students respond, teacher evaluates OR teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates task, students complete, teacher evaluates. Very little disciplinary rules evident



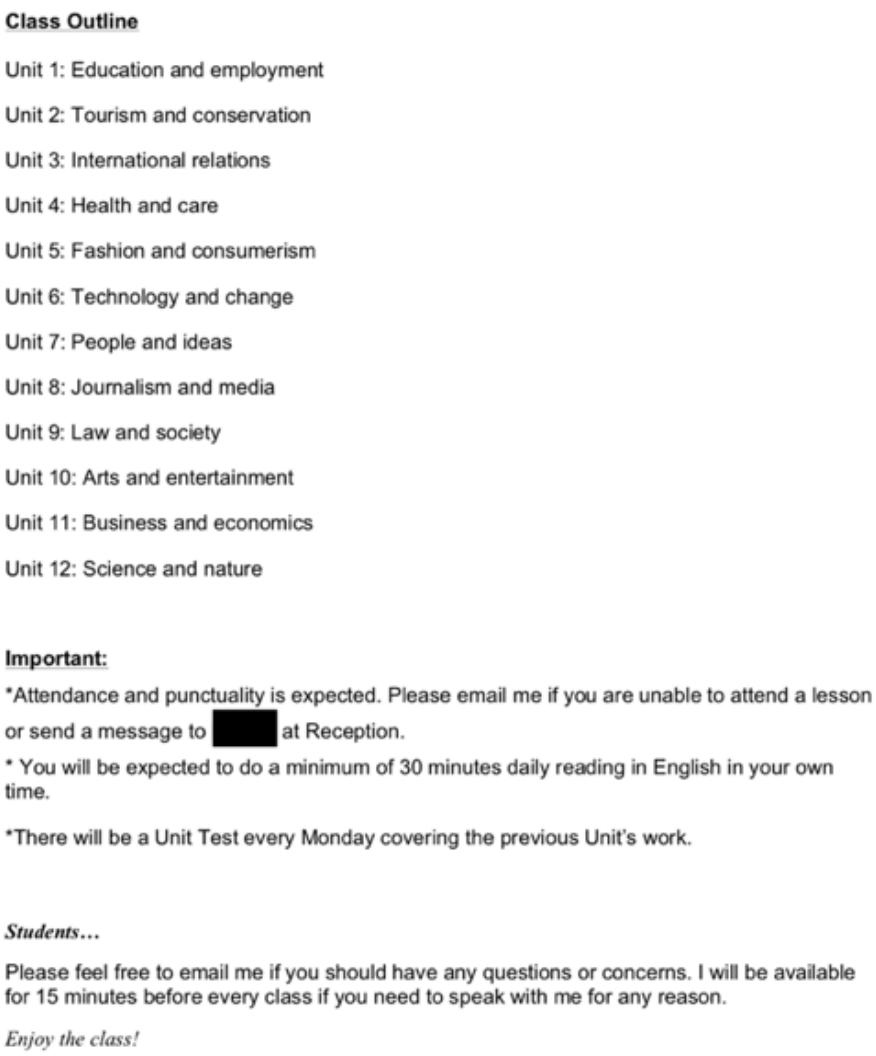
UNIVERSITY OF CAPE TOWN
ENGLISH LANGUAGE CENTRE

Work record week beginning: 3rd April

Teacher: [redacted] **Course:** GE Advanced

Monday **Aims:** **Procedure:** 6.1 + narrative tense review **Homework:**	**Thursday** **Aims:** Units 1–6 **Procedure:** roundup **Homework:**
Tuesday **Aims:** 6.3 **Procedure:** + CAE speaking mock **Homework:**	**Friday** **Aims:** **Procedure:** Speaking Test + Feedback **Homework:**
Wednesday **Aims:** 6.4 **Procedure:** + Speaking feedback **Homework:**	**Weekly Notes**

Figure 25: Ned Weekly Planning Sheet Example



Class Outline

Unit 1: Education and employment

Unit 2: Tourism and conservation

Unit 3: International relations

Unit 4: Health and care

Unit 5: Fashion and consumerism

Unit 6: Technology and change

Unit 7: People and ideas

Unit 8: Journalism and media

Unit 9: Law and society

Unit 10: Arts and entertainment

Unit 11: Business and economics

Unit 12: Science and nature

Important:

*Attendance and punctuality is expected. Please email me if you are unable to attend a lesson or send a message to [redacted] at Reception.

* You will be expected to do a minimum of 30 minutes daily reading in English in your own time.

*There will be a Unit Test every Monday covering the previous Unit's work.

Students…

Please feel free to email me if you should have any questions or concerns. I will be available for 15 minutes before every class if you need to speak with me for any reason.

Enjoy the class!

Figure 26: Marjorie's Course Outline for students covering the term cycle

This coursebook focus is perhaps best illustrated in Dani's positioning of teachers' pedagogy on the Teacher Change Frame (TCF) during her interview, see Figure 27. As discussed earlier (see Section 3.7) the TCF operates as a diagnostic tool for teachers' pedagogy in its focus of the tools and objects approached in their lesson (Tarling & Ng'ambi, 2016). Dani placed teachers fully within Quadrant A which denotes traditional teaching practices, low use of technology with a focus on lower-order thinking skills such as 'to remember, understand or apply' but edging towards more learner-centred pedagogies and technological resources present in C and B (Tarling & Ng'ambi, 2016). It suggests a strong focus on traditional rules in the classroom, with a focus on paper with some attempts (but not many) to get students creating with language or employing technology for lessons (Dani Interview).

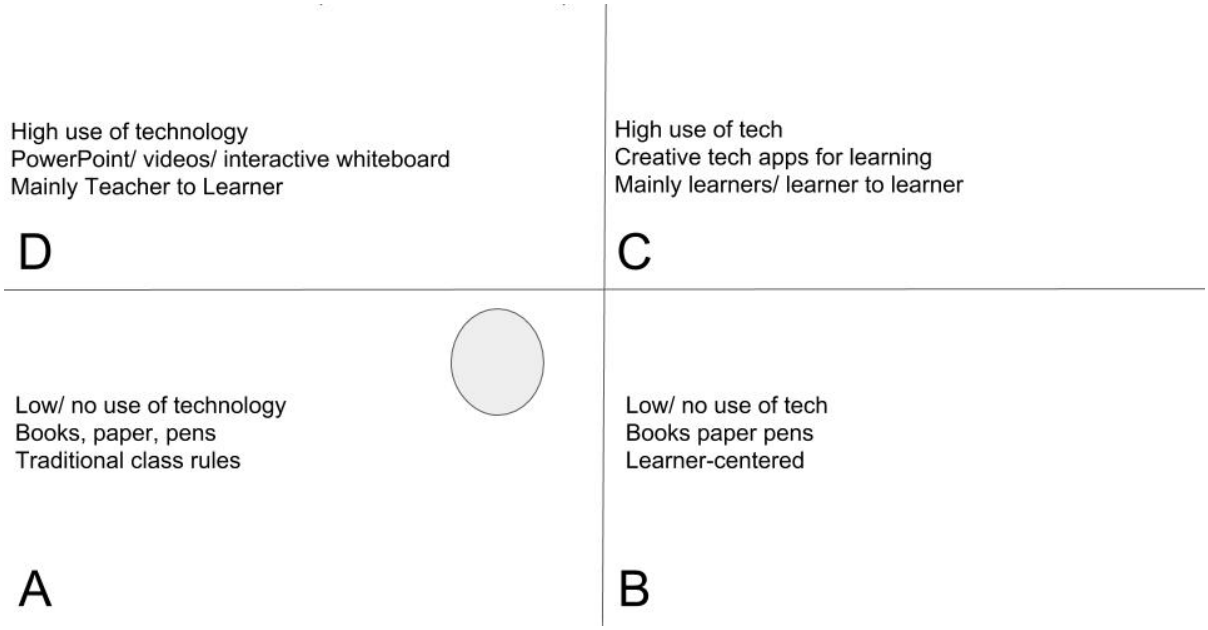


Figure 27: Dani's placement of ALC teacher's pedagogy

4.2.4 Ambivalent-Mediating Artefacts? Management's attitudes to technology

In addition to 'unbooking', attempts to make more use of technology within the classroom have been initiated by management (Dani Interview). Every classroom has internet access, a teacher's computer and a whiteboard. However, management remains ambivalent about its effect and use in the EFL classroom, especially mobile phones. This ambivalence revolves around three interrelated themes: reluctance; management's insecurity regarding technology's effectiveness for teaching and learning, as well as the need for technology, such as mobile phones, to be controlled.

Within the established rules found in both the ALC student and teacher handbook, mobile phones and other technologies present in the classroom are permitted. The centre further advertises itself as using the latest technology in its classrooms (see Figure 28), as Dani explains: "students are impressed by the use of technology… think something is modern and assume that means it's good" (Interview). Here, the use of technology is seen as a means to attract students to enrol at the centre. However, Dani's position on students' assumption that technology in the classroom indicating 'good' language teaching, shows her reservations towards its use in the classroom. These reservations included that teaching with technology "is not necessarily helpful but more play-play", more aimed at the younger students who are now "learning in a different way" (Dani Interview) from their older learner counterparts.

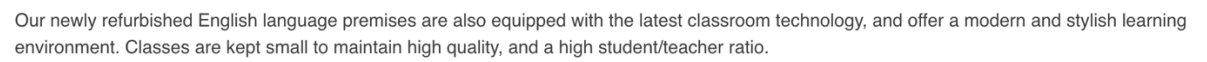


Figure 28: ALC website extract advertising its use of technology (ALC, About page, 2018)

These reservations are not unwarranted. For instance, Briana cited several instances where the use of technology, such as smartboards led to further teacher-centric lessons or acted the same as a coursebook. One extreme example given was that of a teacher using Google and YouTube language lessons in their teaching which resulted in a student coming to her and asking, "why am I paying for lessons?" (Briana Interview) when they could have a similar experience at home. The example of a student questioning their reason for attending a lesson highlights a potential tension wherein the use of technology in the classroom is seen to negatively impact management's ultimate motives for the centre. If the use of technology in the classroom does not facilitate students' language objectives by creating a similar learning experience the student would receive at home without teacher instruction, there is little reason for students to pay or attend courses at the ALC. In turn, technology and its deployment in the classroom are potentially seen to adversely impact the centre's financial and linguistic object.

This potential led to managers frequently reciting "standard" uses for technology in the classroom (Dani Interview). These included teachers using Google search to show images (Briana Interview), the use of streaming video services such as YouTube or Ted Talks for listening skill development (Briana Interview, Dani Interview), or finding internet articles for reading skill development (Dani Interview). For example, Dani noted how she used the computer as a whiteboard as it was "neater" (Dani Interview) for showing language. All of these ‘standard uses’ prioritise the use of technology in the classroom acting as content for lessons, which would focus on teacher's leading content selection and students interacting with this content as they similarly would in terms of paper-based lessons.

Moreover, managers' reservations about technology in the classroom were further linked to how technology for teaching and learning, especially mobile phones, impacted on the ‘communication’ of the classroom:

> Technology can be incredibly distracting… often the distractions that are going on every time a phone pings or buzzes… will not be in English, they will be in their language… it’s like a drip feed of like pulling away like little Arabic WhatsApp messages here… So, I think absolutely it has to be controlled… the process for that is less clear. (James Interview)

The result was that managers concluded that in instances of using technology for teaching and

language learning "the teacher has to be almost super kind of like zoned in on what the student is doing with the cell phone" (Briana Interview). They link this to their prediction that actions with mobile devices in the language classroom at the ALC would not be able to be controlled in terms of students using only English, students finding incorrect definitions of words or not interacting/ participating with the learners around them (Briana Interview; Dani Interview). In turn, student learning actions with mobile devices could potentially allow them to act independently of their classroom instruction and move them away from the work teachers' communicative lessons would ideally instil. These issues led to managers such as James to ask "How do you control that [mobile phones in the classroom]? How do you police that? You can't really. I mean you have to take it on trust" (James Interview).

While this issue of trust and control within managers is justified, it is also extremely telling of how deeply power is inscribed into how the mediating artefacts, such as mobile phones, are used in the language classroom (Lilley & Hardman, 2017). On the one hand, the use of technology for teaching and learning is seen as a means to further promote the centre's potential to attract additional student enrolment. On the other hand, according to the management, technology has the foreseen capabilities of moving students away from the centre's motives, if the teacher does not properly regulate it, or if technology inspires student independence in their actions within the centre's language learning activity. This places technology, especially MALL, within an ambivalent state at the centre wherein its perceived use for *modern* language learning and perceived value for exchange in its potential to detract from the *communicative* focus of the centre is called into question by management, leading to a perceived need for strict control.

4.2.5 Management's View of ALC Activity: Towards a Runaway Object?

The ambivalence management expresses towards MALL and other technology in the classroom as described above, does, however, not mean they were not interested in exploring the potential for its use at the centre. In fact, management was keen to investigate technology's potential for language learning at the centre:

> I would like them to be using more technology. (Dani Interview)

> WhatsApp groups and that's a form of learning English learning and communicating and learning like social stuff. (Briana Interview)

The excerpts from the interviews above demonstrate that while management is concerned over how technology in the language classroom impacts learning, they are not unaware of the potentials it may evoke for language learning or communication in the modern EFL classroom. The problem resides in them making technology fit within their work practices effectively, as James states: "technology is available then the challenge is [to] try and use it imaginatively in a way that supports learning but also that meets the students' expectations of their own interactions with technology in their own lives" (Interview).

In this sense, teachers' "reluctance to use" (Dani Interview) mobile phones or other technology 'imaginatively' may be located in the centre's own ambivalence of what technology 'works' for language learning as 'making technology work' must meet both the centre's needs in generating income for the university (financial object) as well as meeting the language development needs of its students (linguistic object). A possible effect, as seen in Figure 29, is that in meeting both demands of the centre forces a tension between all the *rules for learning and teaching* that managers mediate to the centre's teaching and learning (work unit) activity to be caught between standardisation (or 'showing what works to the university') versus the individual learners needs at the centre (or 'tailoring what works for the individual student'). The possible result is that the exchange of meeting both demands, leads to prioritising/ constricting of mediators and rules in the centre's work activity that have evidence of 'working', such as internationally standardised coursebooks, or skill-focused assessments. These mediators and rules are ones that fully meet the requirements of the academy and partially meet the requirements of all students, leaving not much space for 'imaginative' or 'alternative' ways of working, which are 'high-risk, low-reward' (James Interview). This may be why Dani expressed teachers' 'reluctance' to use mobile phones for learning, as well as the lack of 'experimentation' in the centre's classrooms (Dani Interview).

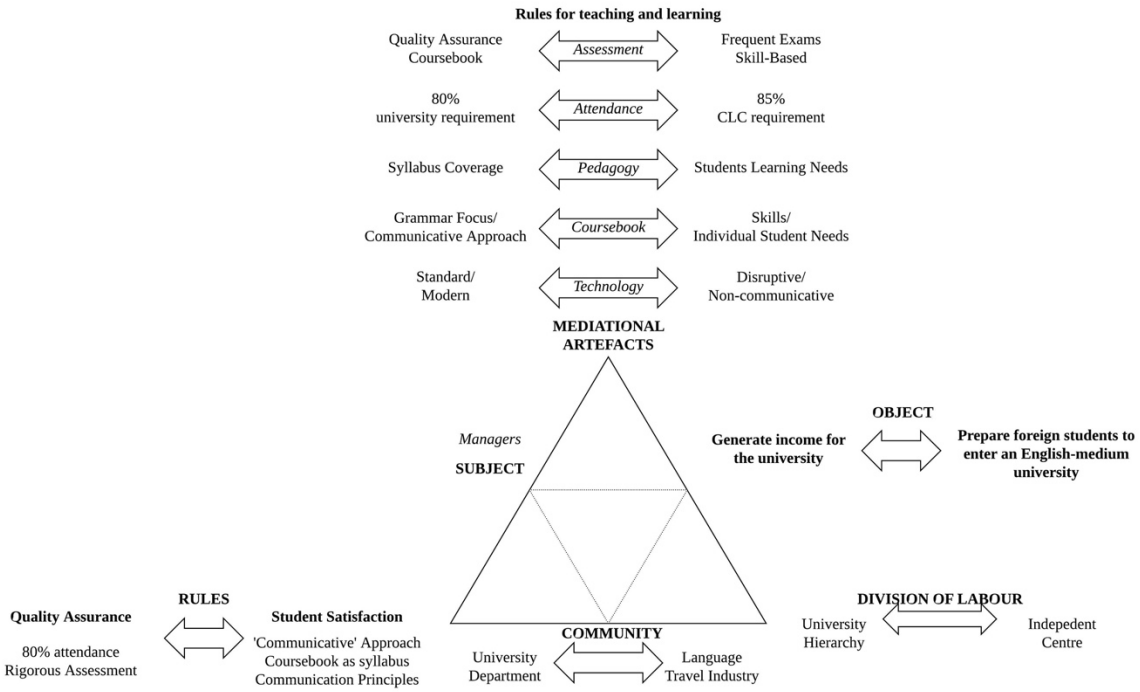


Figure 29: Researcher's interpretation of Management's view of their activity at the ALC

Additionally, these tensions expressed in managements' ambivalence towards technology, while at the same time confirming its need for technology in their language classrooms, suggests links to Y. Engeström & Sannino's (2010) argument where technological innovations bring about a 'runaway' object. These types of objects are defined by the size and contestation they facilitate in that they are "legitimate and illegitimate, sensible and crazy, work and leisure, technology and art" (Y. Engeström, 2009, p. 306). We see similar contestation at the university language centre where technology's legitimacy regarding its use and impact on language learning is questioned, as well as regarded as 'standard' practice by management. Its impact is questioned through the medium of mobile phones disrupting 'communication', yet its legitimacy is upheld in teacher's use of YouTube, online articles, use of Google images, and through the use of a computer and the Internet in 'communicative-approach' language classrooms. In other words, some technologies 'disrupt communication' (like mobile phones) while others 'facilitate communication' (like the computer). This is despite the ironical fact that technology use outlined as disruptive to communication, like modern smartphones, are designed to enhance communication.

This discrepancy may be linked to how some technologies such as the computer and the Internet in education have become more commonplace in classrooms over time. Both the computer and the Internet are identified by management as 'standard' classroom technology,

suggesting further links with some of the other tentative aspects of runaway objects where their use over time leads to intermediate innovations that are visited and repeatedly used, thereby almost becoming commonplace (Y. Engeström, 2009). However, this commonplace-use fixates on an incomplete product of the runaway object, and as it moves again into a period of intensity, new products emerge (Y. Engeström, 2009). This can be seen where Briana states: "technology is a big thing now" (Interview). The emphasis on 'big thing' is essential as technology integration in education has experienced a marked resurface over the past several years (see section 2.2), with more new concepts, revolutions and capabilities (i.e. incomplete products) such as with mobile phones, which has in turn led to their contemporary delineation as *emerging* technologies. Most importantly, this 'big thing' of technology in education is hard to control (James Interview), one which can take a life of its own (Y. Engeström, 2009).

At the same time, the extent to which these tensions expressed by management, or experiences of technology in the classroom as a runaway object within the actual horizontal work practices at the ALC, deems further analysis. Management is not solely responsible for the configuration of teaching and learning practices in the classroom. In fact, it may be how teachers and students have interpreted the *rules for teaching and learning* at the centre that may provide the most insight into how these figured/ perceived practices of activity are materially constituted. With this in mind, in the next section, I turn to look at specific cases of how teachers and students within the ALC language classrooms drew on technology for learning within the rules mediated from management, as outlined above.

4.3 Uncovering the Horizontal Dimensions of Work Practices: The Language Classroom

Foreign language classrooms represent a unique configuration in every instance they are observed, in comparison to more traditional classrooms one would find in a school or university. Their uniqueness is due to their flexible nature (teachers often work part-time, and students often study intermittently), which means that every instance they are encountered or observed represents a slightly different configuration of activity that was present the day before.

Nevertheless, some elements during my observations were relatively stable across lessons as well as in interviews with teachers and students. These were namely, the object of their participation in the learning activity of the centre, the mediators used, and the classroom rules, including how the division of labour was almost uniformly expressed in lessons as summarised

in Table 12. This section below details how I came to inform my analysis present in Table 12. It draws upon specific instances in teachers' classrooms, and their use of mobile phones and technology for teaching and learning to illustrate how lessons, as well as student and teacher interviews informed my understanding and mapping of activity.

4.3.1 Marjorie's Lessons: The 'experimental' mobile-mediated language classroom

Classroom activity is the collective work of students and teachers on a shared object (Williams, Davis, & Black, 2007). This object, as mentioned earlier, is more than material, it is an idea or purpose that drives all participants engaged in the activity towards each of their own actions and temporary goals to attain it (Y. Engeström, 2000).

For Marjorie, in her classroom this central driving purpose was the development of communicative "reading, writing skills […] A lot of them [students] like I say have already studied or are in the process of studying, and they want to get into usually into an English-speaking university" (Interview). In the lessons I observed, I saw a primary focus on this, as reading and writing were often a lesson focus (see Table 12). However, this was not her only driving purpose in her classroom instruction. She explained what "I kept hearing in meetings was we'd like to get more technologically advanced […], and that's what kinda spurred me onto using Google Classroom because I have used it before in my secondary school experience" (Interview).

Herein, Marjorie's own subjective experiences as a teacher for her current students' academic needs led her focus on reading and writing skills in her classroom. At the same time, by her involvement in the community of the ALC 'needs', she felt "spurred" on to use more technology in her class, leading to her incorporation of Google Classroom in her lessons. This incorporation was not only related to her being a part of the ALC, but her previous positive experiences of using Google Classroom as a secondary school teacher.

In lesson observations, I was invited to watch the introduction and incorporation of Google Classroom in her lessons with her Advanced class. Before the lesson, she had set up Google Classroom and had ensured that learners had downloaded the application on their mobile devices, which were all connected to the university's student wi-fi. Throughout the lesson, Marjorie was keen to highlight the 'experimental' nature of using Google Classroom, which was present from the very beginning:

> So today we are going to do a little bit of an experiment, an experiment with the Google Classroom. Um, so we are going to use technology for most of the lesson. So please if I could ask you to make sure you've got a device and access to the wi-fi and […] Okay so if you've got your textbook, you can take it out as well. Yesterday I asked you to do some homework, so I'm going to give you the homework on the um on the classroom [goes towards her desk and access the computer]. So, the first thing I'm going to do is give you is the homework answers [opens the homework file to present it to students via the projector]. So here they are. Please check them. If you don't have the answers, please just fill them in. (Lesson 1)

In this lesson introduction, the main learning resources for the lesson that will both be drawn on by Marjorie and the teacher are outlined: Google Classroom on participants' respective devices and the coursebook. Both of these artefacts can be described as the mediators as they answer 'how' and 'why' Marjorie and her students will approach their shared object (Y.-J. Lee, 2011) in the lesson today. In this instance of the lesson, their combined use will address 'how' the students' goal-orientated actions of checking the homework from the previous lesson will be conducted, and the 'why' can be seen in that it functions as a mechanism for students to see their mistakes. Moreover, their use will aid Marjorie's ability to identify where students need help, giving her insight into her students' zone of proximal development (ZPD) with the homework inversion language task. This is evidenced in her remarks to students once they completed checking "Okay I see there is quite a lot of fixing that we have to do for those sentences" (Marjorie, Lesson 1).

Thorne and Payne (2005) note that all cultural artefacts, including those enabled through the internet, like Google Classroom on students' mobile devices, are never neutral but serve particular purposes for their users. This distinctiveness of purpose can be seen in two excerpts below that focus on instances when the coursebook and Google Classroom in Marjorie's first lesson.

Excerpt 1.1 (Lesson 1 with Coursebook)		Excerpt 1.2 (Lesson 1 with Google Classroom)	
T:	[opening up her textbook] Okay I see there is quite a lot of fixing that we have to do for those sentences. So, what do you think is the, the difficulty? Why are these sentences so much more difficult than normal sentences?	T:	Alright, let's move on. So, the second part I'm going to give you some more questions on here [points to the projector with the Google Classroom being displayed] [… Ss complete task. T starts to review their comments] Alright. Gertrude, I don't think the fashion industry. [to S2] Why don't you read your own comment?
S3:	The use of 'do'	S2:	[Reading from her device] *I don't think that the fashion industry should be forced to do something,* because *we have to change the attitude towards models of average body size*
		T:	Oh, okay you changed the attitude
		S2:	Change the mind of soci-
T:	The use of the word *do* is different than in normal sentences. Alright. Let's go back to the, back to the back page of the book, to page 134. Just to go back to how they explain the inversion. Remember use this part, the *Language Reference*, use this if you do get stuck. Always try and do your homework without looking at the back. If you do get stuck you are welcome to so look at the back because this is obviously a new form, of, style, of writing style. [Reading from textbook] Inversion it says there means changing the position of the subject and verb to put the verb. This is what they say um about the do. It's starts with the number of a negative adverbs for example 'Not only', 'No sooner', 'Never', Scarcely', 'At no time' and 'little'. Celeste read the first one please.	T:	towards. Right so maybe average is not a thing. Maybe we have to change the attitude when we look at models and yesterday, we looked at two sides. The very skinny model the size 0 model and we looked at what is called a plus size model. Um, I'm not happy myself with the phrase plus size. I don't know if it makes people feel any better a lot about that. But we discussed that the two sides of the coin. And then Celeste [reading S1's post] *I disagree. Average body is not attractive.* Okay. Good. Yesterday you also mentioned that just like they said the designer uses the body as a canvas. Your canvas has to be perfect and in the designer's that is very thin model. Okay. Interesting. [to S4] And uh where is your one? Okay so just here. *The fashion industry should be compelled to use models for sizes*. I'm going to take out 'b' there. No that's not going to help there [S is trying to edit the comment on Google Classroom]. Alright. I think. [to S4] Will you just in your comment just take out the 'b'. The fashion industry should use models for sizes. Just take out the 'b' there. Okay. Good.

Excerpt 1: Marjorie Lesson 1

In the above two excerpts, we see the primacy of each mediator in different parts of Marjorie's first lesson. In Excerpt 1.1, we see Marjorie reviewing the coursebook homework on inversion. The specific purpose of her goal-directed actions here is to identify students' difficulty ("fixing up to do") to accurately use inversion to transform sentences, seen in her questioning what the difficulty is, to which one of her students responds, the use of the word 'do'.

Interestingly, from this Marjorie directs her students in how to use their coursebook's language reference section, noting that they should use the language reference guide only after first attempting language tasks without it. In this, we can see the coursebook being positioned into two areas of activity in the lesson. Firstly, it functioned as a mediator in its use of activities and language reference. Secondly, as a rule, in that it has to be used in specific ways for students to approach their larger activity's object in developing their language proficiency.

Similar ideas were also strongly present in Marjorie's interview. She noted that the Advanced classroom was "textbook heavy" and that while she attempted to add content with other

resources, she stuck mainly to the coursebook's structure so that the students were "not losing out in anything" (Interview). Her insights neatly align with management's mediated rules above where the coursebook functions as both mediator and rule in the classroom, in that Marjorie must use and cover both in order for students 'not to lose out' on any language development.

In the second excerpt, we see evidence of Marjorie adding extra content through the use of Google Classroom for discussion questions. These discussion questions were linked to the coursebook's theme on modern fashion but had been formulated by her. In explaining her use of discussion questions on Classrooms she stated: "I find they [students] are very quick to respond to things, but they don't often have a logical or sequential structure to the response" as well as a way in which to provide "a very quick way of looking at several different examples… I would use it as an exemplar and just show them this sample of writing" (Marjorie Interview). Here, we see an effort undertaken by Marjorie to respond to the identified needs of her classroom where writing was an issue in terms of students reaching their object of accurately using language. The discussion questions posed by her, provided students with an opportunity to think and submit responses that the whole class would see and which she could later draw on.

However, Excerpt 1.2 shows there appears to be a discrepancy between what Marjorie idealises from this language activity and what actually occurs. Marjorie has received three students' responses to the discussion question. However, there is little student discussion promoted or evidence of illustrating these as examples to the rest of the class. Instead, what is formulated is an evaluation of students' responses by Marjorie, evidenced by her remarks of "right" or "good". For instance, if Marjorie were to be focusing on language, the spelling mistake of the third student's response in their misplacement of 'b' would be posed to the class. Instead, she notices it and attempts to remove it. Ultimately this first round of discussion culminates in Marjorie's final evaluation/ explanation of students' responses to be:

> Okay so as you can see, we all don't agree which is good. We all have different opinions about a topic which is good. Um one the modelling industry we discussed yesterday. The modelling industry is a difficult industry because from the photos in this there are many issues around industry. Um what are the three big issues from those photos? The three big issues that we came across if you look at the photos on page 50 in your textbook? (Lesson 1)

Looking at Excerpt 1.1 and Excerpt 1.2, we see the coursebook and Google Classroom serving very similar purposes in Marjorie's lesson, where they are used to evaluate students' language

by the teacher, often through lengthy explanations. Moreover, in instances of Google Classroom in Excerpt 1.2, the culmination of these activities is refocusing on the coursebook content, where Marjorie restates students' responses to the issues present in the textbook on page 50.

Her move seems to suggest that both the textbook and Google Classroom are mirroring each other's purpose in this lesson, which is further exemplified by Marjorie's exchanges with students in the form of Initiate-Respond-Evaluate (IRE) (Nassaji & Wells, 2000; Wells, 1999; Wells & Arauz, 2006). Here, we see Marjorie initiate a task (in the form of students commenting on Google Classroom) or question (what were the difficulties) to which students respond. The interaction concludes in Marjorie's evaluation of students' responses in terms of their 'correctness' or 'appropriacy'. In Excerpt 1.1 this type of interaction is linked to her primary position of 'knower' of the language: Marjorie knows the intricacies of the inversion and knows how to use the resources of the textbook to deepen students' understanding. In this way, the asymmetrical IRE interaction in which Marjorie questions and then confirms students' responses is appropriately linked to her developing students' discrete inversion language skills (Eranpalo & Jorgenson, 2018; Medina, 2001).

In Excerpt 1.2, this type of exchange is questionable. The questions' purpose in the Classroom activity is to promote discussion around the topic of modern fashion. In these types of activities, ideally, the teacher's role is to facilitate and move the discussion forward (Eranpalo & Jorgenson, 2018). However, as evidenced in Excerpt 1.2, this is not the case. Instead, Marjorie evaluates, or summaries students' comments and eventually links them with the coursebook. In terms of division of labour, this then sets out a solid asymmetrical division of labour in the classroom wherein Marjorie directs and controls all students' language actions towards the lesson's goals. This is despite the fact that ideally, different mediators incorporate different subject positionings (D. H. Hill & Cole, 1995), or serve different purposes (Thorne & Payne, 2005). Yet in Marjorie's lesson, both the coursebook and students' interaction with Google Classroom operate in very similarly. This similarity even occurs when Marjorie changes students' individual responses to discussion questions into a group response activity on Google Classroom:

> Your statement [group S4, S5, S6 and reads it aloud] *Parents must give options and children decide*. So, you were very much on the decision of let the children decide. And then your group [group S1, S2, S3 and reads it aloud] *We agree in the.* So that's **on** the point, *that parents should not encourage children, but advise and educate.* Very nice. Both of you for the two different questions talk about educating. And this idea that people have to be taught or almost trained to know what's going on and the consumer wanting to allow children to just choose their own clothing. Okay. (Lesson 1)

The strong asymmetrical relation of division of labour in the classroom regarding both tools' use and Marjorie's difficulty in recognising this led me to incorporate a further secondary analysis of the lesson to further identify how deeply power was inscribed into the structure of her lesson's activity.

Y. Engeström (1999b) notes "the object and motive of a collective activity may typically be sought after by means of multiple alternative goals and actions" (p.65). We see this in Marjorie's first lesson where developing the collective object of 'developing students' English language proficiency' relies on the class' goal-directed actions in the lesson of a) developing students' ability to accurately construct inversive statements, b) discuss modern fashion trends, and c) accurately comprehend a listening text about a modern fashion company. Each of these goal-directed actions results in the primacy of semiotic (coursebook) mediators, or the use of students' mobile devices through technological (Google Classroom) mediators. Figure 30 shows these interactions across the Task Model's constructs, with actions and goals predisposed to the coursebook in green and those used with mobile technology applications in blue.

In terms of the context/ community, both the semiotic and mobile applications are used in a 'formalized' physical (the classroom) and virtual (Google Classroom) space. The teacher in both of these spaces formalized the rules and interactions. Regarding the tools offered, the coursebook operated semiotically as content delivery in the inversion activities undertaken, as well as the following listening activity where the questions and video are supplied via the coursebook.

This use sharply contrasted with Google Classroom, where the teacher posted discussion questions to the students through the application, and the students had to respond to them via their mobile devices. In turn, the questions mediated via Classroom operated on two levels. Firstly, they were a means for 'Guided Reflection' where students were to reflect about their own experience and understandings of fashion and write a response. Secondly, for the teacher they are a means for controlling the interaction. As stated earlier, the use of these questions

online was done to help Marjorie facilitate a means to help students 'logically' sequence their response and provide 'examples' for them to examine and review.

Regarding control, this filtered down to the controls established over both the semiotic and virtual tools used in the classroom. In the case of the coursebook, Marjorie supplied the questions, and in turn established the appropriacy of students' language towards their accomplishment. In terms of students' responses to the virtual questions posed on Google Classroom, a similar pattern was established. Students could put any answer on, but it was entirely in Marjorie's control which questions were placed and to what extent students' responses appropriately answered the question. As shown above, rather than prompt discussion, Marjorie would instead evaluate or further explain students' sentences to the rest of the class. A further case in point is when Henri's response to a question generates extensive praise from Marjorie:

> *Consumer eco-sustainability is the new craze*. Very nice! The new craze it's like a good thing to be eco-friendly so you don't need to wear fur. Does anyone remember the phrase that we said fake fur? What do we call it? Fake fur? Do remember how to spell that? (Lesson 1)

Yet, instead of sparking further discussion, Marjorie concentrates on the language of 'fake fur', briefly checks Henri's understanding of 'new craze' and then moves to her own example of eco-sustainability with bears. In each case, Marjorie holds what is picked up, what language is contextualised, as well as when, or if there will be a discussion. This lack of direction can be seen in the type of communication instilled in the Google Classroom virtually. The online discussion is isolated to individual responses, and briefly to groups' responses to questions. Students do not interact with each other on the online space. Instead, it is a means by which Marjorie can pick up their language, evaluate it and explain it to the class. A similar interaction happened when students completed the coursebook's questions, and Marjorie evaluated the appropriacy of their responses.

All of these may imply certain perceptions of the students as subjects and the goals in the lesson. In terms of the semiotic aspects of the lessons, attention was focused on developing or assessing students' ability to comprehend inversion or listen for detail, respectively. In both of these goal-directed actions in the lesson, Marjorie acknowledged students' experiences. For instance, after instructing students to discuss the questions about fashion before the listening, the following exchanges occur:

T:	So alright let's look at what you've got. The first question. It threw a lot of you because it's a strange question. What types of technology can you think of that you can wear? Do you have any of them? […] So just that is a basic idea. But there are other more interesting and more creative ways
S3:	In 2002 when the Brazil against the Japan in the football world cup we arrange it with Nike and Japanese to do clothes you don't sweat. Sweat, I don't know the transpiration
Ss:	Ah!
S3:	Japanese people. It's like two not not just one shirt.
T:	Yes
S3:	The shirt's out, it's it's not behind it you know
T:	Ja so behind the other
S3:	It's ecological too. You walk and you eliminate so
S2:	Really?
	[S goes to the WB]
S3:	And so expensive this shirt [laughs]. Really expensive
T:	Okay I am going to give you another word because sweat is just such a, [S1 laughs]. Another word is **perspiration**. Perspiration.

Excerpt 2: Marjorie Lesson 1

If we compare this interaction with the use of semiotic resources versus the ones in Excerpt 1.2 above, we see far more engagement and understanding evidenced, especially in the length of students' language. Most noteworthy is the discussion wherein Marjorie does not reframe or explain students' comments to each other. Instead, she builds upon it offering new language in the form of 'perspiration'. We also see students interacting with each other as Student 2 questions the possibility of such a shirt existing. In this part of the lesson, students are treated as having previous knowledge, and Marjorie develops on the language (i.e. introducing perspiration) they can use to describe their experiences.

In stark contrast to this, when Google Classroom is used for discussion, as shown above, Marjorie treats students as novices in elucidating the meanings of their sentences to the class. This treatment of students as 'novices' may also be linked to students' experiences of using Google Classroom, as many students had not used it previously. Much of the lesson revolved around Marjorie helping students to come onto the system and giving students confidence, as one remarked to Marjorie on their hesitation in writing their first response: "I don't have

confidence". Although, at the same time, the frequent explanation of students' responses and the lack of any peer evaluation on each other's comments suggests that perhaps Marjorie was using this more to 'know' what students understood, than to encourage them to 'apply' or 'evaluate' their understandings.

As can be seen in Figure 30 then, is that all elements in the lesson closely mirror each other between the factors of 1 to 3. This seems to suggest the coursebook use and how Google Classroom is used in this lesson were similarly restrictive but went unnoticed by Marjorie. In her interviews, she cites how this tool would help her students in their skill development. However, for students, the differences in the use of coursebook and Google Classroom were readily apparent:

> I had kind of feelings that I can […] answer this question like and I need only two minutes to do that but to type everything and send it on the internet wasn't very good. (Gertrude, Interview)

> instead of […] do that part in the book, you do that lesson in the phone. So, my choice for example, in multiple choice, instead of put my own and read my choice I put there in the moment, everyone put the answer and after that you see [..] Let's like learn together, improve together and discuss together why someone has put C and why someone has put B. (Henri, Interview)

Here, we can see the vast disparity in what students understood by Marjorie's experiment with Google Classroom. Gertrude, questioned the value of its use in generating discussion, not seeing the purpose of writing her response online. On the other hand, Henri wanted a more communal interaction to occur, where he could learn from his peers. Both students' insights evidence tensions in the class' activity system. However, in Marjorie's recollection or interpretation, this is not present, as she remarks at the end of her second lesson:

> I want to try and use a bit of technology variety just to make it with everything for stuff like this [points to the writing assignment on the Classroom] so all the answers will go on here it will take a lot less time in class to do things like that homework, feedback and moderation we can do it all on this. (Marjorie, Lesson 2)

Her remark suggests underlying tensions that the teacher may not be aware of. Interestingly, Marjorie relates the use of technology to improve the administrative aspects of the classroom. These reflect *her* needs, rather than those of her students, which also might offer some insight into her setup of virtual activities through the use of mobile devices in this lesson.

	Restrictive			Expansive	
Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules*	*Technological* Full Teacher Control *Semiotic*	*Technological* Mainly Teacher Control *Semiotic*	*Technological* Scaffolded *Semiotic*	*Technological* Mainly Learner Control *Semiotic*	*Technological* Full Learner Control *Semiotic*
Communication *Division of Labour*	*Technological* Isolated *Semiotic*	*Technological* Loose Couples *Semiotic*	*Technological* Tight Couples *Semiotic*	*Technological* Communication within Groups *Semiotic*	*Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

Figure 30: Lilley's Language of Description (2018) adaption of Frohberg, Goth & Schwabe's (2009) Scale of Issues on Marjorie's Lesson 1

4.3.2 Ned Lessons: A tale of two pedagogies?

As stated earlier, teachers and managers frequently cited that students' primary purpose for coming to the ALC was to engage in more academically-based English language teaching. This

view was present throughout students' interviews where students such as Sofia needed English language certificates such as CAE or IELTS to pursue further study, or Gertrude, who needed it for her university course in Russia. Henri provided another dimension to his decision in choosing ALC in contrast to other private language centre chains stating:

> I'm not like criticising chains, but… a lot of chains they have just like schools around the world, but the university means this is, I thought 'Okay I just have', I have also classrooms, technology, teachers, but… I have the name as like a place they are concerned about knowledgement as a university because that… teachers literally like well-prepared who have this background who have this university background. (Interview)

Teachers seemed to recognise this in their own teaching, with all stressing the need for activities and focuses of class interaction to have value for their students in academia or real-life work (Ned Interview, John Interview, Marjorie Interview). This link to value was stressed by teachers working on the finer areas of language development such as language accuracy (John Interview), or "work in the [language] gap that is still sort of inspires that upward direction or sort of increasing in language which can be really difficult, so you have to find creative ways of working within a tight space" (Ned Interview). This creative work in the language gap meant providing tools or tasks that the students could use "to go away and analyse language for themselves" or use authentic 'real-life' materials (John Interview).

In terms of technology or mobile phone use, the experimental nature of Marjorie's lesson was not similarly evidenced. The use of mobile phones within instruction was much less prevalent, although students strongly evidenced the use of mobile phones for translation:

> I try and get students to stop using the phone just to translate as quickly as possible because I just don't think it's sort of the correct thing to do… It's instant, it causes a lot of confusion all the time… and a lot of odd sentences come up and you can see what directly translate everything. (John, Interview)

> The way they [students] use technology in the classroom is usually in the form of dictionaries. Often to back up explanations that are given by me or other students. So often they will use it as a sort of get a different perspective to check. (Ned, Interview)

This use may be linked to how the teachers John and Ned reflected on the value of technological tools to engage with authentic learning work, as both teachers described themselves as being 'technology-lite'. By this, they referenced their inexperience with using mobile devices for language learning as something they had not "explored" (Ned Interview) or something they

could "see the potential in terms of… helping learning" (John Interview). At the same time, it was a use that could be a "massive distraction", "isolating", or "the problems is it is very hard to see what they're actually using the phone for" (John Interview, Ned Interview). Teachers' insights bear many similarities to the ambivalent understanding of how to use mobile technology in the language classroom that ALC managers expressed (see above).

To substantiate this ambivalence in the actual lessons of learning activity at the centre, I analyse two significant instances of mobile phone use which deviated from the current/ 'standard' use of technology in the classrooms of ALC teachers and translation actions by students. The two analysed instances include Ned's use of his mobile phone to direct grammar instruction, and another lesson in which students' mobile phone use was seminal in the construction of a language task.

4.3.2.1 Teachers use of Mobile Phones: Staying ahead of the students

In the first set of lessons I watched, Ned was working with students within a specific unit of the class' coursebook that was focusing on online journalism such as Wikileaks. The lesson (below) began by re-orientating students from their previous lesson's discussion on journalism to a focus on the previous day's homework task of multiword verbs:

T: Good… Hans. Done [shows thumbs up sign]? Awesome. Um… the main ones we need to check are going to be 8B and 9 really. Okay [stands up] let's have a look at um

S2: Can we also look at 10?

T: Okay then also 10. 10. If 9 is correct then 10 will also be.

Excerpt 3: Ned Lesson 2

Here the focus on the textbook and students' completion of the homework exercise is apparent. As can be seen, Ned has noted specific areas of focus for his and his students' actions, emphasizing work on exercises 8B and 9. Specifically, his directives for students to review and correct their work is to find the difference between what they know and what they do not know, opening access to their Zone of Proximal Development, where his work, as the teacher, is to develop students' understanding (Hardman, 2008; Leont'ev, 1979). Below, we can see insight into this process, where the student's doubt about the use of the multiword 'speak out' is highlighted, corrected and explained by Ned:

S2: Mostly. The last part of 10 A

S1: We're not sure about

S2: (I'm?) doubting. I know it's a smaller verb, but we wanted to know what's *speak out* mean?

T: *Speak out*? [gestures with his hand moving from his mouth outward] um voice your disapproval or approval. So, if you speak out about um you might speak out about something like that the idea that you voice your disapproval that is what usually um

S1: (inaudible)

T: No, you would speak out **about**

Excerpt 4: Ned Lesson 2

However, following this, the lesson takes an unpredictable turn. After his review of the language work, they have conducted, Ned begins questioning the entire previous cycle of actions towards the goal-orientated work of developing/ checking students' understanding of multiword verbs in the coursebook:

T: [looks at text]. Yeah so very easy. Why… is this useful, at all? It seems a little arbitrary.

S3: It seems a little?

T: Arbitrary

S3: Arbitrary?

T: Um… [smiles briefly] for no real reason

Excerpt 5: Ned Lesson 2

Here, it seems Ned has begun to question his own language work with students use of multiword verbs in the lesson, as he questions its 'reason' for being there. This questioning may be linked to his view of the coursebook he espoused in interviews: "I've realized the material isn't cutting it anymore, and… the course books we work out of are rubbish. They actually don't work anymore like I think the format is wrong, the way I think, the way students think is different" (Ned Interview). This questioning of the coursebook *both* in his interview and in his classroom suggests he is debating the value of the material versus its worth in exchange, in terms of its appropriacy for students' language development. Nevertheless, this questioning does not (at first) change the focus of the lesson. Instead, Ned moves to use his

mobile phone and the whiteboard to engage students in a deeper explanation of the types of multiword verbs:

T: Arbitrary. Um okay so this, they use the word here multiword verbs. So very quickly there are three kinds of multiple-verb words. One of them you know very well, which is?... [Ss provide no answer] [L goes the board and start writing out brief multi word verbs grammar explanation phrasal verbs. He is holding his phone and looks at it throughout his grammar explanation] Multi. Word. Verbs.

[… T engages in deep explanation of multiword verbs types, all the while using his mobile phone]

And the general understanding of particle there's certain patterns and once you know patterns, it's much easier to make meaning out of words, phrasal verbs (inaudible) because the particle generally gives you a rather massive clue as to what the meaning might be. So, so that's the kind of focus. Um… but it was easy?

S2: Yeah

T: Easy? Did you know all these before?

S1: No

S2: No some of them… but not all of them

T: Okay [T looks at the WB. Looks back at his desk] Okay. We're going to do something completely different [stands up and goes to the WB]. So, it's exactly what we did yesterday or the day before. I'm going to read a passage and then we're going to read a text and then to um let you know indicate where gaps are in the text and you will simply transform one of the words, so I give you a list

Excerpt 6: Ned Lesson 2

In this exchange, we see Ned using his mobile device to provide a deeper explanation of multiword verbs. This exchange is very different from Marjorie's lesson (Excerpt 1 above), where she orientated students towards the language reference section of the coursebook instead of her own. Ned's reliance on his mobile phone to deepen his explanation may be based on two interrelated elements. Firstly, as mentioned earlier, his critique of the coursebook shows he feels that "tasks are too shallow, too short and there's not enough sort of autonomy based on the student" (Ned, Interview). In this instance his use of his mobile phone to help him explain may be an attempt to deepen the language awareness of the students. However, this may also be linked to his feelings. He states: "if I realize I am out of my depth in terms of like what I try and do if I am working in, again laziness, if I am working slightly in front of them and I can see problems that or possible problems that could crop up I'll often find my own analysis before they get there"(Ned, Interview). In this instance, his mobile phone use me be operating as "a tool to stay one step ahead" (Ned, Interview) in the lesson.

The result was that students found out about more uses and types of multiword verbs, as seen by students stating they did not know all of these types. However, this for Ned was not enough, and he completely changed his lesson to focus on an entirely different exercise outside of the set textbook. He engineered an academic word gap exercise that is similar to a CAE exam from another text focussing the rest of the lesson on developing students' word transformation. This turn suggests an aim to which he feels is more valuable to students' needs when compared to the multiword exercise of the coursebook.

4.3.2.2 Students use of Mobile Phones: Constructing language from Research

Above, Ned's use of his mobile phone is deployed as an artefact to further his mediation of the multiword verbs towards his students. In this sense, it functions as a tool to enhance his instruction and 'stay ahead' of their needs, when he notices the coursebook's task 'arbitrariness'.

This differs from the lesson below, where the use of mobile phones played a seminal role in the language tasks set for Ned and his students. The lesson began with Ned handing out an additional language task from the coursebook's extra materials section of the unit they were currently working on:

> [T takes card and prepares to demonstrate and walks to S. T showing the students the example card] In what form?
>
> S1: [reading from the card] [inaudible]
>
> T: Yeah. So, what does it need you to do? What? What grammar is this practicing?
>
> S4: Is this passives again?
>
> T: Passives. Passives. Yeah. It is passives. Okay. And the great part about it, um, it tells you if it's true or false. So, so the idea is to draw a card, one person draws a card, takes the prompt on the one side of the card and makes into a passive statement. And the other person needs to decide whether that statement is true or false. Okay. You guys can go first. Okay?
>
> S4: Okay. No scientist… have ever been killed because of their scientific opinions.
>
> T: No say it again. No scientist?
>
> S4: [reading card and transforming into the passive] No scientist has ever been killed because of a scientific opinion.
>
> T: Nice. [S1 takes a card]. Is that true or false, John? True or false?
>
> S1: False
>
> T: False
>
> S4: It's true [reading from card] *as far as scientific historians know*.

Excerpt 7: Ned Lesson 3

Above, Ned is demonstrating to students the use of these language cards to practice their ability to create passive statements. Here, the semiotic goal of the task is for students to 'apply' their understanding of the passive to reform the sentences and orally express them in the passive. We also see that Ned assumes students have 'good previous knowledge' of the passive, as when he asks students what type of grammar this task works on, student one immediately replies with 'the passive'.

In terms of the rule and division of labour during students' actions with this activity, they are evident in Ned's instruction. He states that one student is to take a card and produce a passive statement and the other student is to guess whether it is true or false, suggesting a 'tight coupling' of the activity. In this sense, the division of labour is distributed to both students producing and listening to each other's passive statements elicited through the cards – the task is dependent on both students' reciprocated actions. Moreover, we also see that Ned is overseeing this effectively playing out, suggesting he has final and 'full control' over what is semiotically produced through this activity. This is most notably, seen in him asking S4 to repeat the phrase, and dictating to S1 to respond to S4's first passive statement.

The cards operate to 'guide' students to reflect on their use of language, and from this help them to construct the passive statement, as Figure 31 shows, with the language needed to be changed or transformed in parenthesis (e.g. ever kill). In this sense, they mediate the language goal of the class' activity in the transformation and elicitation of passive statements. Finally, both the teacher and the students' semiotic actions towards the production of passive statements occur in the formalized context of the classroom.

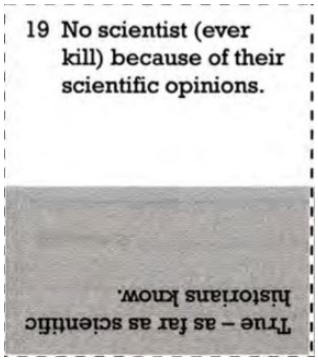


Figure 31: Passive transformation card example (Alexander & Kempton, 2016)

This changes when students have used all the cards. In the second part of the lesson Ned further develops the task into a much more difficult one:

T: Okay [T sits at the front of the classroom, cutting up pieces of paper] so now [walks over to students' desks, counting white paper slips] 1 2 3 4. [Hands cards out to S1] 1 2 3 4. [Hands out cards to S2] 1 2 3 4. Okay. Try do some research on your own and make passive statements about anything you like. Make sure it's either true or false, so look up facts about anything. Produce passive statements out of them. Four of them that you think your partner may not know or may guess incorrectly.

S1: Now? [S1, S4 and T picks up his mobile phone and starts searching]

S4: Do you know about [inaudible]?

S1: Hmmm. Good idea

T: Ja. It's quite difficult for some questions obviously don't lend themselves, some things don't lend themselves to the passive so…

Excerpt 8: Ned Lesson 3

In this second part of the lesson, students are given four blank pieces of paper and must use their mobile phones to independently research information online and transform this information into passive true or false statements. Significant differences occur in the structure of the lesson as the tools change from the cards supplied from the coursebook (see Figure 31) to the blank ones students have in front of them.

Firstly, while the coursebook cards guided students' transformation, in the follow-up task, it is up to students to find, read and transform the information they find into passive statements. Students' work here illustrates the technological aspects of this activity, mainly demonstrating 'content construction'. Moreover, the control of what passive statements are produced are no longer regulated fully by the teacher or the coursebook material. Instead, they are mainly in the learner's control in their initial construction until they are later orally elicited. This part of the task relies on students' working alone with their devices, researching information which they then transform, as seen in the extract below, where Ned corrects S1's pronunciation of 'intestine'.

S1: The, okay, around 50% of the, um, alcohol is absorbed from the stomach and the other 50% is absorbed from the small intestin.

T*:* *intestine [correcting the mispronunciation]. It's singular. Um, I would say it's true.*

S1: It's false. Around 20% will be absorbed from the stomach

T: Wow, okay, here is my one. Mandela was released in 1994.

S1: What?

T: Mandela was released from prison in 1994

S4: I think it's not true.

Excerpt 9: Ned Lesson 2

If we are to compare Ned's lesson inclusion of mobile phones for language learning (Figure 32) versus that demonstrated in Marjorie's Lesson 1 (see Figure 30), we see several differences, especially in the range of factors in the control, communication and tools. In Marjorie's lesson, these ranges are typically narrow, illustrating how the mobile use of Google Classroom in her advanced lesson mirrored the type of communication done using the coursebook. However, in Ned's lesson, we see this range is much more expansive. His lesson moves into the incorporation of mobile devices, providing greater agency and less control being exerted over the language learning, while still reaching a similar object in students' applying their understanding of passive language to construct passive statements. The variation in teachers' lessons suggests that different incorporations of mobile phones for language learning can yield widely different results in the language classroom, especially in terms of control and division of labour.

	Restrictive			Expansive	
Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules*	*Technological* Full Teacher Control *Semiotic*	*Technological* Mainly Teacher Control *Semiotic*	*Technological* Scaffolded *Semiotic*	*Technological* Mainly Learner Control *Semiotic*	*Technological* Full Learner Control *Semiotic*
Communication *Division of Labour*	*Technological* Isolated *Semiotic*	*Technological* Loose Couples *Semiotic*	*Technological* Tight Couples *Semiotic*	*Technological* Communication within Groups *Semiotic*	*Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

Figure 32: Lilley's Language of Description (2018) adaption of Frohberg, Goth & Schwabe's (2009) Scale of Issues on Ned's Lesson 4

4.3.3 Teachers and Students View of ALC Activity: 'Real' Emerging Tensions

As shown in the lessons above, there are several intricacies in teachers' and students' learning/ working activity when compared to ALC managers. In the above lessons, we see a similar tension expressed over the frequent use of the coursebook versus working on students' individual needs in both teachers and students work towards their common object of developing English language proficiency. This tension was present in Ned's abrupt turn away from the coursebook in his lesson, as well as Marjorie, in her effort to turn to Google Classroom to provide more 'structured' student skill development.

Students were also cognisant of the overuse of textbooks in the lessons. For example, Sofia states that lessons "always start with the book. Always" and that sometimes the teachers should

"pick the weakness and try to work together" (Interview). Sofia's comment does not mean students did not see the value, as for Gertrude coursebooks emphasized a structure towards their language learning (Gertrude Interview), and for Henri, coursebooks helped him see his language development (Henri Interview).

At the same time, in interviews and lessons, a further issue that became evident was the issue of 'real' or 'authenticity'. Ned questions the efficacy of coursebook's tasks on the 'shallowness' and matching current thinking; Marjorie highlights the effectiveness of the coursebook on her current course in that it is "a little more Advanced in the sense that the […] articles are about current issues" (Interview), while John prioritises Advanced-level teaching that is "engaged with the real-life stuff" (Interview). Students similarly wanted authenticity in their lessons. For example, Henri explains how he needs real-life language so that he can be taken seriously as a non-native speaker: "Sometimes is difficult when also in my case, I have real life, for example in South Africa and you going to a place, do a business […] And they sometimes, they look down you, or they don't give you the same attention they give if you are a English speaker" (Interview).

One of the ways teachers saw technology playing a role, was in its ability to bring this authenticity and 'realness' back into the classroom through 'standard uses' in instruction in finding videos and articles (John, Marjorie, Ned Interview). Interestingly, these uses relied on technology that was in their control, such as the class computer and projector, while other technology that lay within students' control, such as the use of mobile dictionaries, was up for dispute in its ability to detract from the lesson or disrupt 'communication' and language development. This is despite students such as Sofia who changed her mobile phone settings to English and her listening to English music to help further her language acquisition (Sofia Interview), or students such as Gertrude who in her Russian university used a translation app to help read articles in English (Gertrude Interview).

These insights, for me, supplied several areas within teaching and learning activity of Advanced students at the ALC that might prove generative for further examination by participants. Firstly, the tension expressed in the coursebook operating as both mediator and rule in the system. Secondly, the placement of technology as a mediator was questionable in its dual role of providing access to authenticity when in the teacher's control and its potential to disrupt in the form of technologies such as mobile devices, signifying a closer examination of division of labour in the system. In turn, these tensions also suggest a much-needed closer

scrutiny of participants on the object of teacher and students' activity, as there are traces that something else is being approached in their attempt at 'real' language and 'academic language'. A depiction of these tensions can be seen in Figure 33.

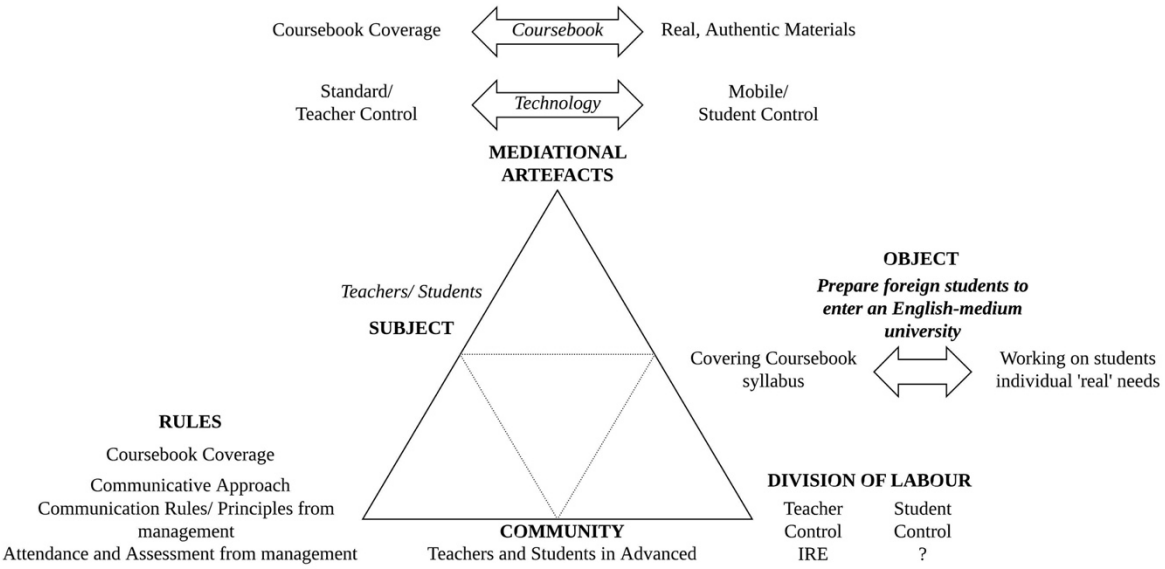


Figure 33: Researchers view of Teacher and Students Learning Activity at the ALC

Furthermore, looking at these tensions versus teachers' diagnosis of the teaching practices, suggests that they may not be fully aware of these pressures in their work. In Figure 34, we see how teachers placed themselves within the TCF, wherein most saw themselves on the boundary of all quadrants, such as John (Quadrants A, D and C), or moving steadily towards a more learner-centred pedagogy, such as Ned (Quadrant A to B). Marjorie's placement (between C and B) shows a much more direct tension between the pedagogy observed in her lessons above, versus how she saw her own teaching that shows little evidence of the tight controls of interaction with technology that were witnessed. Moreover, all of these individually reflective placements fundamentally contradict the firm placement within Quadrant A that Dani had made of her teachers (see Figure 27) or lesson observations (see Table 12) which saw high textbook use and traditional classroom rules. For me, these placements suggest that any intervention would need to focus on teachers closely examining these tensions.

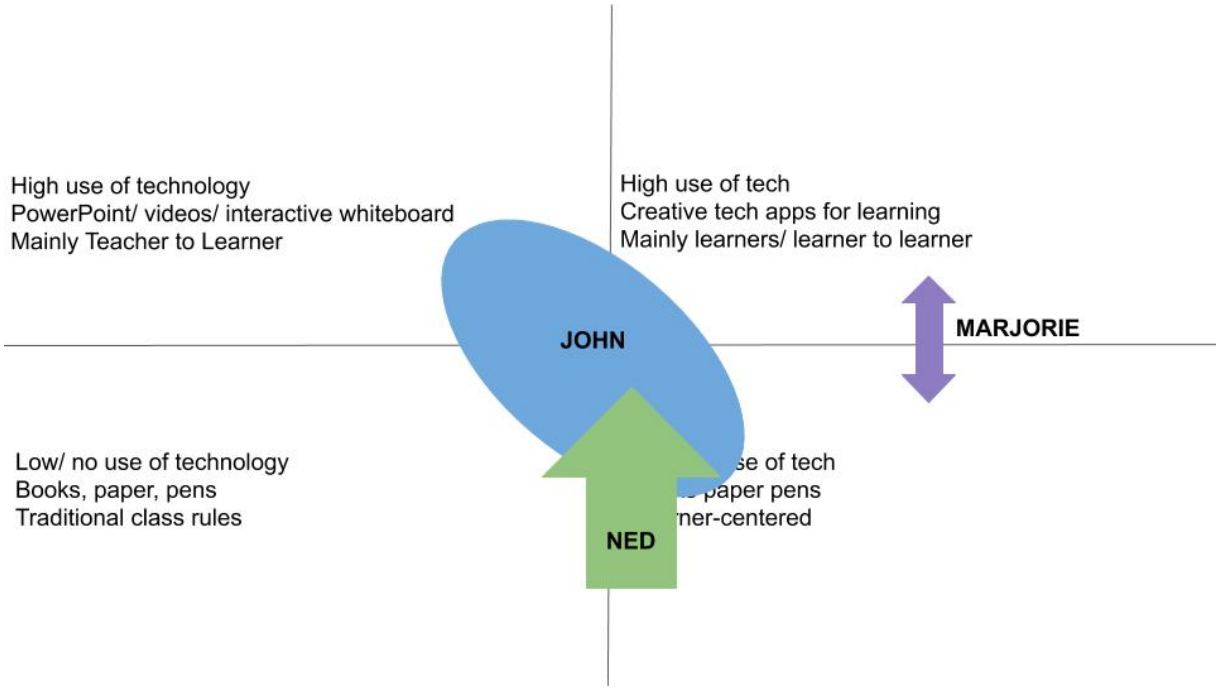


Figure 34: Overview of Teachers' self-placement on Tarling & Ng'ambi's (2016) TCF

4.4 Summary

This chapter traces the vertical and horizontal practices of the ALC. In reviewing the vertical dimensions, I discussed a potential contradiction site emanating from the centre's standardised, communicative approach to meet both its financial (income generation) and linguistic (student communication) motives. I then moved on to investigate the extent to which this potential conflict was evident in the horizontal dimensions of classroom practices of teachers and students. Focusing on three lessons, I described potential conflicts in the use of mediators (coursebook use and technology) and enactment in the division of labour within Ned's and Marjorie's classrooms.

In tracing the activity of managers, teachers and students, regarding RQ 1.1, the potential contradiction sites above evidence tight constrictions in the rules and the division of labour around technology and mediators at the ALC. As Y. Engeström (2009), makes us aware, at the onset of this chapter, novel change cannot occur if one knows what the end product is. In effect, if the ALC's views on communication and standardised resources are so constrictive, can *or* should participants' work practices ever change? Questions like this, emanating from potential contradictory sites mentioned above can be seen as drivers to spark participants' inquiry in the CL process.

Furthermore, these potential contradiction sites facilitate additional questions which will need to be unpacked such as: what is meant by 'communicative' approach, and how do they define their object? There are elements within this examination of the object that suggest a still incomplete picture, especially with the 'real' and 'authenticity' teachers claim. Furthermore, I believe a closer examination of teachers in the division of labour is also required, as this has come into play most notably when technology comes into learning actions. This is exemplified where Marjorie constricts her lesson to prioritize her own understandings, and in Ned's lesson when he uses technology to expand his teaching and his learners' actions in constructing language in the classroom.

Chapter 5: Charting the Situation

Teachers' Dilemmatic and Conflictual Reflections of their Activity

"if you speak justly, you will be hated by men; if unjustly, by the gods"

(Aristotle, *Rhet* II.23, 1399a15 trans. Jebb).

5.1 Introduction

Aristotle's quote above informs this chapter's central focus – dilemmas. At first reading, the speaker faces an inescapable problem, in that no matter what he or she says, it will lead to hatred by one or the other party. However, by inverting the above dilemma, we can find a more positive future outlook: the speaker can be loved for 'unjust speaking' by men and loved for 'just' speaking by the gods (Billig et al., 1983). The quandary of ambivalence in Aristotle's statement captures the dialectical essence of contradictions discussed herein. On the one hand, their initial articulation expresses a choice between equivalently intolerable outcomes, and on the other, by reading deeper into them, possible positive future directions can be established. It is this feature of contradictions that can drive participants to begin the process of imagining something truly 'other' than their current activity which is captured within expansive learning theory (Y. Engeström, 1987; Sannino, Engeström, & Lahikainen, 2016).

In this chapter, I discuss how I set up the conditions for creating a blended intervention space in which these articulations for contradictions could be conveyed by participants so that they could begin imagining something 'other'. I then move on to chronologically detail and analyse these contradictory expressions in the first three sessions of the CL intervention by initially describing the series of double-stimulation tasks constructed, and then moving to the resulting dilemmas and conflicts which participants raised.

5.2 Preparing for Charting the Situation: Cultivating for Possible Change

Any change is difficult. From the necessary instigation to commence change, to the genuine commitment to see it through to the end - change is no easy task. If this is the case for any regular day-to-day changes we wish to make, the nature of change as underscored within expansive learning is a daunting task! These changes are transformations in the very nature of how we approach our world, that firstly, need to emanate from within and secondly, are

foreseeably unpredictable in what they will eventually change (Y. Engeström, 1987; Y. Engeström & Sannino, 2016).

To initiate this kind of transformation within the CL process entails evoking participants' *questioning* of the present practice of activity in the system under investigation known as the 'Charting the Situation' phase (Y. Engeström & Sannino, 2010; Virkkunen & Ahonen, 2011). As stated by Virkkunen & Newnham (2013), *questioning* in these sessions takes the form of: "criticising or rejecting some aspects of the accepted practice, plan or wisdom… [identifying] a breach in the fluent flow of activity and crack in the unanimity of the group and its confidence in the current practice and plan" (p. 81). These criticisms, rejections, breaches and cracks identified, act as triggers for the recognition of problems that moves participants from identifying these as 'one-time events' or individual 'mistakes' to a much broader systemic problem of the activity that can only be solved through joint problem-solving (Y. Engeström et al., 1996; Virkkunen & Ahonen, 2011).

Questioning entails the need for participants to reflect upon their *actual* current practice collectively (Y. Engeström, 2000, 2011b). This requires an engagement in reflective practice that creates a 'double-move': one in which participants are able to distance themselves from the object of their actions, and at the same time draws their attention to how their actions structure the object of their critical reflection (R. Engeström, 2014; Virkkunen & Ahonen, 2011). The creation of this 'double-move' calls for the need of a task or question which will symbolically represent the participants' actions under inquiry that forces them to take a different position or stance on their current practice (Virkkunen & Ahonen, 2011; Virkkunen & Newnham, 2013). This process is captured within the principle of double-stimulation reflective-tasks (Y. Engeström, 1987; Sannino, 2015, see Section 3.2.2).

The creation of the conditions to facilitate transformational learning actions, such as *questioning,* places a considerable amount of responsibility on the researcher-interventionist of a CL. Their role within the intervention, and throughout the cycle of expansive learning wholly, depends, firstly, on their ability to cultivate the appropriate conditions for *questioning* to begin this transformational process. Secondly, it relies on their continued efforts to foster dialogue and negotiation with participants in order to see the expansive learning cycle through to its determined endpoint (Virkkunen & Newnham, 2013). As stated earlier, initiating the desire to change, and to continue to cultivate that change, is no easy task. I begin by discussing how I aimed to develop the appropriate conditions for instigating the CL, below.

5.2.1 Rationale for Session 1 Development: Failures of Committing to the 'Need State'

My attempts to cultivate the expansive learning process began long before the actual intervention. They started with my initial discussions with both managers and teachers in outlining their consent to participate in the proposed CL. In these sessions, we discussed how my research interests in the viability of mobile language learning could tie in with teachers' aims of professional development, and managers' broader objectives of determining the future teaching strategies of the centre for the 'next five years'. Moreover, these sessions were useful in defining the time-frame for the overall intervention (seven weeks), the potential timings of sessions (either one, two-hour session, or two, one-hour sessions a week) and the availability of managers and teachers (see section 3.8.1.3). These discussions culminated in the eventual development of a Tentative Project Outline (see Appendix 6.1).

However, during the development of this outline, alongside my discussions with participants, I felt that I had not nearly approached the level of negotiation, clarity of the intervention process and need for transformational activity, participants and the researcher should demonstrate *before* the expansive learning cycle begins (Virkkunen & Newnham, 2013). In order to facilitate the genuinely participatory sense-making process of CLs (R. Engeström, 2014) fostering commitment between the researcher-interventionist and participants is vital at the intervention's inception, as well as throughout the entire innovation process (Sannino & Nocon, 2008). It was evident that, while certain aspects in obtaining participants' commitment, such as defining the scope and aligning our mutual interests, were seen during private discussions with individuals, as a participatory project, there was still very little evidence of a collective commitment to the proposed intervention.

I believed the best way to create this commitment would be to respect Y. Engeström's (1987) advice of 'following the object' (Lazarou, Erduran, & Sutherland, 2017). By identifying the mutual need and collective problem space, the ALC unit shared, I could prompt all participants to make a firm collective charge for the intervention (Virkkunen & Newnham, 2013). My preliminary analysis had already traced emerging, potentially contradictory object(s) for my two distinct groups of participants (see Chapter 4). To recap, for teacher-participants, this revolved around the language-learning of students which either focused on coursebook coverage or students' individual needs. For management-participants, there was an equal concern regarding student language-learning, but this preparation was tied to the centre's profit-motives. The mutual focus of both participant groups on students' learning at the centre

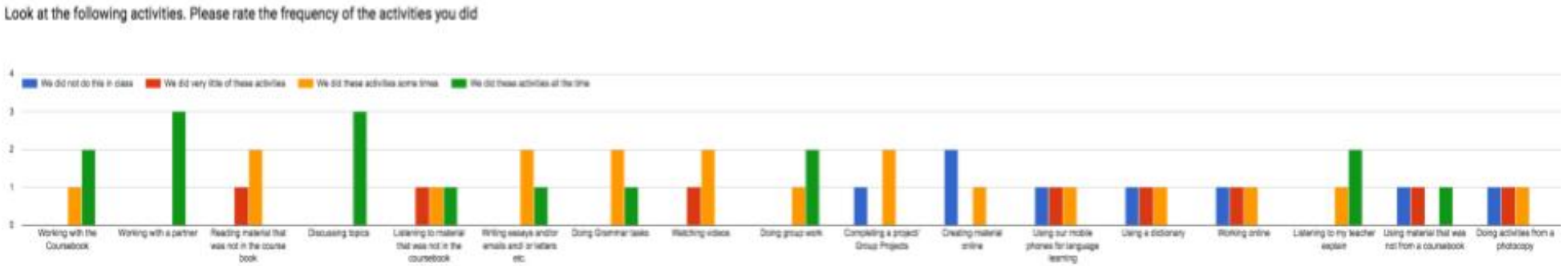
suggested that using my case-studies' findings of classroom practices alongside students' recounts would prove useful mirror data to share with the group, as both participant-groups' activities were enmeshed within this (shared-)object.

At the same time, I was also aware that students' classroom recollections could potentially bear more significance towards the teacher-participants, as interviewed-students were selected from the teacher-participants' classrooms and therefore their experiences would more closely inform the teachers' object. This difference became apparent to me during my private discussions with management over their participation in the proposed intervention, as I was often queried about the validity of my low interview sample of students and which teachers had informed my classroom observations.

5.2.1.1 The Questionnaire: Bottom-Up Data Collection

Recognising this as a chance to obtain mirror data that could be of equal significance to all participants and their activity at ALC, I believed the use of an anonymous online questionnaire focusing on past-Advanced students' reflections of their learning experience would be useful on three fronts. Firstly, it would offer an opportunity to further triangulate my data from the preliminary study's student interviews (Kramer, 2018; Morselli, Costa, & Margiotta, 2014), allowing me to see common and uncommon experiences. Secondly, based on management's general validity concerns about my preliminary findings, a larger sample of students' experiences could promote further recognition of a common theme among students' learning experiences that would be equally valid to the teachers and the management participants. Lastly, and perhaps most importantly, basing my data collection on management's expressed needs could demonstrate to all participants their ability to drive the CL process from the bottom-up. This demonstration would, in turn, allow participants to see this research as more of a participatory intervention project, wherein: "the researcher aims at provoking and sustaining an expansive transformation process led and owned by the practitioners" (Y. Engeström, 2011b, p. 605).

These insights resulted in the creation of an online questionnaire, which was reviewed by management before it was emailed to previous Advanced students of the centre (see Appendix 9.1.4). However, despite numerous attempts before the second Information Session to elicit more student responses via email, the eventual total responses to the questionnaire were only three students (see Figures 35-36 below for a summary).



HIGHLY AGREED ACTIVITIES (all the time & some of the time)	Coursebook, Partner, Group Work, Discussion, Teacher Explanations, Grammar, Writing
LOW AGREED ACTIVITIES (some of the time & very little/ not do)	Project Online material, Mobile phones, dictionary use, online, photocopies/ extra resources
NOT AGREED ACTIVITIES (all the time, some of the time, very little, not done)	Listening to other material, using material not in coursebook, using mobile phones, using a dictionary, working online

Figure 35: Online questionnaire key data summary 1 of student experiences of teaching at ALC

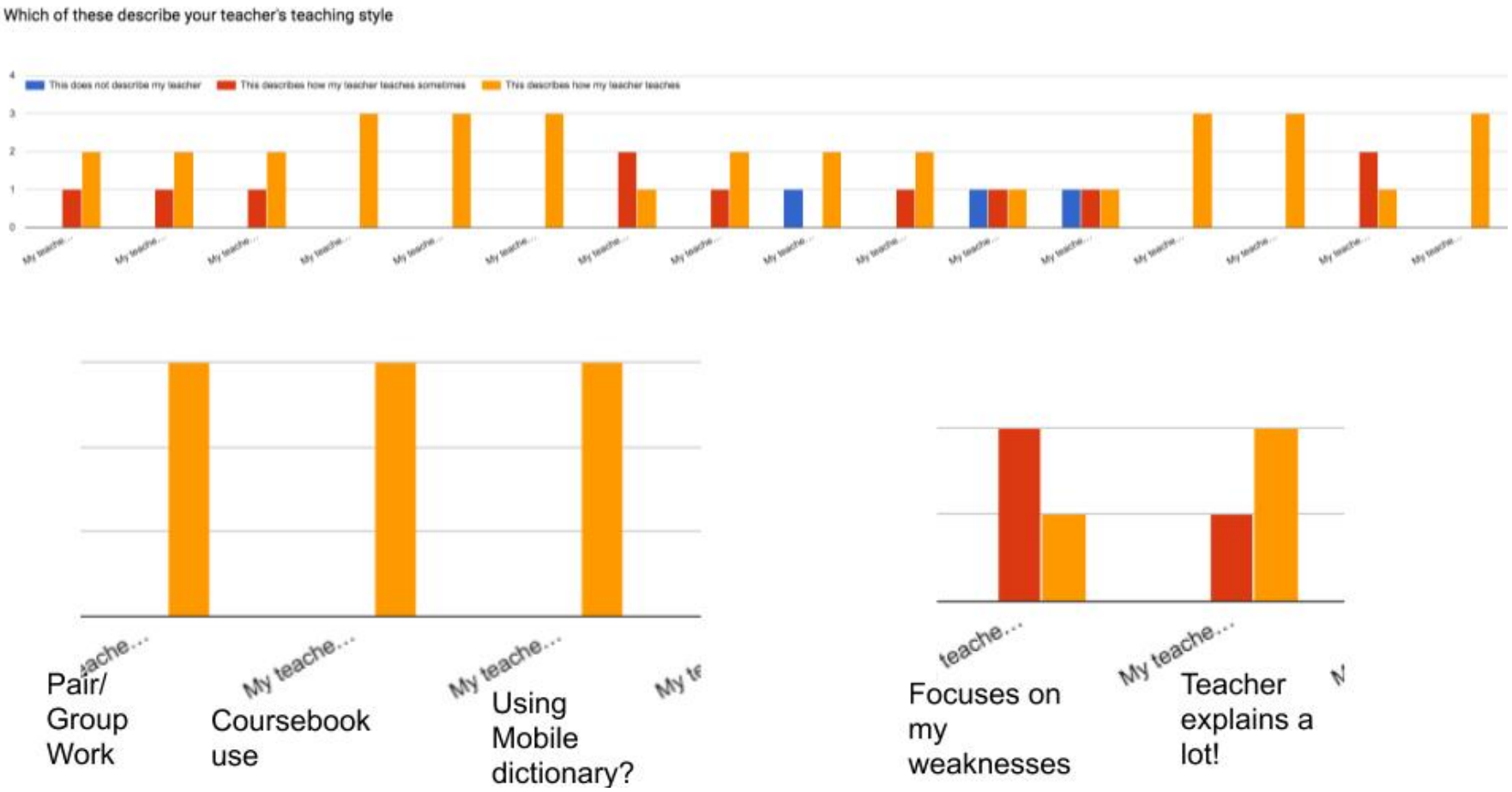


Figure 36: Online questionnaire key data summary 2 of student experiences of teaching at ALC

This low student response rate, while disappointing, did illustrate similar findings to my interviews and observations with students, namely: the high-use of coursebooks in classes, the high student-use of mobile devices and the tendency for pair-work and other communicative language teaching practices. Despite the problematic response rate, I saw data which could provoke a possible further call to action as the questionnaire data could supply an overview and links to my preliminary findings of the teaching of Advanced students. This data, coupled with a description of the CL method and expansive learning theory, were incorporated within the second Information Session presentation.

5.2.1.2 Questioning the Researcher: Beginnings of Questioning?

As stated earlier, the second Information Session was a formalised discussion around the research project. It aimed to create greater transparency about the intended CL, as well as discuss preliminary findings as a means to heighten a greater collective commitment toward the intervention's possible aims. I discuss each of these thematic aims, respectively below.

In establishing greater transparency around the intervention, I began the session by briefly reviewing third-generation CHAT and CLs. In an attempt to aid participants' understanding of the complex, central tenant of contradictions I used euphemisms and metaphors (see Jensen, 2006) such as "a small change can have major repercussions"; "a butterfly spreads its wings… and tornadoes arise" (Information Session 2), as well as using examples of successful CLs like that of Oulu Hospital (see Y. Engeström, 2011b; Sannino & Engeström, 2017).

However, transparency only around the methodology and the theory is not enough. Both Akkerman et al. (2013) and Eri (2013) note the need for researchers to be transparent about their own conflicting motives and interests during the CL process as this facilitates not only greater agency with researcher and research itself, but also with the participants. To this end, throughout the session I highlighted my dual-role as both a researcher-interventionist and as a part-time employee, where during this intervention process, the participants and I would come together to evoke expansive learning at the ALC:

> We work together, and I don't come in as an expert…What do I want? I want to see how this [Change Laboratory intervention] works here first of all, number one… But the other thing that I want as a teacher here… there's been these ideas about how do we use tech, how do we go about these things and I'd like to find a way that's unique for us… what's been said has been like 'I want to explore this [mobile technology] more, but we're not sure how to go'. So, this is one of the things that I would like us to do and to focus on in terms of where it goes… (Warren, Information Session).

Following this, one of the teacher-participants, Marjorie, opened up about her problematic language teaching experiences related to using Google Classroom with her students, where they did not interact as she had intended. She stated: "It's a great tool. It's just you've got to be so careful how, especially in an English language situation where you are trying to promote this language use… we've got to think for ways around that" (Information Session 2). Her last line captures a collective call to action for the intervention participants in her use of 'we' needing to find ways to think of incorporating this technology more in line with promoting English language use in the classroom. It suggests some participant reverberation in the discussion of the intervention's aims of looking towards technology use for language teaching. I decided to build upon this, drawing upon the unpredictable nature of CL intervention and again emphasizing the open-ended nature of the intervention, clarifying that during the intervention we would look at "In what way will this [technology] be viable for you and we'll explore it. We might decide that no, it's not, which is okay. But we're going to see what works for this organisation itself" (Information Session 2).

At the same time, not all participants were as open to sharing their experiences as Marjorie was, many displayed criticisms of my findings. These critiques came to the forefront during the presentation of my secondary thematic aim of the session which was outlining my preliminary findings to facilitate the cultivation of a firm collective commitment from the participants to the proposed intervention.

In initially discussing my findings, I focused on students' experiences of teaching at the centre, highlighting that while students in both the interviews and the questionnaire reported they were generally happy with their language learning experiences, there was some discrepancy in their responses. I used data from the questionnaire to show this discrepancy, where each student respondent rated their teacher's teaching from 3 to 5 (see Figure 37). I further noted that the students raised concerns similar to those elicited in interviews with management and teachers, namely an overt focus on coursebook material, teacher explanation, and that technology use was mainly in the hands of students (see Figure 36).

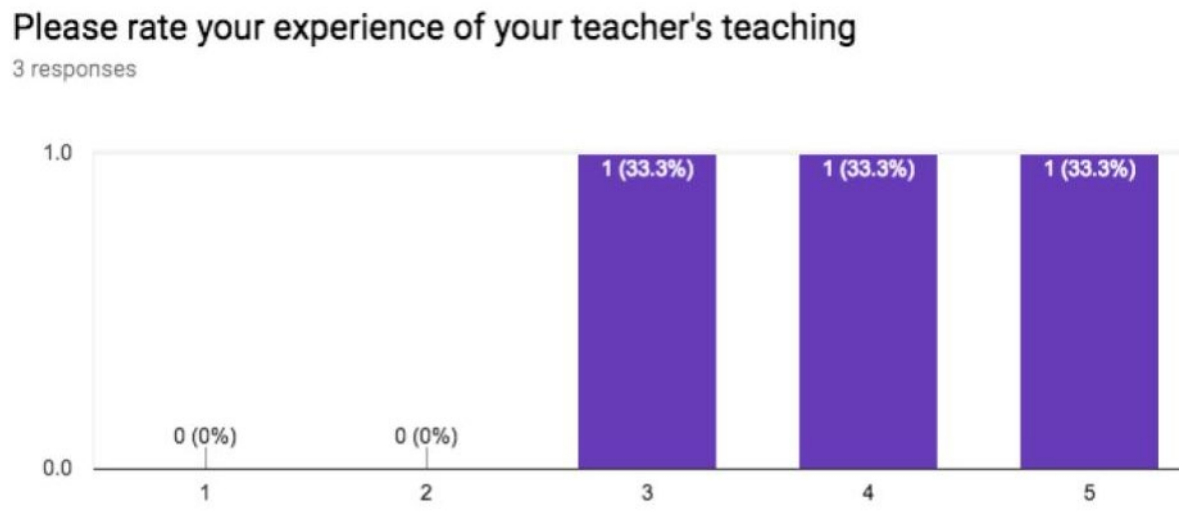


Figure 37: Student responses of experiences of teachers' teaching at the ALC

Immediately following this presentation of data, participants, more specifically, the principal and previous director of studies at the ALC began questioning the viability of my data, noting the lack of respondents being an inadequate representative sample of Advanced students at the centre. For example, James states explicitly: "Why is it good? Yeah, because I… I think small is unreliable" and "I feel like having only three respondents is… Is very small and… I hear you saying small is good, but I'm not convinced by that" (Information Session 2). In both of these excerpts, we can see him drawing on my earlier euphemism of 'small things' showing possible pathways to 'larger changes' not being valid in how these 'small representations' might fully capture the 'larger' set of students' experiences at the centre.

I wholeheartedly agreed with his criticisms of the low generalisability of the sample. Lamenting the low response rate, I still emphasised that this data did correspond with the in-depth student interviews: "I've done in-depth interviews with two other students which we're going to get into as well. But I'm giving you an overview from what I've got" (Warren, Information Session 2). I then further attempted to describe how participants could direct sessions going forward: "You can during this next seven-week process invite… Ask me to do more kinds of questionnaires if you want higher samples and stuff. I wouldn't mind it. I was quite disappointed" (Information Session 2). I then proceeded to highlight that I received a similar low response from the teachers and management in the demographic questionnaire I had sent out earlier. From this point, an exchange in criticisms from the manager participants was seen taking three critical turns, which I illustrate below:

Turn 1

DA So I would want to suggest something like for example you send that [questionnaire], you say please send it back by this and this date… 24 hours before the deadline…on my part I didn't fill in your form…

Turn 2

JA Warren… it was a very long questionnaire.… So, you can imagine some of them [students] started it and then they were like next page and they quit.

Turn 3

DA When I fill in a questionnaire like that and I feedback about stuff, I am much more likely to fill in the questionnaire if I feel positive about it. If I have negative feelings, I'm likely to go oh, I'm not interested… I also don't feel that three respondents is fair because I think that's likely to be too positive.

JA Just there I would do the opposite. I would be more likely to respond if I was pissed off…

Excerpt 10: Information Session 2

What must be noted from the above excerpts is that the manager-participants' criticisms are valid – there is a very low generalisability in the questionnaire data I presented. At the same time, this does not adequately explain the manager-participants' constant engagement with the presented data, as they could have easily dismissed the entire intervention itself stating that this data was not enough for the centre to participate. This was not the case. Instead, throughout the session, both their actions of consistent questioning/criticism of the data attempt to *explain* the reason for the data's low generalisability as an abnormality. First, as a problem of the data itself (James's concerns with 'small'), then moving to how the data was collected (Turn 1), and lastly to the actual student respondents (Turn 2 and 3).

This cycle of criticism focusing on the validity proves interesting on several fronts. One of the aims of this session was to engage participants in deeper negotiation and to heighten a collective commitment to the intervention process. While a collective commitment to the intervention process is not clearly distinguishable in the above excerpt-turns, there is an explicit negotiation of what 'counts' as appropriately representing the Advanced student experience in the data I presented, especially according to the manager-participants.

All of these explanations can be interpreted as *questioning* what 'counts' as distinct ruptures in the representation of the accepted teaching practices and students' experiences at the language centre. Central to *questioning* within expansive learning is how ruptures in the accepted practice of the activity system are explained-away to discrete one-time events or an individual's mistakes (Y. Engeström, 2000, 2011b). This 'explaining-away' of a representation of students' experiences highlighting ALC language teaching as a contested practice is notable as it fulfils both features in how ruptures are 'explained'. Firstly, it is explained as a problem of data representation, then as the researcher's mistake, and finally, as the problem of the questionnaire respondents who did and did not complete the form. Another feature of *questioning* is that often, this 'explaining-away' of discrepancies or ruptures is attributed to others situated in the activity (Virkkunen & Newnham, 2013). This attribution is seen in *the questioning* of me as a researcher and part-time ALC teacher-trainer, as well as student respondents. To this end, it would suggest that during this Information Session, the research participants and I were beginning to embark upon a collectively negotiated, participatory sense-making process that is highlighted within the CL method (R. Engeström, 2014).

A further notable feature of what 'counts' as an adequate representation of potential ruptures in the accepted practice at the ALC is my turn towards questionnaire data as a way to further reinforce my extensive qualitative interviews and observations of teachers, managers, as well as students. Y. Engeström (2011b) notes how educational researchers often feel they have to compromise their methodologies towards positivism to grapple with the pressures of a field that prioritises positivistic data, as seen in James being "unconvinced" about "small" data findings. My own attempt to employ questionnaire data as a way to further triangulation shows compromise in my practice (Mangan, Lalwani, & Gardner, 2004) as an attempt to facilitate more of a commitment from managers of the ALC. My compromise here again places my subject positioning as both a researcher-interventionist and employee within the ALC's activity as oscillating between two contradictory roles impacting my agency (Akkerman et al., 2013).

Following the information session, despite these criticisms, all participants readily agreed about the viability of the intervention and provided their consent. Keeping the criticisms in mind, when planning for the first *Charting the Situation* sessions, I decided to emphasize several tasks (see Appendix 9.2.2.1). First, a more in-depth account of what CHAT and expansive learning prioritise in understanding change. Secondly, to employ the use of double-stimulation tasks which underscored the analysis of 'mirror-data' I had collected drawn from

the teacher and manager participants, that more concretely reflected their actions in their activity. Moreover, due to the *Must Fall* protests, the session needed to promote participants' mobile device-use to access the Blended CL containing the virtual 3x3 Expansive Learning Frame and tasks, as future sessions would need to accommodate teacher-participants' displacement from the protests on campus.

5.3. Planning to Implement Charting the Situation Sessions

As discussed earlier, *Charting the Situation* entails instigating a 'need' for change in participants, i.e. a *need state*, that is instigated through promoting *questioning* actions being taken by those involved in the intervention (Virkkunen & Newnham, 2013). The second Information Session had already shown a prelude to such *need state* actions, with the managers in response to the preliminary and questionnaire data I presented, focusing on the students and me. With that in mind, the following three sessions aimed to fully cultivate a *questioning* environment for teachers and managers.

Below, I first outline how I used the principle of double-stimulation to structure mobile-supported participant inquiry into mirror-data presented to participants. I then follow this up by tracing participants' reflections and interpretations of their activity of these tasks, analysing the dilemmas and conflicts permeating their discourse.

5.3.1 Virtual / Digital Change Laboratory Tasks: Designing for Questioning

A uniqueness of this study is that the intervention occurred during the *Fees Must Fall* student protests, closing university campuses nationwide. However, due to the ALC's student population being largely composed of foreign/ international students (see Section 3.3.2), the centre had planned for classes to run off-campus during the student protests (see Section 6.3.1). Participants' impending displacement created a need for a new medium and location for the CL to be explored. A place that could be 'on the shop floor' (Bligh & Flood, 2015), even if that floor would move from site to site as the teachers and students would. This need for a CL, which emphasises the mobility of the participants (Sharples, Taylor, & Vavoula, 2005), led to a mobile-supported modality of the CL, its Expansive Learning Frame and the double stimulation-informed reflective tasks participants would draw upon throughout the intervention. It was achieved by drawing of the use of *G Suite for Education* tools, such as Google Classroom, Google Docs, Google Slides and other multi-device friendly applications in the design of the 'blended' CL (see Section 3.8.1).

5.3.1.1 Initial Tasks to facilitate Mobile-Device Appropriation

Over the course of the intervention, the 3x3 Expansive Learning Frame operates as a mediational artefact in a CL's activity as it is the main mechanism through which participants make sense of their activity under investigation towards the intervention's ultimate object (Y. Engeström, 2007b, 2011b; Virkkunen & Newnham, 2013). However, participants in this study had never utilised such a frame, drawn on its underlying CHAT assumptions, nor previously used their mobile phones for the learning CL encompasses. This inexperience meant that I would need to extensively employ and guide participants' utilisation of their mobile phones throughout these first sessions, as mediators are appropriated when they are used in object-orientated activity (Doering & Beach, 2002; Y. Engeström, 1987).

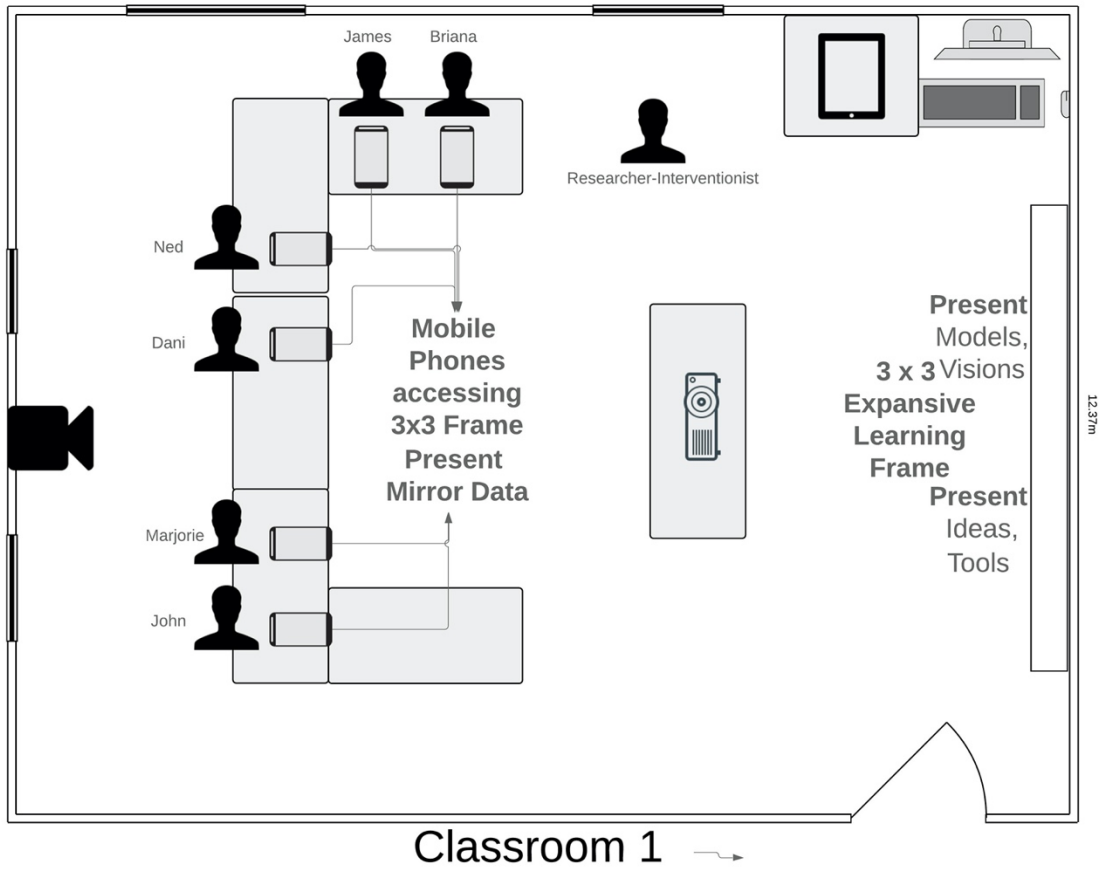


Figure 38: Session map (Session 1.1)

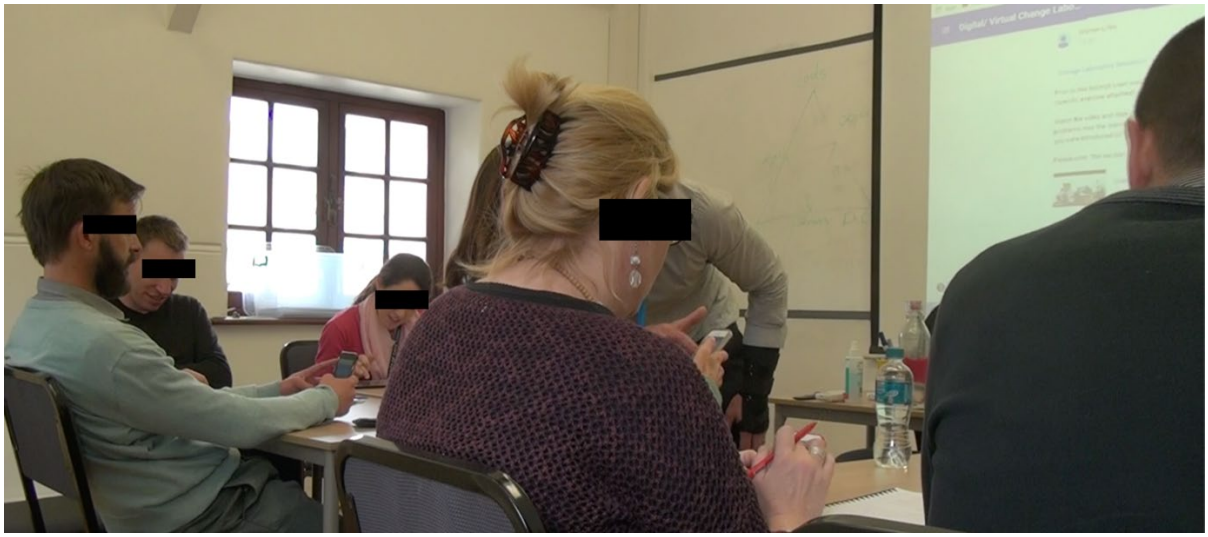


Figure 39: Example of how mobile phones were drawn on in Blended Change Laboratory by participants (Session 1.1)

Aiding this appropriation in the first session was a crucial task, as the first session would include both manager and teacher participants, while subsequent sessions would feature only the teacher-participants. Manager-participants would then only join later sessions to consult and direct teachers' future-directed initiative but expected access to the virtual aspects of the CL to check progress through notes and agendas (see Virkkunen & Newnham, 2013).

I facilitated this appropriation by enmeshing the use of mobile devices and access to the virtual CL resources. Firstly, I conducted a *Nearpod* interactive, virtual presentation that drew on participants' mobile devices. After briefly reviewing participants' understanding of CHAT, I employed the use of a virtual field trip designed to immerse them in an educational setting which they would have to map according to Y. Engeström's (1987) third-generation CHAT model (see Figure 40). In this task, they would have to use various functions such as screen capturing, writing with their mobile device and virtually interacting with the presentation's prompts. These goal-orientated actions were aimed at specifically facilitating participants' appropriation of using their mobile devices for future tasks in the CLs.



Figure 40: Example of participant's mapping after Nearpod Presentation task (Session 1.1)

This was evidenced in Dani's comments by the end of the first session where she stated: "I think as, as we do more sessions with you and we get more used to working on these phones, because my child would do this in a heartbeat, and they wouldn't be lost between one place or another". Her use of 'getting more used to' with mobile phones in comparison to her child, showcases the gap in participants digital fluency in using their devices, and at the same time suggests that the goal-directed actions in the session were beginning to aid her in 'getting used to' using the device for the tasks within the intervention.

The discussion following the *Nearpod* presentation aimed to help further clarify the central tenants of activity theory according to what participants had outlined, giving insight into their ZPD in understanding CHAT theory and where I could help to further clarify their understandings (see Bodrova & Leong, 2007; Vygotsky, 1962; Wertsch, 1985).

The second task incorporated to aid participants' deeper understanding of CHAT and accessing the virtual aspect of the CL was a brief assignment aimed to simulate a double stimulation task the teachers would encounter throughout this first intervention phase. The design of the task needed to incorporate a 'first stimulus': mirror data which participants would have previously understood and expressed as problematic, and had emotionally resonated with the participants (Y. Engeström, 2007b). The information session had shown, in particular, that teachers' teaching of Advanced students could operate as such a stimulus, leading me to select the most explicit illustration of a potentially contradictory episode from the preliminary study: Ned's lesson of presenting phrasal verbs.

In a further attempt to familiarise participants with the mobile environment, participants would need to use their mobile phones in order to access this first stimulus on Google Classroom (see Figure 39 & 41) where I presented the mirror data. It depicted a brief video excerpt from Ned's lesson, discussed in the previous chapter, including virtual access to the material he used for the lesson.

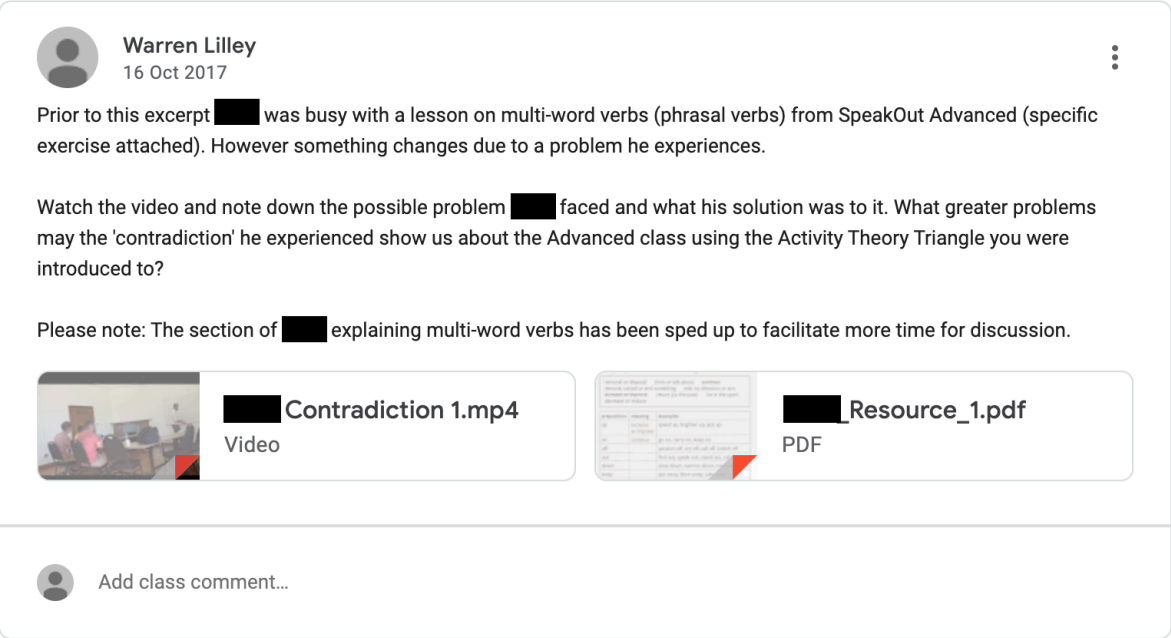


Figure 41: Mirror Task on Google Classroom extension of Change Laboratory

Once participants had watched the video and had had a brief discussion, I showed the video on the projector to further engagement. Briana noted this during the session stating: "It's nice, it's nice to look at the resource while we're watching the class [video] actually" (Session 1.1).

I then posed to participants the following question to frame their reflection on the mirror data: "I'd like you guys to think about, number one, what was the problem that Ned was facing in his lesson and what did he do to overcome that?" (Session 1.1). However, participants struggled to identify what had occurred in Ned's lesson when he moved from the coursebook to his own material due to the video's structure. To compensate for this, I gave a summary, alongside playing the video, leading to the following interpretations of Ned's behaviour between the participants:

DA: It's not the aim of his lesson, he's getting side-tracked off what he's supposed to be doing…

NE: [The course] book, I just... then it seemed pretty useless.

BR: …it [the lesson] was like going off the main objective.

Excerpt 11: Session 1.1

One of the aims of double stimulation tasks is to make the unobservable, observed (Sannino, 2015). By provoking participants' interpretations of their actions through the use of mirror data

(i.e. the first stimuli), participants start to re-construct the first stimuli according to an external mediator, such as the long-standing rules and underlying beliefs of the activity system they are in, known as the interpretive layer of causality (Y. Engeström, 2011b). Over time, the more often these long-standing rules do not adequately pose a solution to problematic first stimuli, leads to a conflict of motives (contradictory layer), which then results in participants actively searching for the creation of secondary stimuli (agentive layer) which can resolve the problematic first stimuli (Y. Engeström, 2011a; Sannino, 2015; Virkkunen & Ahonen, 2011).

In participants' interpretations above, their first attempts to respond to the episode rely on interpretations drawn strictly from their ALC activity. By Ned moving away from the coursebook, he must be getting 'side-tracked' and not following 'the main objective' of the lesson, despite his own interpretation stating he found the book "pretty useless". The use of the coursebook as the central mediator in the ALC's activity is done to ensure that teachers do what they are 'supposed to be doing'. In moving away from the coursebook, the problem has to do with Ned as a teacher – a criticism finding resonance with the *questioning* actions that locate a disturbance to the individual (Virkkunen & Newnham, 2013).

Following this, I supplied a second stimulus, an analytic tool, in the form of CHAT's conceptualisation of contradictions to help participants gain a different, more distanced perspective (Virkkunen & Newnham, 2013) of Ned's actions in the excerpt. Supplying this tool led to Dani and Briana re-evaluating their initial interpretations of Ned's actions as a "strategy" (Briana, Session 1.1) and a method to "self-evaluate" (Dani, Session 1.1). Their interpretations are a far cry away from understanding Ned not doing what he is supposed to.

5.3.2 Double Stimulation-Informed Tasks: Triggering a Conflict of Motives

At the start of this chapter, I discussed the dialectical power of contradictions lying in their ability to not only identify problematic areas of activity but also, if properly harnessed, to drive change. This dialectical power is facilitated through the construction of tasks based on the principle of double stimulation throughout the CL (Y. Engeström, 2007b). As seen above, even a simulated task informed by double stimulation can yield unique insight into participants' understanding of their activity and their underlying beliefs.

Critical to designing these double-stimulation tasks within CL, is the need for them to trigger a 'conflict of motives' (Sannino, 2015). The emphasis on conflict is central to double-stimulation, as it is only through reflective-tasks that generate participants' expression of the

underlying conflicting motives embedded within their activity that subjects are inspired to find, explore and create an auxiliary stimuli (tool or idea) that can overcome their contradictory state (Y. Engeström, 2011b). Facilitating this conflict requires tasks that promote divergences through issues of choice and stimuli that foster strong emotional responses, as they force participants to find themselves between competing motives of how to (re)act to their current dilemma the task(s) has forced them to confront (Sannino, 2015). It is reflective-tasks like these that I developed in these sessions, paying particular attention to the two phases of conflict of stimuli (phase 1) and conflict of motives (phase 2) which I describe below.

The first double-stimulation task embodied both the issues of choice and stimulus evoking strong emotional responses, as it involved all participants reviewing a virtual document containing anonymous excerpts drawn from all teacher- and management-participants' interviews. These excerpts were coded to themes drawn from common questions, and problems participants had expressed during the preliminary study – 'problem-themes' (see Figure 42). Again, to help their appropriation of the mobile nature of the intervention, the virtual document was accessible via participants' mobile phones, thus enabling all participants to be working on the same document at the same time.

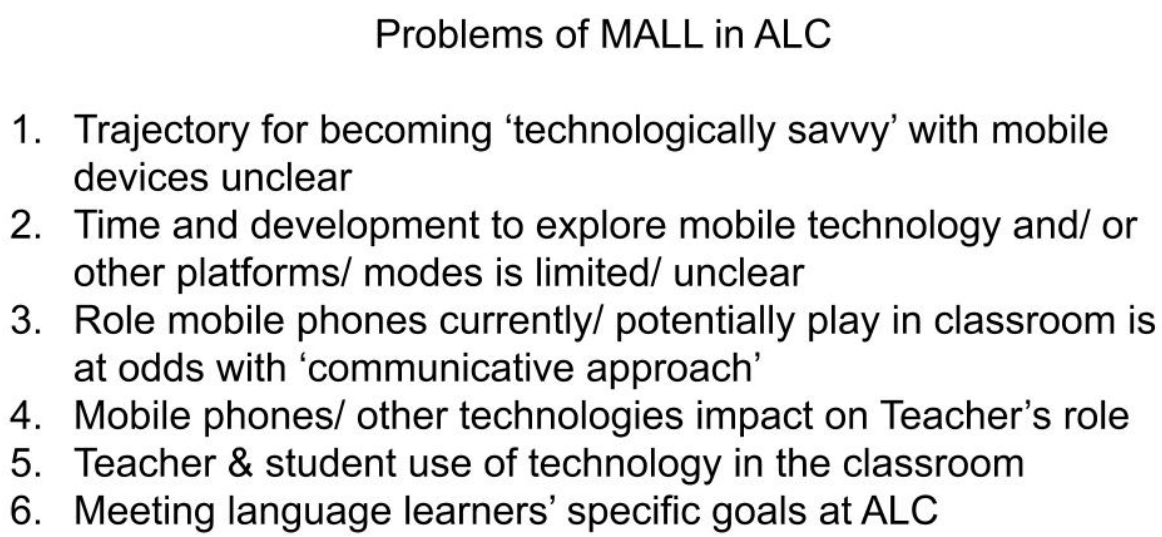
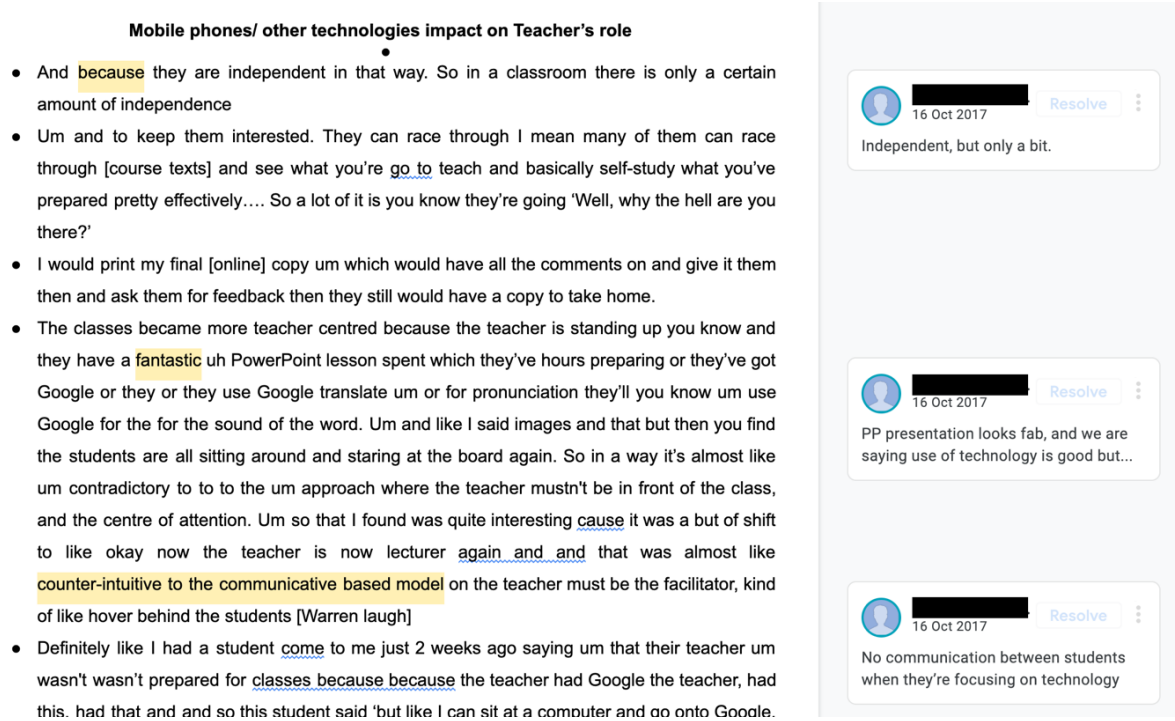


Figure 42: Problem-Themes Double-Stimulation Task 1 - 3x3 Expansive Learning Frame (Session 1.1)



Mobile phones/ other technologies impact on Teacher's role

- And because they are independent in that way. So in a classroom there is only a certain amount of independence
- Um and to keep them interested. They can race through I mean many of them can race through [course texts] and see what you're go to teach and basically self-study what you've prepared pretty effectively…. So a lot of it is you know they're going 'Well, why the hell are you there?'
- I would print my final [online] copy um which would have all the comments on and give it them then and ask them for feedback then they still would have a copy to take home.
- The classes became more teacher centred because the teacher is standing up you know and they have a fantastic uh PowerPoint lesson spent which they've hours preparing or they've got Google or they or they use Google translate um or for pronunciation they'll you know um use Google for the for the sound of the word. Um and like I said images and that but then you find the students are all sitting around and staring at the board again. So in a way it's almost like um contradictory to to to the um approach where the teacher mustn't be in front of the class, and the centre of attention. Um so that I found was quite interesting cause it was a but of shift to like okay now the teacher is now lecturer again and and that was almost like counter-intuitive to the communicative based model on the teacher must be the facilitator, kind of like hover behind the students [Warren laugh]
- Definitely like I had a student come to me just 2 weeks ago saying um that their teacher um wasn't wasn't prepared for classes because because the teacher had Google the teacher, had this, had that and and so this student said 'but like I can sit at a computer and go onto Google.

[redacted] Resolve
16 Oct 2017
Independent, but only a bit.

[redacted] Resolve
16 Oct 2017
PP presentation looks fab, and we are saying use of technology is good but...

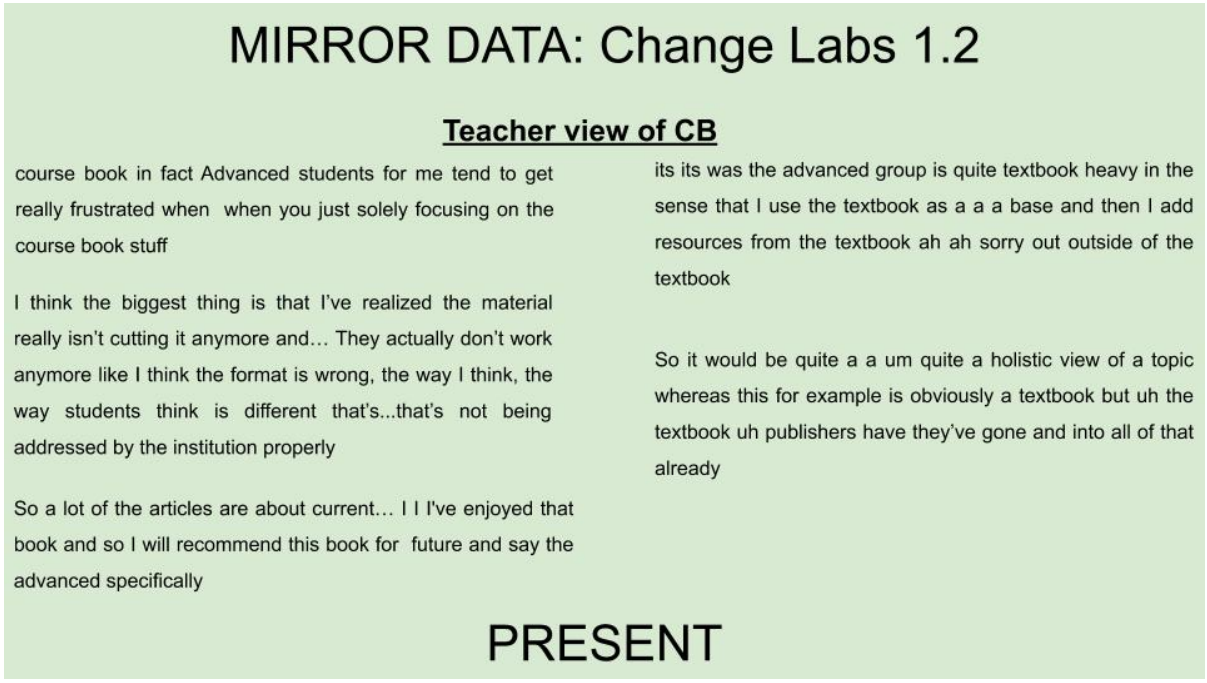
[redacted] Resolve
16 Oct 2017
No communication between students when they're focusing on technology

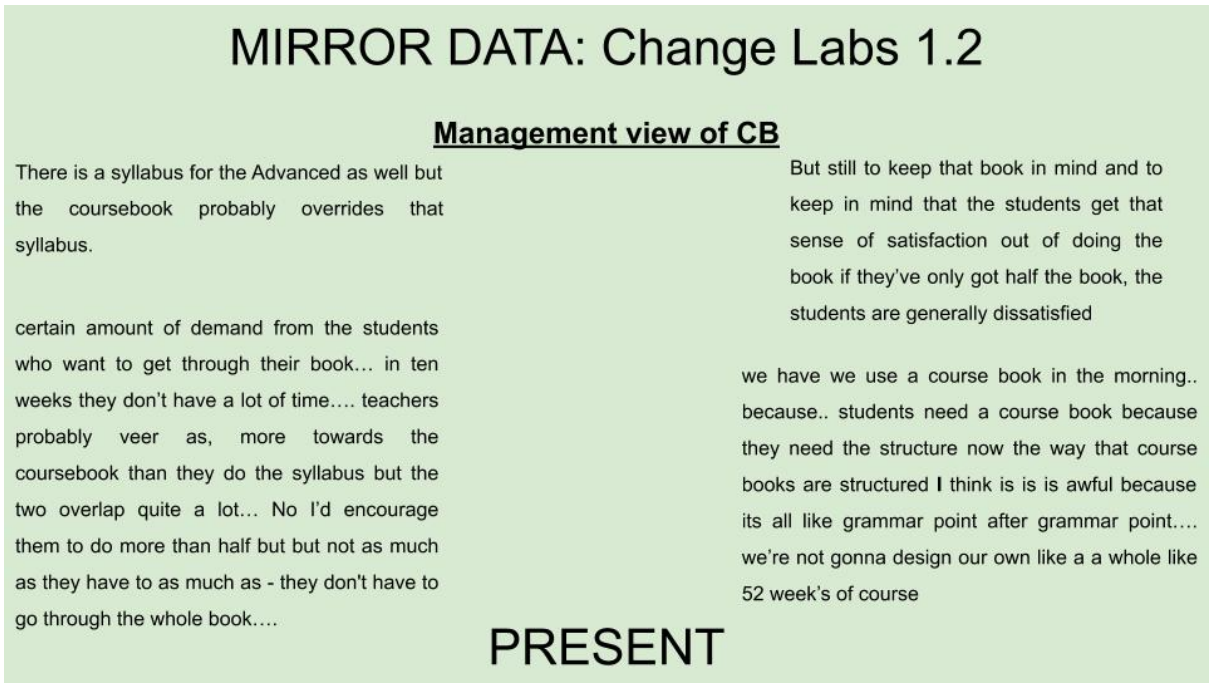
Figure 43: Problem-Themes Double-Stimulation Task 1 - GoogleDoc (Session 1.1)

Participants in this task were asked to review one of the 'problem-themes' that was evidenced during interviews in pairs. Participants were paired into three groups: one management-pair, one manager- and teacher-participant pair and a teacher-participant pair. They were invited to experiment in highlighting text and commenting on the actual document, as seen in Figure 43 above.

In structuring this double-stimulation task, I was cognisant of Lund & Rasmussen (2008)'s recommendation that stimulating participants' reflections of mirror data (the first stimuli) of their interviews, required a mediator that could facilitate both the task and productive reflection. In this case, closeness and distance were needed to allow the descriptions of their activity to become the object of attention (Virkkunen & Ahonen, 2011). The use of anonymous excerpts here could provide such a 'distance' and 'closeness', as participants could find themselves within the mirror data and at the same time be distanced, in that their words would not be attributed to them by their peers. Moreover, this anonymity of the task, coupled with the uncertainty of different participant-pairs' motives when highlighting and selecting 'problem-themes' would open the task akin to Sannino's (2015) description of 'conflict of motives' double stimulation tasks, which are characterised by the openness of participants' choices and competing motives as mentioned above.

A similar task was created for Session 1.2, in response to teacher- and management participants' expressed dilemmas regarding the use of the coursebook at the ALC evidenced in Session 1.1. (see below). Following a similar format to that of the anonymous virtual document, I placed key excerpts of interviews from teacher-and management-participants that demonstrated strong concerns and ideas regarding the use of the coursebook as the first stimulus at the centre. Teacher-participants were asked what the possible conflicts and problems were surrounding coursebook use at the ALC, and then to detail the main issues using the Present Ideas and Tools slide (see Figure 44 below).





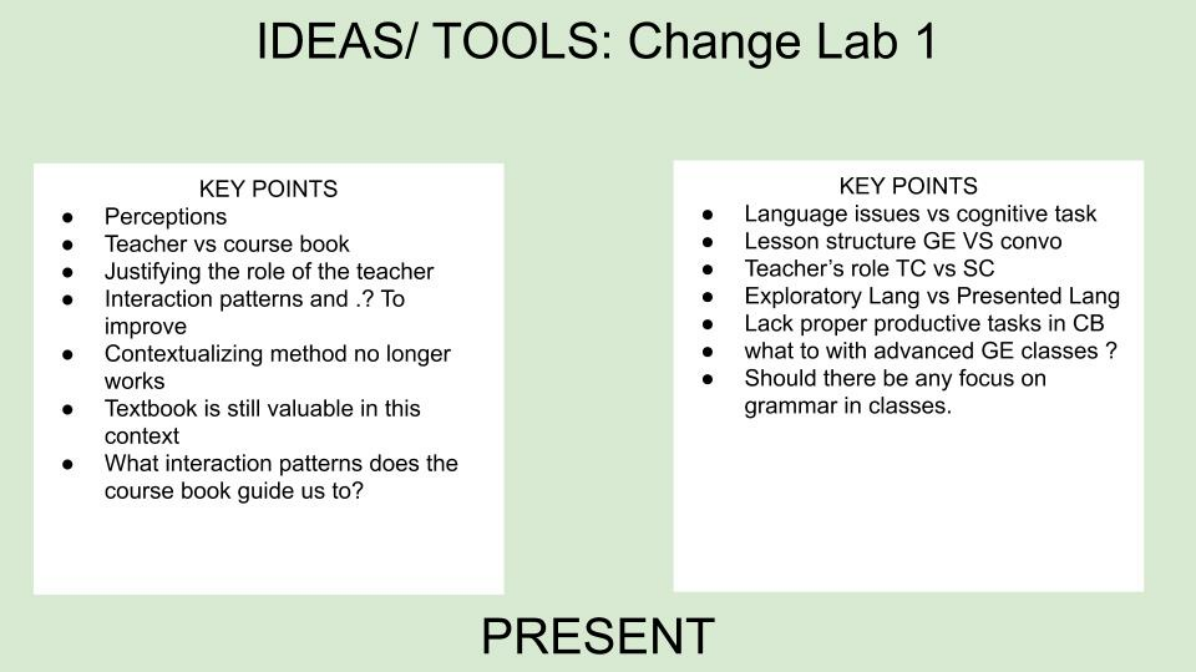


Figure 44: Double-Stimulation Task 2, Session 1.2

In the following sessions (1.2 to 2.1), the other main tasks more closely followed a conventional model of double stimulation tasks, wherein the teacher-participants would watch video lesson excerpts drawn from observations of their classrooms (Y. Engeström, 2007b; Virkkunen & Newnham, 2013). Each of the episodes focused on the teaching of Advanced students: one which did not use technology (Ned), one which used technology (Marjorie) and one which focused on repurposing coursebook material (John). To aid their reflection, teacher-participants were given a *Notes of Video Excerpt* sheet (Figure 45). The sheet aimed to promote participants' reflections of the first stimuli, as well as help 'distance' themselves from the possible strong 'close' emotional response that could occur from watching themselves in the lesson. It was to be used in conjunction with the virtual 3x3 Frame, which focused on the horizontal Present plane of ideas that teachers could access and write on using their mobile devices.

Notes on Video Excerpts

While watching and after reviewing the lesson plans & resources, make notes around the following points

Lesson 1 and 2

Question	Lesson	My ideas/ comments	Evidence?
What was the teacher trying to achieve/ develop?	1		
	2		
Teacher's role?	1		
	2		
Students' role?	1		
	2		

Figure 45: Notes on Video Excerpts Sheet for Lesson Mirror Data (Session 1.2)

In the above tasks, teacher-participants were very self-aware of their lessons being used for the mirror-data during these initial sessions (see below). To aid their abilities to distance themselves from their teaching and approach a more analytical frame (Virkkunen & Ahonen, 2011) in understanding their expressed conflicts and dilemmas, I planned a final task during Session 2.1 which would re-introduce the Teaching Change Frame (TCF, see Figure 46) (Tarling & Ng'ambi, 2016) after all teachers' lessons were viewed. The introduction of a secondary mediator to help facilitate further reflection and analysis is not uncommon in double-stimulation tasks (Virkkunen & Newnham, 2013), as long as they are appropriate (Sannino, 2015). The TCF appropriacy falls in line with the objectives in this study as it is a diagnostic tool to map teachers' pedagogy with and without the use of technology in the classroom. Moreover, its prioritisation of critical diagnosis is seen as one which allows teachers to examine where their current teaching falls, and help them to visualise how they would like to teach for the future (Tarling & Ng'ambi, 2016). This explicit link between present and past captures the essence of double stimulation tasks, where problematising the present to look for future directions is at the core of its method and principles (Y. Engeström, 2007b; Sannino, 2015; Sannino & Laitinen, 2015).

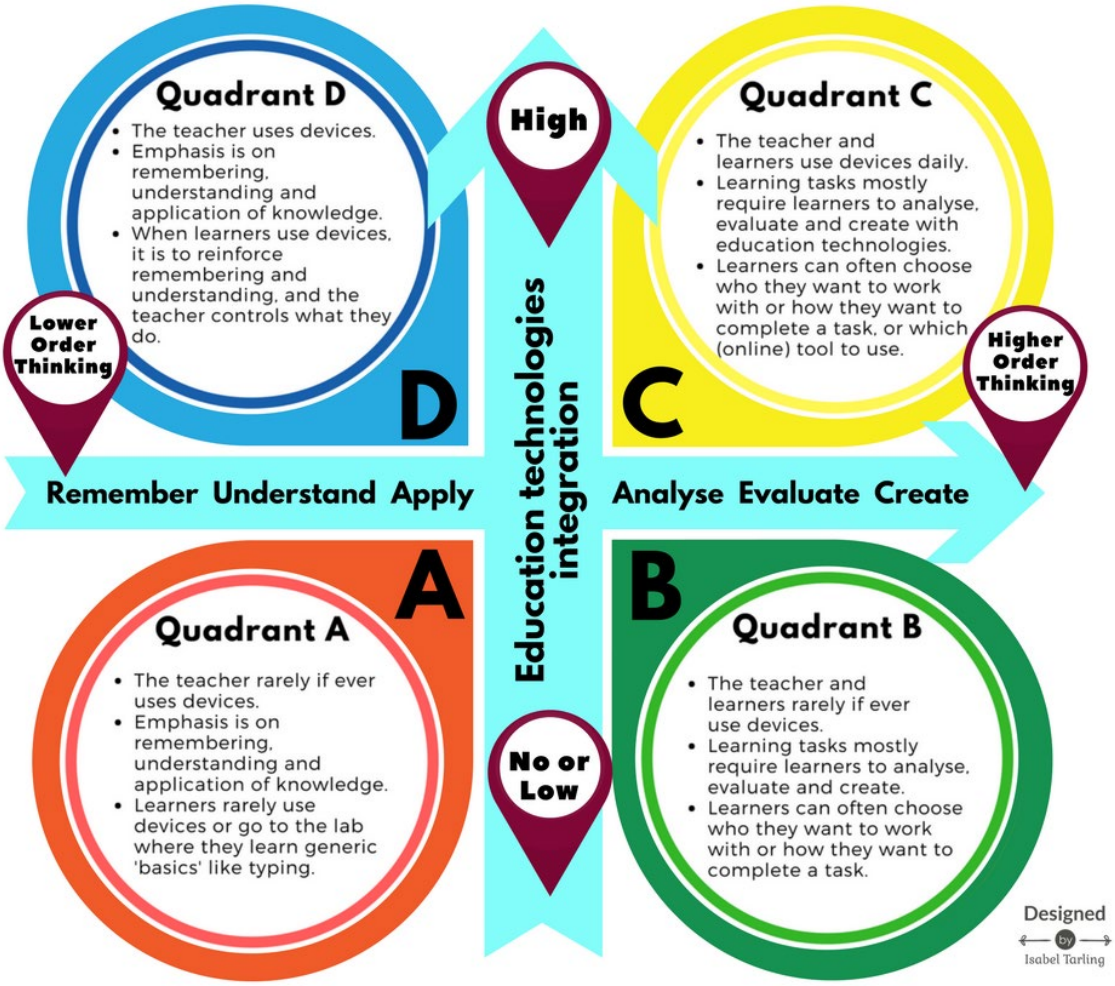


Figure 46: Teaching Change Frame (I. Tarling, personal communication, March 4, 2019)

In the task itself, participants were asked to work together on the Present Models/ Ideas plane of the virtual 3x3 Expansive Learning Frame to re-situate where their lessons fell, accounting for the issues and problems they had collectively expressed over the last three sessions. The aim here was to allow them to look at their teaching practices more holistically to trigger further *questioning* of their Advanced teaching and perhaps evoke the start of a deeper *analysis* of their activity at the ALC. Furthermore, teacher-participants were asked to engage with their mobile devices to virtually capture their different placements.



Figure 47: Teacher-participants using their mobile devices to re-diagnose their lessons using the TCF (Session 2.1)

All these tasks aimed to trigger a 'conflict of stimuli' regarding teacher-participants' activity at the ALC, to evoke conflict of motives. Each of the tasks represented core aspects of the problems teacher- and management participants' had identified around the teaching of Advanced students at the centre in terms of technology, the coursebook (meditators) and how teachers taught in lessons (division of labour and rules), which were singled out as critical areas of focus from the preliminary study. Successively exposing teacher-participants to mirror data representing these problems and triggering their conflicting interpretations of the causes through double-stimulation tasks allowed an avenue for them to express the competing motives which drove and at times repressed their activity at the centre. I now move to discuss how these concerns were expressed through their dilemmatic and conflictual interpretations following the presentation of mirror data.

5.4 Dilemmas and Conflict: Analysis of Participants' Questioning Actions

As stated earlier, during this initial phase of the intervention, tasks informed by double-stimulation lead towards participants' first agentive actions. These agentive actions take the forms of responses to problems they are experiencing in their *questioning* of their activity being attributed to specific elements of the activity or other participants (Y. Engeström, 2000).

Central to this *questioning* articulation of contradictions is that the actual contradictions can never be expressed directly. Instead, as Y. Engeström and Sannino (2011) note, they are discursively manifested in four forms: dilemmas, conflicts, critical conflicts and double binds, which consistently reformulate the contradiction participants experience. Dilemmas are

ideologically produced expressions of incompatible appraisals of participants' actions, while conflicts are utterances that showcase participants feeling negatively affected by one group. Critical conflicts, on the other hand, are highly personal, metaphorical narrative accounts stipulating the participants' feelings of facing contradictory motives in their activity, while double-binds express helplessness where participants can see no way out of their current problem state.

5.4.1 Session 1.1: The Dilemma of Teachers, Coursebooks and Mobile devices

5.4.1.1 Problem Theme Collaborative Double-Stimulation Task

These discursive articulations in *questioning* actions were immediately seen following the first double-stimulation task. In this task, participants were asked to identify contradictions by reviewing anonymous excerpts of participants' interview data, using a collectively-accessible virtual document (see Figure 43). I had tasked James and Briana to review excerpts under the problem theme of 'teacher & student use of technology in the classroom'.

Asking for their insights and what they had found, led to James immediately directing attention to an excerpt focusing on a teacher-participant's frustration at students being distracted in class "presumably" (James, Session 1.1) by their mobile phones, which the participant had regulated to an issue of respect. James criticized their view, stating:

> JA: So, I think that was contradictory…. they're [students] obviously not paying attention because they're on their phones… And then they [participant] say it's not to do with the phone, it's to do with the, the issue of respect. So, it is to do with the phone, because without the phone it wouldn't happen, but it's not to do with, or, but they're saying it's not to do with the phone, it's about the (unclear), I suppose.
>
> WA: So, so I mean, respecting each other can't have an impact about how people use their devices or course books?
>
> JA: No, I'm just, I just meant that from, they're saying it's not to do with the phone, but then also it is to do with the phone.

Excerpt 12: Session 1.1

In the first turn, we can see James's *questioning* concerning the participant's experience of student mobile use as a dilemma. In evaluating the participant's excerpt in terms of the idea of

'respect', he finds it irreconcilable in explaining students' distraction. It is "obvious" to him that it is the phone that is causing the distraction (although he 'presumes' it in his previous turn) because phones are associated with distraction. The teacher-participant is wrong as "they're saying it's not to do with the phone" which he juxtaposes with his clear emphasis on the phone being the issue. In this, he is clearly signalling a problem with the participant's logic, demonstrating a causal interpretation of the participant's experience, where the presence of phones drives distraction, echoing the first layer of causality – interpretation – where reflections are structured according to logics of the current activity system (Y. Engeström, 2007b).

I then asked for further clarity on his reflection by applying his statement about mobile phones to include other mediating artefacts like coursebooks. Virkkunen & Newnham (2013) note that it is the researcher-interventionist's role to support participants' questioning actions by attempting to counter-balance them by looking at other tools and elements of their activity. Moreover, Billig et al. (1983) state that often, the way to get towards the heart of a dilemma is through inversion. It is interesting to note that after this, James reformulates his statement in two ways. Firstly, he distances himself from his earlier statement, explicitly relating his prior comments to solely the participant's uptake of respect and students' 'presumable' use of mobile phones. One of the elements of dilemmas is that they are often restated, resorting to linguistic cues like "I just mean" and "but" (Y. Engeström & Sannino, 2011), evident in James's reflection of the participants' experience in both turns above. Secondly, this reformulation is stated as more a paradox - "not to do with the phone, but to do with the phone" in line with the notion of contradictions I had introduced earlier in the session, thus highlighting his attempts to use of CHAT theory as an external mediator (Y. Engeström, 2007b; Virkkunen & Ahonen, 2011).

This type of reformulation of the dilemma was not only limited to James. Over the session, the dilemmas which emerged were collectively-reformulated by the participants time and time again. The first instance, right after James's interaction above, was Marjorie drawing on another participant's excerpt about the ubiquity of mobile devices: "I thought that was very circular… just because something is ubiquitous doesn't necessarily make it important" (Session 1.1). To which Ned further reformulated Marjorie's argument: "I kind of agree with that, that just because they're around doesn't mean that they're important… but it is a resource that you can use, because it's available, it's lying there dormant" (Session 1.1).

In James's earlier statement around mobile phones, he is *questioning* the exchange value of mobile devices versus their perceived usefulness in how they distract students (Y. Engeström, 1987). Marjorie and Ned both evidence a similar kind of *questioning*, but in a much more abstracted formulation where the exchange-value of mobile devices is questioned in terms of in their pervasiveness against the perceived value in using them for teaching and learning just because they are there. Again, a dilemma is emerging within these articulated reformulations regarding how mobile phones operate, given that 'on the one hand' the availability of mobile phones does not mean they should be used, but 'on the other hand' they are a dormant potential resource (Y. Engeström & Sannino, 2011).

Here, the mobile device as a mediating artefact of ALC activity is framed as an element up for collective debate based on the motives that drive its use, due to its apparent availability and ability to distract. Participants agreed, stating that there "is a contradiction" (Briana, Session 1.1). I followed this by attempting to summarise the discussion so far, stating "there's a fuzzy line that we're not sure about, right?" (Session 1.1). At this junction, Marjorie wished to highlight a criticism about an excerpt focusing on teaching and learning at the centre:

> Um, sort of in line with that… we sell our courses on communicative methods… we are going to teach students to communicate, not just to read or write and they're going to be encouraged to participate in class. We were just saying, that, that just needs to be rephrased because communicative methods could include reading and writing as well, as part of that. So maybe not just verbal communication. So maybe there's a contradiction in terminology perhaps. (Session 1.1)

Her statement above questions the ideation of communicative language teaching at the centre in that it needs to encompass not only verbal but also written communication. *Questioning* does not only single out individuals, but also criticises aspects of accepted practice (Rantavuori et al., 2016). Here, Marjorie requests for an expanded conceptualisation of the rules which govern teaching at the centre, in its uptake of ALC, as expressed by the participant. However, the value of this excerpt does not only lie in its *questioning,* but how it triggered a reorientation and further reformulations around the collective discussion of dilemmas about language teaching and technology.

Dani started this turn, focusing on an excerpt where a participant had watched a lesson of a teacher using *PowerPoint* in their language lesson, but that in using this technology it was "taking away" (Dani, Session 1.1) from the students' communicating in the classroom. She positions this as a rhetorical question: "So, is it [technology] fantastic? Actually, no. It looks

fab, but it's not actually doing what we need it to do" (Session 1.1). Her use of rhetorical question aligns this *questioning* action within the frame of expressing a dilemma, as it expressed hesitation or doubt concerning the value of technology in the language classroom (Y. Engeström & Sannino, 2011).

Her support of these doubts mainly stemmed from the ideology of communicative language teaching (CLT) and the teacher's role. The first was the teacher's placement in the language class: "the teacher's been told to…[be] around the back and facilitate" (Dani, Session 1.1). In CLT, lessons should emphasize student-centeredness (Richards, 2006; Sato, 2002), but in the excerpt, Dani's focus on technology is placing the teacher at the centre.

Furthermore, is how the technology-use in the example highlights the substitution of the teacher: "they're using the *PowerPoint* instead of their voice, but it's coming to the same role" which Dani further expands to a problem of inefficiency "it looks professional, blah blah blah. But in actual fact… I could have written it up on the board in ten minutes" (Session 1.1). Herein, Dani's dilemmas with technology like *PowerPoint* in the classroom is that in its use-value of looking 'professional' and 'fab' is questionable in its value-in-exchange within the language classroom: (1) as it 'takes away' from CLT's emphasis on student-centricity; (2) it still places the teacher at the front or acts as a substitute for them, and is (3) inefficient in the time it takes to create them when compared to more traditional classroom resources such as the whiteboard. She summarised her concerns as: "I do think that, that is important, that, that the use of technology doesn't take away from our learning... that it doesn't become all about display and, and no pedagogy behind it" (Session 1.1).

Moving on, Ned related this as similar to an excerpt of a participant's recollection of a student criticising a teacher's use of *Google* and *YouTube* in lessons. The excerpt focused on a student's criticism of a teacher being unprepared and that the student did not see the value of learning as they could access the same resources at home. His articulation of the excerpt, alongside Dani's previous questioning (above), resulted in the following exchange between the research-participants:

DA: It's a good point isn't it? Because the teacher can go on Google… and the student, they've both got exactly the same...

NE: So, I mean, the contradiction there is that the teacher is using the available resources, which is kind of a positive, they've got probably diverse resources as opposed to the singular sort of set. But the contradiction is too that because they're sort of instant and available, that doesn't look very good.

JA: And accessible to everyone.

NE: Accessible to everyone, which you used to have a teacher's book, there was only one copy, that was yours....

DA: But we're supposed to be moving away from that whole thing that the teacher is in power, that's...

JA: Are we? ...

NE: We need to, we need to find another way of appearing that we're earning our keep.

Excerpt 13: Session 1.1

The exchange above emphasises an explicit move captured within the contradictory layer of interpretation, where participants' reflections of the contradictory motives of using technology are coming to the fore (Y. Engeström, 2007b). The dilemma posed in participants' evaluations of technology for teaching languages is that while the initial motivation to use technology allows a broader set of tools to be used in the classroom, this use challenges the language teacher's role and value as well. By being instantly accessible, participants question the ability of the teacher to 'look good' in front of the classroom, as teachers and students have the same access to the same teaching and learning resources. This accessibility is juxtaposed with more conventional practices of having the teacher's book where accessibility is limited, allowing the teacher greater control over the lesson as there is only 'one copy'. In turn, this relates to competing, ideological motives of the teacher's power and control in the classroom. Dani relates the open accessibility of technological resources allowing teachers to 'move away' from control, versus teachers needing to be solely in control of learning in the classroom through limited accessible resources like a teacher's book.

James rhetorical questions confront this, stating, "are we?" and then Ned's expression of the necessity of finding a path to make teachers appear to "earn [their] keep" (Session 1.1). This movement from a rhetorical question, doubting the ability for teachers to do so ("are we"), to a desire to find a new pathway ("we must find"), aligns with Y. Engeström & Sannino's (2011)

discursive pattern of how double binds are initially manifested in formative interventions. It places ALC language teachers facing equally unacceptable options in 'earning their keep'. Incorporating more open and accessible learning resources, like *PowerPoint* and *Google*, questions and downplays their value and control of instruction, while using conventional resources with limited accessibility prioritises their role but underplays their directives for a more open, student-centred classroom. This led to Ned expressing the need for 'us' to find a way that teachers can still find value (or appear to) in the contemporary language classroom.

To probe deeper into this articulated double-bind and instances where teachers did find value, I posed to the participants an inverse quandary of their evaluations. I asked if students having a copy of both the teacher's book and coursebook offered the same problem as having access to the same technological resources in a classroom. At first, Briana expressed that meant both coursebooks and technology function as classroom tools, with the key difference being in teacher's *use*: "if the teacher is using one of those tools without that human input or feedback or whatever, then it's the same thing" (Briana, Session 1.1). Her response here does not open a discussion of ways to practically transform the use of tools in the classroom, as is expected with articulated double-binds (Y. Engeström & Sannino, 2011). Instead, her response led to participants reformulating the issue as dilemmas surrounding how resources are used to show how teachers can / do 'earn their keep'.

The first of these reformulations revolved around the 'skill of subtlety' and its effect on the 'believability' of the teacher, summarised in Dani's question: "does the student believe the teacher can't do this without the book?" (Session 1.1). She reflected that in order for students to 'believe' in their teacher's ability, meant teachers need to use the teacher's book subtlety in lessons, i.e. "don't really show our students that we have… all the answers and the ones we don't know we have a little peek". Briana immediately linked this to teachers' use of technology in the classroom: "So like, bringing up… the answer on Google Dictionary is just a more blatant way of doing the same thing as peeking at page 66" (Session 1.1). The ability to be so 'subtle' and 'believable' in the classroom was then further linked to the amount of experience the teacher had with using the tool(s) for teaching and learning (Marjorie, Session 1.1). Moreover, teachers' use of technology was contrasted with students' use of applications like *Google* to further 'check-up' on teachers' knowledge furthering this need for to 'appear' to know or be 'believable' in lessons (Ned, Session 1.1).

The above reformulations place a distinct focus on the division of labour as a site of contestation in the language classroom since how teachers utilise, and control lesson resources are linked to language learning where teachers feel 'valuable'. This control is achieved by masking (being 'subtle' with) the knowledge contained within mediators, like a teacher's book, as it allows the teacher to be 'believable' in their 'expert' placement in the classroom, as the knowledge to be imparted resides with a mediator to which they have sole access. According to participants, technologies like *Google* in the classroom, open this knowledge up to all, in turn, allowing students to 'check' their teachers which runs the risk of jeopardising the teacher's place in their learning activity system. It is even more interesting to note that the 'expertise' of teachers, as referenced to above, is then seen to reside in to what extent they learn to be 'subtle' and 'believable' with resources over time, rather than the knowledge they hold: "I've had teacher's books where the board plan is written out for you, it's great. You can just copy out the board plan and then teach it. You didn't have to think for yourself at all" (Dani, Session 1.1).

The issue of teacher control was further taken up later in the session again, when drawing on more excerpts the participants had found contradictory. The excerpt evidenced teacher-participants grappling with the need for firm teacher control in the classroom, and at the same time needing a clear emphasis on the students and teachers working together. Ned questioned the contradictory nature of this statement, to which I remarked "is there a way that they can't be?" a contradiction, asking for concrete examples. It led to Marjorie and Dani *questioning* the role of the teacher as a facilitator. For Marjorie, as a language teacher, despite the need to plan and guide the lesson, the language classroom needs to also present "a community ethos and still have the students very much engaged and… you [the teacher] are the facilitator" (Session 1.1). However, Dani *questioned* this statement stating: "but… sometimes the questions that we ask, … we're in control of what the task supposedly is, but we're building it together collaboratively" (Session 1.1).

Again, a dilemma is presented in their reflections of teaching in the classroom, not only frequently evidencing the linguistic markers of 'but' (Y. Engeström & Sannino, 2011); it also portrays competing ideologies of education. The first being the need for student-centricity of the classroom (discovery learning) on the one hand, where collaboration is uplifted *and* at the same time, the need for this collaboration is tightly controlled and handled by the teacher (transmission-orientated) in the tasks that are set (Billig et al., 1983). A similar mutually exclusive dilemma (as posed earlier) is seen in participants' reflections in how resources are

implemented in the classroom by teachers, as there cannot be open-access to resources (progressive education) *and* 'valuable' teachers (traditional education) in the classroom.

These reformulations residing within the division of labour of teaching Advanced students were not without disagreement by other participants. For John, the emphasis on subtlety neglected the socialising role that teachers play in the classroom. As he stated:

> I don't think you have to be subtle. I mean, the book gives you [the teacher] the answer but you're there to explain why it's the answer really, and why something else is not the answer… So, you know, I mean, obviously you translate it on Google or whatever it is, but then is something telling you whether you can appropriately use it or not? (Session 1.1)

In John's statement above, he disagrees with the earlier participants' emphasis on teachers' skilful, subtle-use mediators in the classroom. Instead, he emphasises their role in language teaching to help students in developing language. His reflections, here, emphasise a conflictual discursive manifestation of contradictions in that he feels that the earlier noted subtlety by other participants is an incompatible summation of what the language teacher brings to the classroom (Y. Engeström & Sannino, 2011). He further builds on this idea with Marjorie, eventually reformulating their ideas to the need for teachers to find: "the appropriate tool that lends itself to that lesson in that moment" (Marjorie, Session 1.1).

However, this emphasis on the need for finding the appropriate tool, regarding mobile devices (and other technology) towards the end of the session remained ambiguous: "your mobile device can help you in class, um, not necessarily as a communicative device… but it can be a great teaching tool" (John, Session 1.1). Given the past articulations surrounding mediators like coursebooks and technology by the participants, the value of tools was strongly linked to the teacher's role and how labour is divided in language lessons. However, the focus here in John's reflection emphasises again the teacher's use of the device for instruction and not the communication that ELT's primary pedagogy CLT emphasises for student language learning. Marjorie reinforced this further with her narrative account of her use of Google Classroom:

> I prepared everything, it was all there, and then I get up and the students were just basically writing, they put it up there and then they made a mistake and then they were so concerned about how they looked, you know, to the rest of the class, they stopped actually writing. And my whole lesson was collapsing you know… (Session 1.1)

Her strongly personal, narrative account outlines her discussion around her experience of using technology as a 'critical conflict' (Y. Engeström & Sannino, 2011). In attempting to use technology to support her motives of developing students' written communication, when it was presented to the rest of the class, students' communication stopped, letting her feel that the lesson had collapsed, especially in terms of CLT's aims (see Hunter & Smith, 2012; Richards, 2006; Sato & Kleinsasser, 1999).

5.4.1.2 Summary of Session 1.1

To summarise then, what can be seen by the end of this first session is how deeply the role of mediators, technology and power are inscribed within the dilemmas participants expressed throughout the session. Moreover, of significance, is how the articulation for these dilemmas was constantly reformulated and re-expressed, showing deeper concerns and conflicting motives that were also further communicated through other discursive manifestations like double-bind, conflict, and critical conflict, but not to the same extent to which dilemmas were. It illustrates the beginning of participants evoking a much deeper underlying contradiction through double-stimulation, evidencing how choice and conflict of stimuli can help evoke participants' ability to more deeply understand their own internal and external motivations surrounding their activity (Y. Engeström & Sannino, 2011; Virkkunen & Ahonen, 2011).

5.4.2 Session 1.2: Emerging Conflicts from Coursebook Use

There were two significant takeaways in developing the second *Charting the Situation* session with teacher-participants. The first of these was the need for teacher-participants to see their actual practice, leading to the first planned video-reflective tasks informed by double-stimulation focusing on Ned's and Marjorie's lessons. The second was the need to delve deeper into participants' underlying motivations for coursebook and teacher's book use in lessons. As discussed above, the coursebook and mobile device were seen as antithetical to each other in their 'valuing' of teachers' roles in the classroom, but at the same time, both were also regarded tools that could be used.

These concerns were further reflected in teacher-participants' reflection notes after Session 1.1, as seen in Figure 48 to 50 below. All participants similarly raised concerns around teaching and the need to be seen doing it; the difference between students and teachers and materials used in lessons; and the role that technology should play in the classroom, respectively. I

believed that the video tasks and the coursebook task would allow some deeper discussion on all of these aspects.

3. My answer to number two is probably the contradiction I was most aware of. This and the contradictions discussed in class are one in the same. Teaching fills two function: to teach, and to be seen to be teaching.

4. Hmmmm

5. I'd like to explore the role of what we do as business (a product that is sold) and the way it changes behaviours and expectations in the classroom.

Figure 48: Ned's Reflection 1.1

3. What contradiction/ problem in our discussion did you most identify with?

- Conflict between student **wants** and actual **needs**. Plus their expectations based on what they consider to be good teaching practice + materials vs what we consider to good teaching practice and materials.
-

4. Which contradiction/ problem in our discussion did you least identify with?

- The idea that it's bad practice for the teacher to be seen consulting the teacher's book - although yes it is bad practice if the are consulting it because they don't know what to do next - that should've been done in prep.

Figure 49: John's Reflections 1.1

3. What contradiction/ problem in our discussion did you most identify with?
The contradictions for me are all around how often to use technology in class. Firstly how much technology, how useful it is, how effective it is.

4. Which contradiction/ problem in our discussion did you least identify with?
The fact that technology use in class is questioned. I feel that it is necessary to use technology in lessons and to promote the use of technology, especially with students using mobile phones.

Figure 50: Marjorie's Reflections 1.1

5.4.2.1 Ned Video Double-Stimulation Task

A remarkable feature in each session was how participants would quickly re-orientate themselves at the beginning of the session to return to primary concerns and issues from the previous one. For instance, at the beginning of the session, I asked participants what the key challenges or discussions that came up from the previous session were:

JO: …. So, I think, well the problem… the student would feel as if the teacher should know everything…

NE: Yes… I kind of identified with that… what perceived value are you bringing and… making students aware, aware of the value you bring… There's this very strong, uh, thing of justifying our existence.

Excerpt 14: Session 1.2

After this brief recap, I set the first double-stimulation informed video task. Participants were asked to review Ned's lesson plan that was done within the two-morning lessons (see Section 4.3.2.). After briefly reviewing the lesson plan, participants watched some key moments, which explicitly focused on Ned's teaching of phrasal verbs and noted down their key insights together with questions regarding the lesson. We then engaged in a collective discussion of the lesson.

Ned started the discussion, remarking that he "didn't know what the hell I [he] was going to do… Because I had thrown out the phrasal verb lesson" (Session 1.2). In Ned's reflection about his lesson, he is suggesting he found himself in a paralytic-state after 'throwing out' the phrasal verb lesson. His discourse here contains strong emotional metaphorical expressions like: 'hell'; 'thrown out' aligning his reflection here as a 'critical conflict' perceiving himself to be caught between two conflicting motives (Y. Engeström & Sannino, 2011). Ned further elaborated:

> Because I realised that to do it was going to be laborious for zero benefit. They were going to get nothing out of it. They knew what phrasal verbs were, they knew all the common ones… to have an entire lesson to find… examples that, that they didn't know, and probably wouldn't retain… just seemed pointless suddenly. And especially because they gave me the presentation… (Session, 1.2).

Herein Ned expands on the critical conflict he experienced in his lesson. In following the coursebook lesson on phrasal verbs, its perceived value/motive was to develop students' ability to use phrasal verbs. However, in conducting the lesson, Ned saw that students had quite a good knowledge of the target language for the lesson, hence his realisation that the coursebook's exchange-value would lead towards a 'laborious', 'pointless' task for the teacher and students, respectively. It led him to replace the lesson entirely focusing instead on: "a CAE little thing… [students] read the text and get them to transform the word" (Ned, Session 1.2). He further aligned his use of the CAE task with students' language motives, as the task is practice in "what they're going to actually need for the exam" as well as opening up a chance for him to work on language errors pertinent to the students "they're far more likely to make a mistake…they're not going to recognise when something's wrong" (Ned, Session 1.2).

In their collective discussion about Ned's expressed conflict, teacher-participants' *questioning* focused on two aspects of Ned's motivation: increasing 'communication'/ 'interactivity' and the value of the coursebook. This process began with John inquiring about Ned's decision for the CAE exercise "Tell me about the process, you said it was too easy for them". To which, a reliance on interpretive rationalisations for the cause of Ned's unpredictable decision for changing the entire lesson dictated their discourse, as specific elements of established practice and individuals were seen as the primary cause for the disruption (Y. Engeström, 2011b). This is demonstrated in how teacher- participants, including Ned, firstly attempted to argue that the need for Ned to move was on how "easy" (John, Session 1.2) the coursebook lesson was and how "passive" (Ned & Marjorie, Session 1.2) the students were during the coursebook exercise. Moreover, these issues were further attributed to specific students' group-work behaviour, like Sven (Marjorie, Session 1.2) and Hans (John, Session 1.2) in their tendencies to lead or work-alone, respectively.

Their discussion belied the need to enhance students' interaction through tasks like pair checking, which the CAE exercise offered a better opportunity to do so (see Appendix 9.2.2.2). To further their discussion on this, I replayed two excerpts of students checking each other's work during the lesson using different mediators: one with the coursebook and one where they were checking their answers to Ned's CAE exercise. I then asked teacher-participants whether they noticed a difference in the two played excerpts leading to the following exchange:

JO: Not really a huge difference I'm seeing.

MA: I find it's still the same. You still… want them to, as a group, do something and then the outcome is to have checked your work.

WA: So, the outcome is not for them to communicate more, or to interact more, just to make sure they're right for the [next task]?

NE: Well, to me the outcome is to grapple again with the language.

MA: Yes, negotiating the language.

NE: Exactly.

JO: So it's…. that your answers, to try and explain why we're all right and they're wrong.

NE: Yes, and that, that process of going well, which is right?

JO: Yes.

NE: That's, that's what you want, because, because often the exercise itself is arbitrary… It [the targeted language] actually comes out…

MA: And the way, you know, you were talking about the communicative, if that, if, you know, the students are battling, whether it's verbally or in writing, I kind of feel like that's... it's still open, you know? …So, I said, I heard very little student talk, but they were still busy grappling, so...

Excerpt 15: Session 1.2

The above exchange is permeated with attempts at finding a compromise for pair-checks and their role in the language classroom. These checking activities are seen as central aspects of the CLT approach where the interactivity of students checking each other's work is seen to further foster the communication and student-centricity that CLT aims to evoke (Oxford, 1997; Richards, 2006; Tan, 2005). However, as teacher-participants discuss, in neither of the two excerpts was there any discernible heightening of this 'interactivity' which their interpretive rationalisations had previously attempted account for Ned's abrupt change in his lesson. Instead, for them, these checks function to prepare students for forthcoming tasks or as a means to 'grapple' or 'negotiate' the language and *not* to communicate. It is then taken further to suggest that the exercises teachers use in the classroom are 'arbitrary', as long as students 'battle' and grapple' with the language, the motive(s) for pair-checks in the classroom are functioning as they should be.

Herein, competing notions of the outcome of checking activities and what makes them useful, frequently evidenced in the linguistic cues of "yes" and successive turns aimed at forming a compromise of these notions, suggest the emergence of attempts at resolving a conflict

discursive manifestation of contradictions. These manifestations of *questioning* emphasise aspects of activity that make a behaviour/action in activity less effective (Y. Engeström & Sannino, 2011). Effectiveness is vital here, as communication has been highlighted as an essential motive driving classroom pedagogy, but the value of checking activities to support this is questioned. John fully exemplifies this 'critical' *questioning*:

> My issue though, sometimes it doesn't work…. they don't want to offer their…answer… and they don't see a value in... checking the answers, they just want to get on and have Ned confirm that they've, that it's correct. (Session 1.2)

In detailing their use of language activities in the classroom to promote communication and interactivity in line with CLT (Oxford, 1997; Richards, 2006; Tan, 2005), we see a move of resolutions which firstly deny the motivation to highlight the 'communicative aspects' of these activities with students. Instead, the motive for teachers is to highlight negotiation or 'grappling' with the language. However, as John makes clear, this is not always effective, as students do not see the same 'value' in this motivation as teachers do, as they just want to know what is correct and move on (Session 1.2). It suggests a conflict arising in the motives of language activities in the Advanced CLT classroom, where the 'value' students see in these activities interferes and obstructs the 'communicative', 'interactive' and 'grappling' aspects that teachers aspire to facilitate, rendering them less effective, as well as illustrating the divergent interests of students and teachers in lessons (Y. Engeström & Sannino, 2011).

In response, Ned suggested that in order to get around this, meant that teachers needed to keep students "unsure, so the grappling's happening" (Ned, Session 1.2). To which, I asked if moving away from the text to the CAE exercise was how he attempted to facilitate his students remaining 'unsure'. At this point, Ned reformulated his reasoning behind changing his lesson so abruptly, bringing how 'time' and the 'coursebook' were tied to it:

> To be quite honest, I think the timetable played a role in that. Um, I knew that I was either going to run the 40 minutes or whatever, whipping the same horse…. And being in the second [lesson] after break, I'm a lot more likely to just do that sort of thing. I'm a lot more likely to just go off… But yes, no, I mean, I think the, the other thing was that because the first part of the lesson had been very book based or book bound, that tends to, tends to play more into the analytical sort of… correct, incorrect.... (Session 1.2)

In previous discussions, the central conflict was tied to enhancing 'communication' and 'interactivity' in the classroom, and then reformulated to the need to refocus students on 'grappling with the language'. In this turn, the lesson's timing and its coursebook reliance are brought to the forefront as underlying motives of the change. For Ned, time was a motivator for completely changing his lesson, as he was going to run the risk of 'whipping the same horse,' i.e. his planned lesson, he felt, was going to be "laborious for zero benefit" (Ned, Session 1.2). Moreover, the lesson's timing impacted on this decision as the second-morning lesson allowed him to go 'off-book' (as he had already focused exclusively on the coursebook in the first lesson) allowing a more 'analytical' approach to the language of that day's lesson.

Marjorie built more upon this, focusing explicitly on the use of the coursebook by relating a highly personal narrative account of a student from her exam classes criticising her constant use of the coursebook in class. She offers several rationalisations for this frequent coursebook use. First, Marjorie cites students' language level and aims where certain classes, like exam classes "you have to follow, in the sense that everything in the textbook is, um, practice for the exam" (Session 1.2). She then further explicates a dilemma in that should she, as a teacher, include alternative textbook resources, it will result in similar language practice (Y. Engeström & Sannino, 2011): "So even if I give you other stuff, it's going to look exactly like that, you know?... that makes it very difficult to go off coursebook because if you miss it" (Session 1.2).

It is interesting to note that both Ned's and Marjorie's successive turns contain strong metaphors (whipping the same horse) and personal accounts (my student), respectively. However, they are not full 'critical conflicts', as these discursive manifestations need to display a paralysis on the part of the speaker who cannot find a way to move away from contradictory social motives in activity (Y. Engeström & Sannino, 2011). Marjorie and Ned do not demonstrate this. In fact, their articulations here act as further resolutions for the conflicting motives of using (and not using) the coursebook in Advanced lessons.

To elaborate, before this, it was argued that the use-value of non-coursebook activities allowed students to 'grapple' more with the language-focus of the lesson. Yet, this value in exchange was questioned in terms of the communication, interactivity and usefulness students found in them. Then, the issue of timing was placed to the centre, wherein the use-value of coursebook instruction was tied to its exchange-value, i.e. when it was used in the lesson, as particular timings of the day allowed for more 'analytical' language focus than others. Moreover, it was

suggested that certain classes needed coursebook instruction more than others, and even if other resources were used, hardly any difference in instruction would result.

In all these *questionings*, Ned's experienced conflict, demonstrated in his abrupt change from the coursebook to the CAE activity shown in the mirror data, is resolved by submitting to the authority of the system: (1) the need of communication and interactivity within CLT pedagogy; (2) the timing of lessons at the ALC; (3) the ALC-selected coursebook operating as any other mediator. Ned's last turn re-establishes this, as he then submits that his change was due to him sticking to established ALC activity: "a lot of it's the laziness. Okay, to be honest, I mean it is a fact, it is just laziness [laughs nervously], okay?".

5.4.2.2 Coursebook Double-Stimulation Task

The recurrently expressed conflict(s) and resolutions surrounding coursebook-use in teaching Advanced students above, signals this aspect of practice at the ALC needing deeper investigation. I had gleaned this from the previous session but had initially planned to bring in the double-stimulation task focusing on it later on (see Figure 44; see Appendix 9.2.2.2). However, John had to leave for a management meeting, so I brought the task forward, and involved only Ned and Marjorie, leaving the double-stimulation task focusing on Marjorie for the next session (see below). After directing them to the 3x3 Expansive Learning Frame on their mobile devices and displaying it using the projector, I gave them some time to review the key excerpts.

In our subsequent discussion, the original conflicts brought up surrounding the coursebook were reformulated and linked to much deeper underlying, contradictory aspects of the ALC's teaching activity. It was in evoking these contradictory aspects that participants began to reach towards possible auxiliary stimuli as ways in which to resolve these issues (Sannino, 2015). I move to discuss this sequence below, beginning with Ned and Marjorie's first remarks after being exposed to the mirror data of excerpts drawn from teacher-participants' insights about the use of the coursebook at the ALC:

NE: I mean it's, it's a contradiction.

WA: What do you mean?

NE: Um, I think there's, to a certain extent, we're not satisfied with the material, or that I'm certainly not... but at the same time, there, it's kind of like, it's kind of expected, by both us and the students...

MA: And that's the thing. I was talking to Catelyn this week. What do we tell our students when they come here? For, especially for IELTS and CAE because they obviously come here with a preconceived idea. And then we start working with them, but then halfway there through there's quite a conflict between what they were expecting and what we're actually delivering.

Excerpt 16: Session 1.2

In this first exchange, we see several quick successive *questioning* turns in establishing the competing motives for using the coursebook at the centre. We see this firstly in Ned's dilemmatic discursive manifestation of the contradiction wherein, on the one hand, teacher-participants are not satisfied with the material, but on the other, coursebooks are expected to be used by the teacher and the students (Y. Engeström & Sannino, 2011). Marjorie then reformulates this dilemma as a conflict, highlighting how these expectations negatively affect instruction (Y. Engeström & Sannino, 2011) at the centre when students are frequently taught with the coursebook centred: "we perceive that they want to use the textbook. But then sometimes that's not necessarily the case".

She then goes on further to highlight a personal account of the difference between the general morning classes, which use a coursebook and the conversation [convo] classes which do not. Marjorie states that her students had asked for a book containing all the convo material, lamenting: "we're just trying to do the complete opposite with convo and now we're giving you [the students] paper all the time. You know, so where is the happy medium, you know?" (Session 1.2). Her movement here suggests an inner doubt wherein she is *questioning* the impossibility of managing students' expectations in classes where they want material and when they do not. She then goes further to ask if the centre is handling students' expectations correctly and the need to find a *new way* – 'a happy medium' – in which to handle these teaching expectations correctly, suggesting a reformulation of the original dilemma as a critical conflict (Y. Engeström & Sannino, 2011).

Ned added further to this critical conflict, suggesting the difference lying in students' motives in attending the ALC, linking this back to the centre's ties to the university stating: "this brand

that we're riding on is also kind of the devil on our back. Because, because it creates an expectation of difference and we're not different" (Session 1.2). Again, we see high use of metaphoric language and narrative in explicating the inner contradiction they were experiencing in their activity in managing the different motives driving the use of learning resources for teaching Advanced language students. Moreover, of equal significance, was how these competing motives surrounding learning resources and course delivery were seen to impact other elements of Advanced teaching activity, such as discipline: "we've had a lot of behaviour issues recently. We've had a lot of conflict with students" (Marjorie, Session 1.2) and the difficulty of managing older learners' behaviour (Ned, Session 1.2).

It was from here Ned expressed a more concretised articulation of an inner contradiction: "there's a lot of difference in the students, and we essentially provide the same services for them" (Session 1.2). Derived from the competing motives of the activity, primary inner contradictions emerge from the differences in the use-value and value-in-exchange within specific elements of the system (Y. Engeström, 1987; Sannino, Daniels, & Gutiérrez, 2009). This can be seen from the *questioning actions* to this point in the CL, where discussing students' needs/expectations versus the actual course that is delivered, has led to *questioning* surrounding: (1) the effectiveness of the resources like the coursebook, activities and technology (mediators), (2) elements of CLT pedagogy (rules and mediators) and (3) the teacher's role (division of labour). Double-stimulation holds that when participants become aware of primary contradictions and see how these primary contradictions impact other elements of the system (as in the case of student discipline mentioned above), it will lead to secondary contradictions which force participants to look for a new stimulus in an effort to resolve their perceived impossibility of action (Botha, 2017; Y. Engeström, 2007b).

The first of these proposed new stimuli was a Needs Analysis (NA). NAs are common in EFL schools to measure students' learning needs upon their arrival (see Doughty & Long, 2009), but up to this point had not been included at the ALC as: "students don't all arrive at the same time" (Marjorie, Session 1.2). Marjorie *questioned* the practice of not including them: "their test, and as they apply, can't they then immediately write a needs analysis?" (Session 1.2). Both Ned and Marjorie saw this as a way of managing students' needs with course delivery as the NA could allow teachers to have:

MA: […] a record of stuff that the student is expecting. And then you can kind of deal with all those, you know, unrealistic expectations immediately. Or explain that this is actually what's going to happen.

NE: Mmm, in some ways, like socialise them before they arrive, both ways. Like we need to know what they expect, and they also need to know actually what is it that we do.

Excerpt 17: Session 1.2

Herein, participants have proposed the creation of a new mediator to resolve the contradiction between students' needs and the actual course delivery, as the NA could more effectively mediate students' expectations and provide an entryway though which to embark on a discussion surrounding what is actually delivered at the ALC. However, Ned later posed the incorporation of the NA as a dilemma: "So do we want to manage expectations and organise things more in order to make sure the course books work, or the resources we have work?" (Session 1.2). His *questioning* here evaluates the incompatibility of the NA to resolve the underlying contradiction in terms of resources expressed earlier (Y. Engeström & Sannino, 2011) as it will not necessarily meet how students expect teaching will be done at the centre versus how it is actually done.

This *questioning* led to the proposition of another auxiliary stimulus in the form of an in-house-created coursebook reflecting the centre's affiliation with the academic institution it is part of (Ned, Session 1.2). Marjorie further supported this with the recently created resources the centre had made for their conversation classes which too had overcome a similar perceived "tension" by teacher-participants. The benefits including incorporating activities/ "stuff that we know that works"; could easily up updated "every two to three years", in turn responding to the earlier *questioning* of the coursebook and CLT activities mentioned concerning Ned's mirror-data (see above). However, at the same time, the use of this stimuli was also questioned in terms of copyright and its respective costs (Ned, Session 1.2), to which Marjorie outlined a possible solution would lie in making an "online version and that way it's not a published version" (Session 1.2).

CLs are premised on their unpredictability. As the researcher-interventionist, I was quite taken aback by a return to coursebook as an auxiliary stimulus, given teacher-participants' previous criticisms and questionings surrounding its use in the classroom (see Appendix 8). I then moved to ask the two teacher-participants to elaborate on the reasoning behind the suggestion

of creating one. To this, Marjorie responded with two key benefits of its inclusion. The first related to the profit-motive of the centre as a part of the academic institution: "you sign up, the money is part of [the university], it's kind of like a lovely brand, all that sort of thing" (Session 1.2). The second was the profit-motive, "who gets the money for that [creating the textbook]?... I would just love the recognition, not money. I love money obviously, but I'm just saying….".

Part of the unpredictability encultured within Expansive Learning and, in turn, CLs is the 'multi-voicedness' that each participant brings to their examined activity (Daniels, 2004; Y. Engeström, 1987) and intervention sessions (Behrend, 2018; R. Engeström, 2014). We see here, Marjorie's and Ned's own motives within the ALC trying to find precedence, where the goal-directed action(s) of creating a new textbook (the proposed auxiliary stimulus) will heighten their and the centre's recognition as well as possibly include financial incentives. The ideation of the textbook also suggests a potential inner contradiction lying between the boundary of the ALC's motives for teaching and the centre's wider motivation as a part of the university's establishment (see Section 4.2.1). The creation of any auxiliary stimuli within double stimulation between two boundaries is tied to converting the experienced systemic contradictions of each into a new motive / new boundary object (Akkerman & Bakker, 2011; Y. Engeström & Sannino, 2010; Kerosuo & Toiviainen, 2011). In this case, the proposed ALC textbook is seen to fulfil/overcome both the centre's profit (and its prestige) motives for the university, as well as the articulated contradiction between students' needs versus the actual teaching at the centre.

At the same time, in discussing the textbook's potential use, teacher-participants were able to highlight potential conflicts that its incorporation would have within the existing framework of the ALC and the university, highlighting potential tertiary contradictions (Roth & Lee, 2007). Ned highlighted the problem around whose property the textbook would be: "if you're Paid on Claim [POC], …as far as I know management just, have not even considered. That POC teachers who add to curricula, that's their property" (Session 1.2). In the same turn, he moves on to a deeper "crux… in every school. Every good school" is facing in that "this sort of, the old way of contextualising stuff is no longer working"(Session 1.2). Marjorie reiterated his point, highlighting how some secondary schools have moved away from coursebooks to use 'packs' that are frequently updated, and it is this frequent updating means "it's the pack that works"(Session 1.2).

What can be seen here, in the above stipulation of the proposed textbook and analysis of its far-reaching effects within their expanded activity system(s) (the ALC and university), is that teacher-participants have begun an inquest into their labour-power. They see how their value and value-in-exchange is deeply inscribed into the contradictions they are facing in their teaching practice/service delivery (Daniels & Warmington, 2007; Warmington, 2008). It has brought up issues in their value as teachers, their course delivery and financial incentives to contribute to their work in the ALC's activity.

Interestingly, in the turn above, Ned and Marjorie do not only focus on the monetary focus of being POC, but highlight the main issue facing education is actually how teaching is done and which materials are used – crucial aspects of their service delivery. To probe deeper into participants' comments, I tried to refocus them on the coursebook and the language teaching at the centre: "What, do our course, how often do our coursebooks change, how long is language going to be the same?" (Session 1.2). Ned immediately evoked an intense critical *questioning* action stating:

> No, they don't change at all... But Warren, I don't think that… it's actually just the material that needs to be updated. Because it's, it's the old way of contextualising something…a lot of what we do no longer has context (Session 1.2)

The critical aspect of his *questioning* is signalled with his strong use of the linguistic marker 'No', underscoring how CLT pedagogy is actually less effective (Y. Engeström & Sannino, 2011) in contemporary society. He and Marjorie proceeded to highlight ineffective activities from CLT aimed to facilitate context (Sato & Kleinsasser, 1999; Tan, 2005; Thompson, 1996) in reading lessons such as: how the "stupid little warm-up questions…" (Ned, Session 1.2) do not truly reflect how people read at the moment as "we will all click on click-baits…. and will make that decision in half a second..."; as well as how other lead-ins "distract them [students] from the actual task" (Marjorie, Session 1.2). In their examples, both teacher-participants highlighted that many conventional CLT methods do not correspond with how contemporary language learners interact and learn from virtual ('clicking' and interacting with online media) or physical content (where we discuss texts generally *after* we have read them) in the classroom.

Seeing this as an opportunity to engage participants in an 'imagining something other' than their established practice, I asked them: "How could you imagine it [teaching] being different?"

(Session 1.2). Both Ned and Marjorie responded by stressing a reversal or change of pedagogy, most fully captured in Ned's statement: "We, we do it the other way around… we get information, and then we work out what's going" (Session 1.2). In this, we see participants reaching towards a very abstracted conceptualisation of a pedagogy that they feel will suit the needs of their students more aptly. Marjorie emphasised how she could "get so much more" from students when providing them with a text by itself rather than following a textbook's steps, as by just giving students a text they can "come up themselves with what's similar, what's different"(Session 1.2).

The move here from an abstract conceptualisation of 'flipping' CLT around to identifying concrete instances where teacher-participants feel represent this, illustrates a key component of Expansive Learning, *ascending from the abstract to the concrete*. This principle holds that as participants begin to reach for an auxiliary stimulus to overcome the experienced contradiction it will initially be abstract, and as the Expansive Learning cycle continues, this initial abstraction will become much more concrete (Y. Engeström & Sannino, 2016). Both Ned and Marjorie's discourse here evidence elements of it, although the actual 'flipping' of lessons other than reading is not apparent, nor are there enough concrete examples of practices which can further signify development. Moreover, towards the end of the session, Marjorie was still quite adamant about the development of the in-house coursebook in it being "a main source for the teacher and two, it is a main… sort of solid platform for the student to use" (Session 1.2), suggesting that participants were still grappling with fully establishing the inner contradiction they are experiencing.

5.4.2.3 Summary of Session 1.2

To recap, over this session we see how the initial dilemmas participants expressed in Session 1.1 over their pedagogy, resources and the teacher's role in the Advanced language classroom became much more developed and explicit in their articulations. These articulations came to the fore in the critical conflict Ned expressed over his lesson where he saw little value for him or the students in continuing an exercise, he saw students obtaining little benefit from. Instead, he turned towards his own CAE one, which he believed would more closely address their needs. This articulated critical conflict where the coursebook did not meet the needs, wants and expectations of students triggered teacher-participants to express more conflictual, discursive manifestations of the contradiction which focused on *questioning* the value of the coursebook, and CLT activities in the classroom and what their true focus is.

In turn, these discussions were further heightened by focusing on teacher-participants' views of the coursebook at the ALC. These discussions prompted them to further *question* the extent to which they meet students' actual needs at the centre, and in turn, how CLT-informed coursebooks meet the learning needs of the contemporary language student. Subsequently, this led to participants' initial imaginings of potential auxiliary stimuli, such as an NA to better account for students' expectations, an in-house coursebook which better-reflected students' expectations and 'flipped' CLT pedagogy to more closely match students' contemporary learning behaviour. In all of the above cases, we see participants approaching a clearer approximation of the primary inner contradiction they are experiencing in their activity, and the start of them imagining an activity that could be 'other' than that.

This focus on the teacher is noteworthy in these double-stimulation tasks, as their classroom activity with Advanced students forms the core analysis of this study's change intervention. Towards the end of this session, this came to the forefront in Marjorie knowing her lesson would be next, stating: "I'm very, very nervous about people seeing my teaching. Although I think I'm feeling comfortable in this environment and this space to have those deeper discussions on those things in" (Session 1.2).

I reassured her here, emphasising how the CL is "about the system" (Session 1.2). It led to both Ned and Marjorie re-expressing how teachers are "always on show" (Ned, Session 1.2) which was a major theme of the discursive manifestations in the second session, which I discuss next.

5.4.3 Session 2.1: Am I being seen to teach or am I teaching?

5.4.3.1 Marjorie Video Double-Stimulation Task

After a brief recollection of the previous session's main discussion points (as highlighted above), I initiated the double-stimulation task focusing on Marjorie's lesson (see Section 4.3.1) which used Google Classroom. After giving participants time to review the material, the video and collect their thoughts, I opened the discussion. Marjorie immediately emphasised to the other participants why she had posted questions onto Google Classroom: "…So, I thought I'd use these questions that I wrote…feeling that we use technology and it's in a different way. Maybe that would spark them to speak more" (Session 2.1).

In this episode that Marjorie repeatedly brought up during previous sessions and in her reflections (see above), she is referring to the tasks she set using Google Classroom which tried

to emphasize students' communication, highlighting this episode as a problematic aspect of her activity with Advanced students (Y. Engeström, 2007b). She emphasised that the students' speaking was "even less than normal" and she believed that this was due to students "seeing your [their] words on the board… so that maybe was the issue" (Session 2.1).

In their discussion, her colleagues signified the importance of changing modalities, as the lesson made use of both the coursebook and Google Classroom throughout. This aspect was first raised in the nature of engaging two different modes shifting students' attention, "Was it not that they maybe had split focus…" (Ned, Session 2.1). It was then reformulated along the line of the 'newness' of using Google Classroom: "…I mean in the [course]book they did that one. They know exactly what to do. So, I suppose with that first one, they kind of, like thought this is new" (John, Session 2.1).

In both of these excerpts John and Ned are relying on interpretive understandings (Y. Engeström, 2011b) of students' lack of communication in the classroom, detailing the main issues as lying in the student themselves (as they cannot split their attention) to the 'newness' of the mediator (Google Classroom). Both their *questioning* actions here take the forms of dilemmatic manifestations seen in Ned's rhetorical questioning when expressing doubt (Wasn't it…?) and John's comparison emphasising that, on the one hand, students knew what to do with the coursebook, while, on the other, students did not know what to do with Google Classroom (Y. Engeström & Sannino, 2016). That is not to say both cannot undoubtedly be true for students in the case of Marjorie's classroom. What is evident in their reasoning though, is a causal rationalisation, where X (questions on Google Classroom) must lead to Y (students not communicating), because, as a rule, students cannot shift their attention between modes or cannot appropriate technological tools for learning. This is despite both Marjorie and Ned suggesting the inverse in the previous session, when discussing contemporary learners' behaviour with technology not matching CLT practices (see above).

In an attempt to get closer to unpacking participants' discrepant views, I again turned towards the principle of 'following the object' (Y. Engeström, 1987), in this case, Marjorie's goal of her lesson. I asked Marjorie what exact communication she wished to evoke through her use of technology. She emphasised that she wanted students firstly to write their response and then discuss what they had written. Her insights were followed by asking her colleagues: "my, sort of, comments or questions here is when to use a bit of Google Classroom and for what?" (Session 2.1).

Marjorie's question here is expressing her helplessness in knowing how to harness technology appropriately in Advanced language lessons. She believed she had set up the class correctly as she had planned with students' interests in mind, and she cannot imagine a different way of utilising this technology. Her comments intimate a state of 'paralysis' between the motives of including technology in the classroom and the need to facilitate effective 'communication' / 'language work', suggesting a critical-conflict discursive manifestation of the contradiction (Y. Engeström & Sannino, 2011). In response, the group collectively negotiated ways Marjorie could have achieved her communicative aims, as is predicted when critical-conflicts discursively manifest (Y. Engeström & Sannino, 2011).

These suggestions revolved around reframing the 'openness' of the questions on Google Classroom. This 'openness' would be done by not letting students see the projected Classroom throughout the lesson on the screen. Instead, it would be off, first getting students to respond and submit their answers on it using their mobile devices. Then once all the answers were taken, Marjorie would then project the answers and get the students to communicate around the different written responses. Ned saw this as a way of separating the two modes (course book and virtual) which would allow students to "realise… the whole thing of it [online communication] being public but then also not being as informal as spoken" (Session 2.1). John took this a step further, stating it would help develop students' accuracy: "you're suddenly a lot more focused on, you know, the accurate language actually" (Session 2.1). In both of these teacher-participants' transformations of activity we see an explicit focus again on communication and language, as well as teaching 'subtly' in order to curtail the issues of technological 'openness' – all previously mentioned in the first session (1.1). We see this in Marjorie's reiteration of their idea: "So, you're right. If you want them to write and stay involved… like you say, maybe blank it [Google Classroom] give them all a chance to answer then go through that" (Session 2.1).

From this, I tried to question participants more, especially in comparing Ned's lesson from the previous session to Marjorie's, the one they had now examined, but participants seemed ready to move on. I therefore began preparing to show the mirror data of the next lesson, John's lesson. However, Marjorie did something unexpected. She redirected the session back to her lesson, asking:

> I'm also wondering…sorry… we said that you know, why is **that** content actually relevant… and what I liked about this was it was a real, and I mentioned that in the video, that it was a real company… But I'm not sure how much that impressed them or that was beneficial or relevant to them. (Session 2.1)

Marjorie's redirection is notable for two instances. Firstly, we see one of the teacher-participants taking their first agentive actions wherein they are starting to direct the session. Participants taking ownership is key to CLs, as it is in triggering participants will to create and facilitate change that suggests there is a move towards an expansion (Feryok, 2012; Sannino, 2015). Secondly, these agentive actions are based on *questioning* the premise of using authentic content, such as the video from the coursebook, that depicts a real interview with a fashion company. She starts off stating how her choice of using the content was linked to its authenticity, but she is doubtful to what extent it: helped students' language work, was relevant for them, or even sparked their interest. Her description here suggests a further critical conflict manifestation of contradictions as she feels the language work she selected, based on this need for authenticity and developing student interest, negatively impacted her lesson (Y. Engeström & Sannino, 2011). She further tied this negative impact to the previously expressed contradiction of the motives between students' expectations/needs versus the actual teaching/teachers', stating: "So, I don't know if we're [teachers] ahead. I thought the perception of what we think is relevant. I mean completely different, [than] ah, students..." (Session 2.1), evoking a unanimous agreement with the other participants.

This move to the contradictory layer, suggests another triggering of the contradiction between managing the different needs of students and the actual teaching at the centre. It further also *questions* the previous session's focus on how CLT methods do not meet how current students interact with content, as the use of authentic video should certainly interest the students. Ned's response supports this where he states: "I don't know, to me it's *more* [emphasis mine] about the way something is different. I can't put my finger on it exactly" (Session 2.1). His comment here, illustrates the difficulty in fully conceptualising the contradiction, (Murphy & Rodriguez-Manzanares, 2008) as he is able to state that there is a historical tension emerging "like when I started teaching five years ago to now it's just something" (Session 2.1), but unfortunately he cannot fully articulate what it is - yet.

5.4.3.2 John Video Double-Stimulation Task

The agentive action taken by Marjorie and Ned's difficulty in finding a way to express historically accumulating tensions in his teaching activity emphasised the need to move on towards the next double-stimulation task. Using a similar procedure as that of Ned and Marjorie's tasks, I played the video.

In contrast to the other lessons, participants did not start directly *questioning* John's lesson. The main issues they raised had to do with shorter lesson length, learners' levels, the centricity of off-book content and the teacher's efforts to form the focus of the lesson:

> NE: I found myself in conversation, especially being a bit more of a, sort of, entertainer a little bit because, because often the structures change, like, completely.
>
> MA: in General English level you have the course… which is already, kind of, either a recorded tool or approach…. And you, kind of, measure your success with them including, you know, by how many pages you've covered.

Excerpt 18: Session 2.1

In the above excerpt, we see a strict contrast drawn between the conversation lessons and morning General English level-classes. In both cases, the teacher-participants stress how the differences in time and content lead to shifts in the teacher becoming the central focus of the level and that measure of successful language teaching is reached by coursebook progression. In comparison, John highlighted that the language work in conversation classes "really focus on… doing drills and spelling and, like really long rules and things. It's essentially because the situation stimulates conversation" (Session 2.1).

Despite mentioning these differences, participants struggled to centralise their focus on John's lesson. This difficulty may be due to how differently structured the lesson is compared to the others, as it located in a neighbouring activity, or may have to do with no explicit disturbances being noticed by them in the task. While unexpected, I took this as an opportunity to help prepare participants for the forthcoming task. I asked out of the three lessons they had observed which ones they "veer more towards?" This question evoked deeper concerns and issues they had with technology in the classroom so far.

The first turn of their discussion revolved around the issue of the coursebook, where Ned expressed doubt about the benefits of going outside the course book: "I am not sure taking it out of the book necessarily does any good. I mean, obviously, it has the potential too, but it

doesn't always" (Session 2.1). The hesitation and doubt expressed here illustrate a recurring dilemmatic *questioning* where materials (both the coursebook and non-coursebook materials) can meet the object of Advanced lessons being questioned in terms of their value-in-exchange - they can, only if properly harnessed.

John, however, disagreed stating he veered more towards out-of-book lessons which used the phone and projector in the classroom. He specifically related this to the ability of the teacher to control what "students see" as well as the opportunity for students to direct their own learning progress: "there are some [students] who skip this part… they are doing the fourth part" (Session 2.1). Herein, we move towards a different conceptualisation of how the teacher harnesses material in the classroom, as opposed to Ned's first turn, where the possibilities for off-book technology lessons are being discussed. It is interesting to note that both Ned and John are specifically highlighting how teachers use and adapt learning resources in the classroom are integral in creating viable lessons.

At the same time, both Marjorie and Ned expressed further doubts about the viability of off-course book resources. The first of these revolved around the issue of one tool, like Google Classroom, handling all the needs of the language classroom (Marjorie, 2.1). For Ned, the issue revolved around the lack of ability to keep records: "because some of those, sort of, more studious types will sort of… make notes, and, and vocab themselves" (Session 2.1). These *questionings* of technology again focus on more critical aspects that technology poses, in one mediator to effectively reach all the aims of a particular lesson, as well the ability for it to heighten students' needs. As can be seen, once again, participants have reformulated their previous dilemma of the use-value of mediators in a lesson to effectively meet the changing needs of students in-exchange.

5.4.3.3 Questioning and Analysing with the TCF

Given the number of reformulations occurring in participants' discourse surrounding their teaching activity, I moved on to the final task. In this task, participants utilised the TCF to re-assess their teaching, based on our discussions so far in the CL. I began by quickly reviewing the TCF and its use for identifying transmissive or transformative pedagogies, as well as these pedagogies' learning foci Figure 51. Participants were then tasked, as a group, to discuss and then place themselves on an empty frame of the 3x3 Frame featuring a blank TCF.

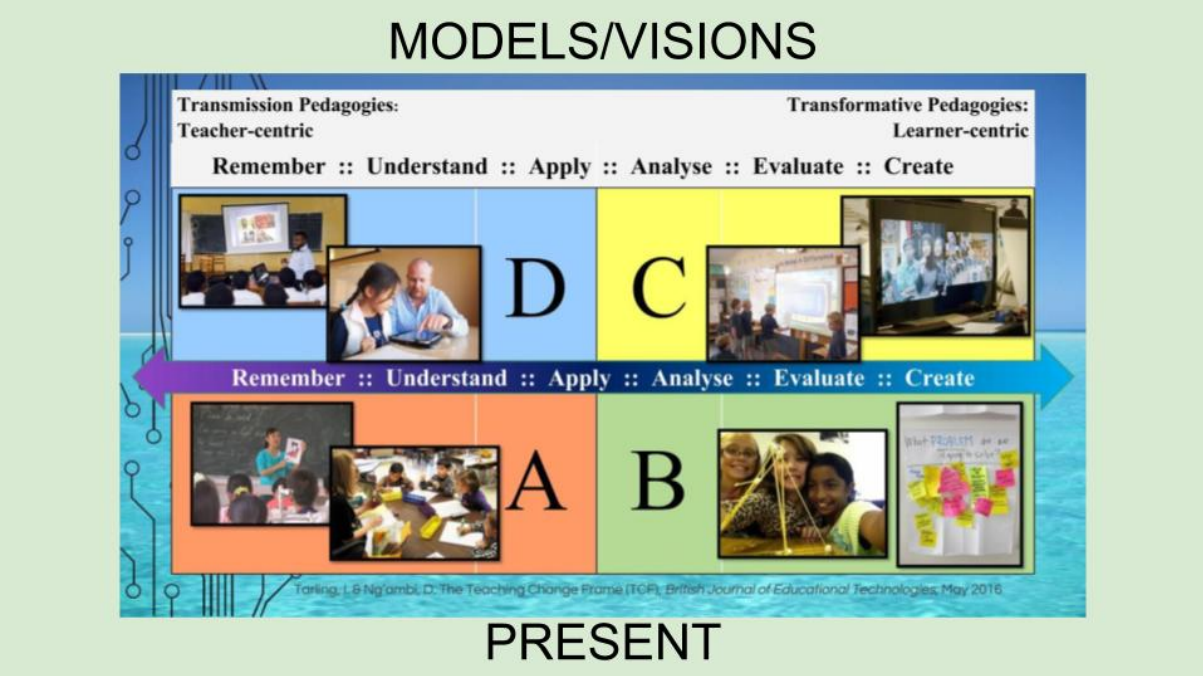


Figure 51: TCF on Blended Change Laboratory virtual Expansive 3x3 Frame

When completed, we engaged in a collective discussion of their re-placement of Figure 52. I queried participants on 'why' they had placed themselves in these specific sections. In response to this, two crucial aspects of their activity came to light. The first of these revolved around the difference between conversation classes and General English classes in their ability to 'create' as: "the classroom setting is controlled, actually, there is no such thing as free practice" (Ned, Session 2.1). This was explicitly linked to the "tools you're [they're] supposed to [use]", as students in the free practice part of their lesson are meant to apply the language learned; "it's not a creation" (Ned, Session 2.1). Herein, we see teacher-participants again restating the contradiction of CLT and the coursebook in their ability to both meet and not meet the demands of 21st-century students and other transformative pedagogies. In effect, teacher-participants are highlighting that the motives of CLT might run contradictory to the transformative pedagogies using technology as seen in Quadrant C.

Marjorie added to this: "isn't it interesting that though I used the tech but I felt like … I was speaking so much through the lesson…. That I was still directing them" (Session 2.1). She contrasts this with the use of coursebook as the primary mediator: "If I didn't have the tech, I would ask them a lot more to do it by themselves if they had the textbook" (Session 2.1). In this Marjorie states how technology-use in her lesson heightened her need for control, as she was "trying to explain the technology" (Session 2.1). Her analysis here highlights a conflict discursive manifestation, as it suggests that the initial steps in utilising this technology evoke

a highly transmissive pedagogy as in Quadrant D of the TCF rather than the C Quadrant. Her articulated conflict led to her denoting how tools like Google Classroom could work well for bringing 'home' and the classroom closer together, for assessments like essays (Marjorie, Session 2.1).

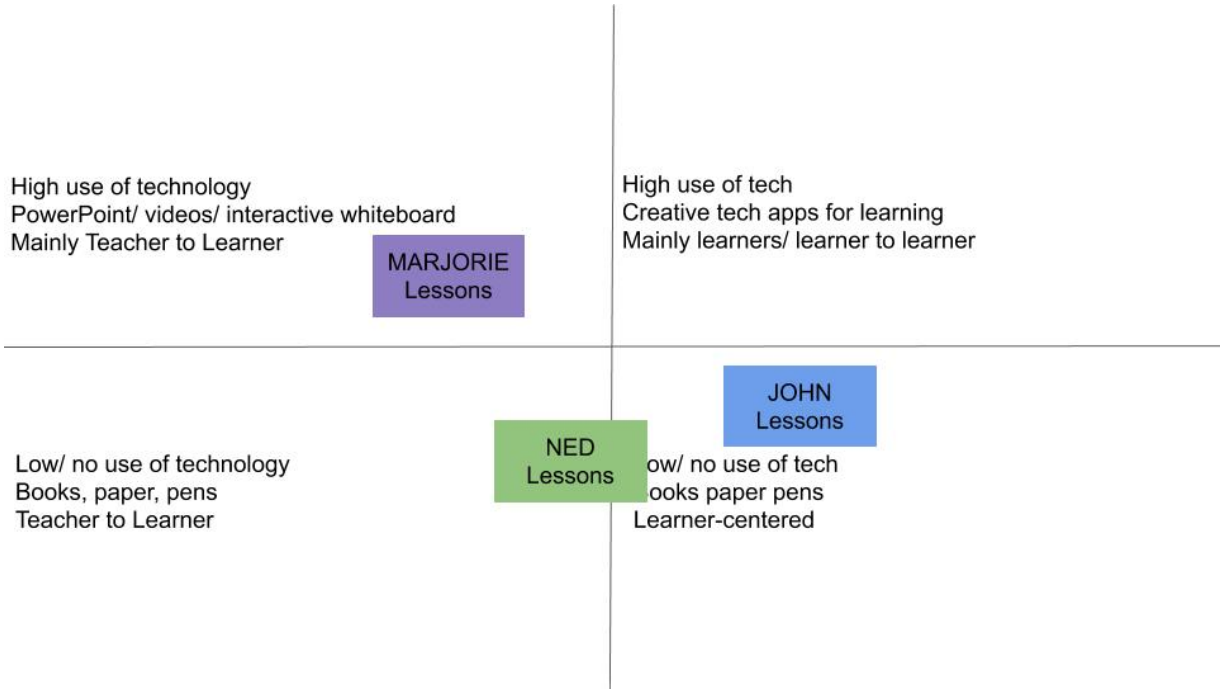


Figure 52: Teachers re-placement after double stimulation tasks

With this mind, I tried to centre teacher-participants' focus on the students' frequently cited object of entering the university, and how well their placement of their pedagogy meant they were meeting these demands. In the discussion, John pointed to the right (Quadrant C and B) stressing that for university students should be able to: "research by [yourself], or you know extracting, you're synthesizing… you are using language for a purpose" (Session 2.1). Ned added to this, "but at the same time it's connected to understanding concepts", emphasising how you cannot teach and learn concepts, "without using language to express it" (Session 2.1). As can be seen above, participants are again reformulating how well their actual teaching and their materials are reaching students' needs. The above, abstracted formulations of what language teaching needs to achieve with Advanced students reframes the object/ motive of language teaching away from getting to students to 'communicate' and be 'accurate' and instead locates its purpose towards developing students' abilities in 'expressing a concept'.

One caveat of the session was in how different Figure 52 is from teacher-participants' initial placement of their teaching during the preliminary interviews (as shown in Figure 53). What

can be seen is a much closer ideation of their teaching, that does not feature large arrows or circles. Moreover, Marjorie has moved her pedagogy from the right side of the TCF (Quadrant B and C) to the other side of the TCF, firmly within the D quadrant. We also see that John has moved from covering all quadrants to firmly positioning himself within the B quadrant, while Ned has narrowed his teaching between A and B.

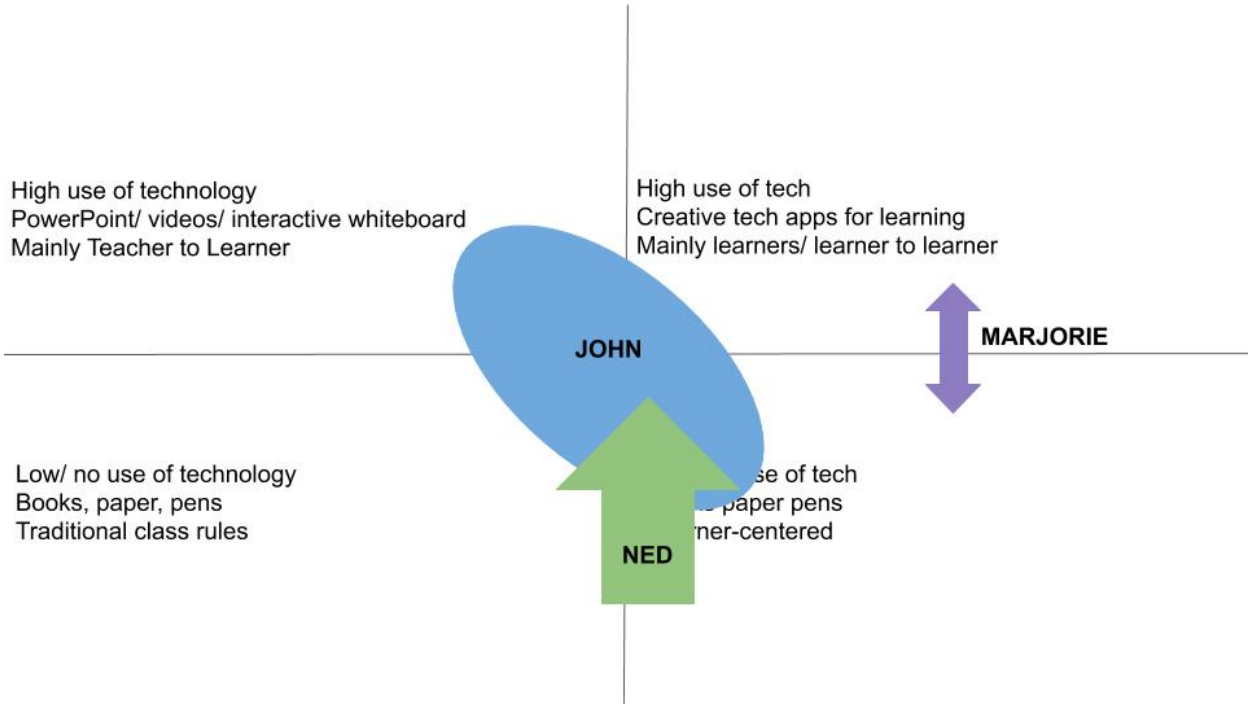


Figure 53: Teacher-Participants' initial placement in the TCF

5.5 Summary

This first chapter which chronicles teacher-participants' development of their expansive learning actions offers several insights. Regarding RQ1.2, which looks at the adaptation of the CL method to the research site, this chapter illustrates how smaller, initial tasks using technology can aid participants towards appropriating the blended-mediational mode of this CL. Moreover, this chapter elucidates how 'blended' double stimulation tasks to create a 'conflict of motives' which can be facilitated using *G Suite for Education* suite.

Concerning questions RQ 1.1. and RQ1.3., that focus on which contradictions emerge and how they are drawn upon, this chapter highlights the way the issue of power has been fundamental in teacher-participants' initial questioning of their activity. Teacher-participants have explicitly linked their use of mediational artefacts (like the coursebook or classroom technology) facilitating their 'control' of language lessons. However, their recognition of this locus of

power, in turn, facilitated further *questioning* of the extent to which the primacy of the textbook in lessons actually met Advanced language students' needs. The identification of this deeper conflict resulted in participants' move towards new paths, such as a Needs Analysis or a move to a new object for their activity, like ‘expressing a concept’ rather than communication.

These realisations of their teaching can be explicitly seen in how teachers reformulated their original placement on the TCF. In this, we see how confronting individuals with mirror data, and asking them to reflect on their experiences can yield fundamental transitions in how they situate themselves in activity. In this case, how teachers came to understand their teaching. The next chapter moves to describe what occurred when teacher-participants confronted the deeper cultural and historical antecedents that have informed the conflict they have experienced.

Chapter 6: Analysing the Situation

"It's a war, or a bit of a challenge, they don't communicate"

> The doubts have been there for years, piling up steadily in this dreary place. It's the extremity of the case that's made them active. I know that. The extremity is the point! All the same, whatever the reason, they are now, these doubts, not just vaguely worrying – but intolerable. (Shaffer, 2011, p. 8)

6.1 Introduction

In the previous chapter, I illustrated how teachers' *questioning* of their activity evolved throughout the first set of CL sessions. Initially, these abstracted discursive manifestations of their faced contradictions centred around technology, course books and the CLT approach. However, as they repeatedly questioned their practices and underlying beliefs, these contradictions became more concretised as emanating from a changing object of the different language-learning needs of the 21st-century Advanced students where, as teachers, they were struggling to find their value within the contemporary language classroom. In turn, their discursively expressed dilemmas and conflicts of this contradiction became explicitly focused as primary contradictions emanating within the division of labour, rules and mediators of their activity system.

While *questioning* is seen as the first set of actions towards expansive learning, it is in participants' *analysis* of where their *questioning* stems from in their activity that the 'extremity' of their situation and the need to instigate change takes shape (Y. Engeström, 1987). The quote above, taken from the play *Equus* (Shaffer, 2011) provides an insight into the placement of *analytical* learning actions within the expansive learning cycle, in that at the beginning of the play the protagonist Martin Dysaart, a clinical psychologist, recounts the 'intolerable' state he finds himself in after a particularly challenging case involving a boy. The extremity of the boy's case, much like a first stimulus in double stimulation, has forced him to confront his own long-standing doubts over his practice as a clinical psychologist. The play traces his own historical analysis of his experience of the case and in so doing leads him to realise that these doubts, in fact, have had "nothing to do with this boy" and all to do with his own "old language and old assumption" that would not allow him to imagine "a whole new track of being" (Shaffer, 2011, p. 8).

Much like, Martin Dysaart in *Equus*, the inner doubts / *questioning* the teacher-participants expressed in the previous section are simply that, questions. While they can problematise their current activity, they still, as yet, have only yielded suspicions of what a "whole new track" of language-teaching activity *might* be. To further their own volitional force towards this *expansive* change, they too will need to trace where their current doubts about language teaching at the ALC stem from, so much so, that they find their whole current activity 'intolerable'. It is the reaching of a similar point of 'intolerance' and the volitional need to imagine 'something other' than their current activity for the participants in this study that forms the main preoccupation of this chapter.

This chapter discusses how I engaged participants in a deeper analysis of the antecedents of their activity in the three subsequent sessions that followed those in the previous section. Again, my analysis emphasises tracking participants' progression through the CL in order to fully account for the evolution of their expansive learning actions and the discursive manifestations of the contradiction they articulated.

6.2 Moving from Charting the Situation to Analysing the Situation

The gap between *questioning* to *analysis* actions within expansive learning is small but significant within a CL. While *questioning* emanates from triggering participants' conflicting motives of their activity through their exposure to first stimuli, *analysis* actions derive from focussing participants on uncovering and unpacking the underlying genesis of where these contradictions of motives stem from (Y. Engeström, 1987; Virkkunen & Newnham, 2013). To facilitate the teacher-participants' move to these *analysis* actions requires the researcher-interventionist to engage participants in two types of reflection of their activity: historical-genetic and actual-empirical analysis (Y. Engeström et al., 2014).

Both these types of reflective analysis draw upon the deeper principles of CHAT which see culture and history as intricately intertwined within the development of any activity system (see Section 2.3 & 2.4). For the researcher-interventionist, this means engaging participants in an analysis which can account for their activity system(s) as social enculturation (Y. Engeström, 1987; Foot, 2014; Roth et al., 2012). Every activity system creates unique cultural tools and understandings which determine "not only what [people] see but also the way [people] see" (Kramer, 2018, p. 214) themselves in their activity. By allowing participants to unpack and construct a picture of the distinct interplay of their activity system's inner facets,

like how mediators approach their system's object or how the division of labour at a school impacts the rules (i.e. secondary contradictions), can provide participants with a deeper understanding of their current practice and the issues they are experiencing at that specific moment in time (Y. Engeström & Sannino, 2016). This is known as *actual-empirical* analysis.

At the same time, activity systems are never static, nor have they come to be in their current form by mere coincidence. They have historically evolved into their current form by constantly re-mediating the primary contradiction inherent in the system to their current formulation (Y. Engeström, 1987). Strictly focussing analysis on the external elements of activity in its present state mitigates the intervention to the superficial elements of the system that are only likely to create a variation of current practices, and not the creation of entirely new ones as captured within expansive learning (Virkkunen & Newnham, 2013). To avoid this, the researcher-interventionist has to engage participants in an analysis of their activity that highlights its historicity to trace the system to its simplest form of the entire system, the 'germ cell' (Y. Engeström & Sannino, 2016). In doing so, participants go beyond the present staging of their experienced disruption(s) and analyse the deeper, underlying, essential contradiction that lies behind it (Kramer, 2018). This historical-genetic analysis allows an avenue towards participants creating a theoretical concept of their practice, a concept from which they can thoughtfully and practically attempt to transform in their efforts towards the creation of new practices (Virkkunen & Newnham, 2013).

These analytical efforts draw on one of expansive learning's main tenants, *ascent from the abstract to the concrete* within tasks principled on double-stimulation. The researcher-interventionist engages participants to move from the actual disruptive experiences of their activity (presentation of first stimuli) to their abstraction of it (actual-empirical and historical-genetic analysis) where participants unpack their system into its essential conflicting elements (construction and presentation of secondary mediators), which motivates them to search for a new stimuli (auxiliary stimulus) to overcome this conflict (Sannino, 2015). This new stimulus is at first very abstract, and participants carry out efforts of *modelling* and practical experimentation with it, that leads towards a concertized new model of activity, which now forms a reconstituted and newly understood whole unit (Kramer, 2018). Virkunnen & Ahonen (2011) deem the actual-empirical and historical-genetic analysis within *ascent from the abstract to the concrete* as *theoretical-genetic* reflection, as the reflection enabled facilitates the creation of richly abstracted, theoretical concepts drawn from the deeper underlying

contradictions of participants' actual experiences that promote the creative search for a new mediator that can overcome the essential contradictory elements of their activity. Below, I describe how I engaged teacher-participants in theoretical reflection which drew firstly upon *actual-empirical* and then move to *historical-genetic* analysis.

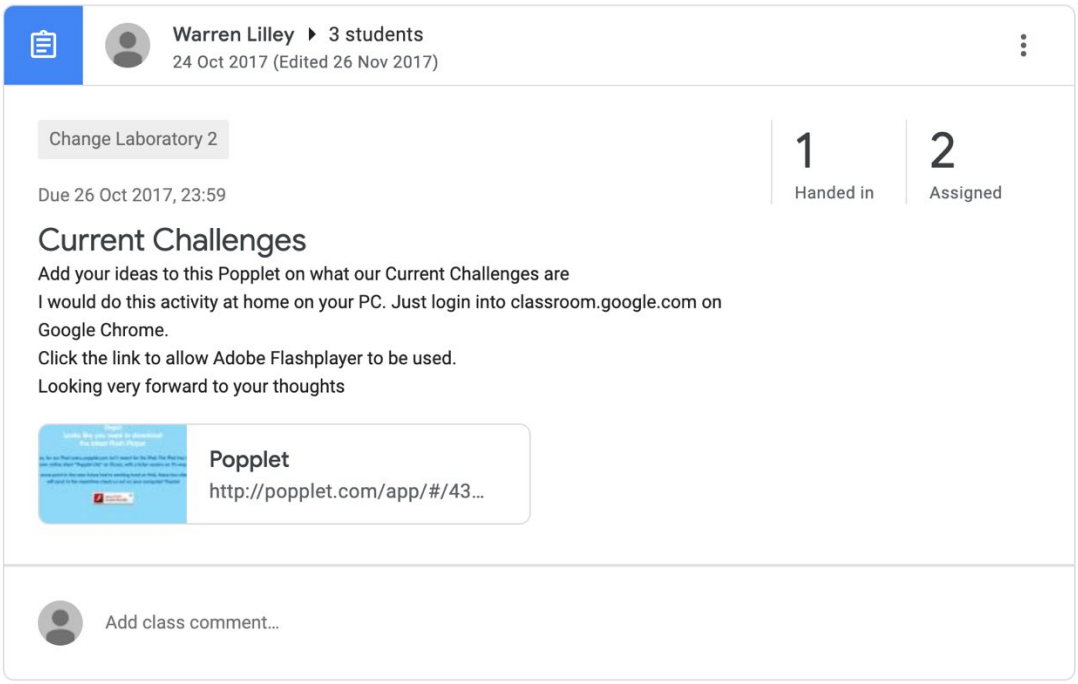
6.3 Session 2.2: New Spaces, New Change-Work

6.3.1 Rationale for Session 2.2 development

By the end of Session 2.1, teacher-participants had worked extensively with the presentation of the first stimuli-mirror data obtained during the ethnographic data collection phase of the study. Much of their learning actions to this point can be described as *questioning,* leading towards the emergence of *analysis* actions in teachers re-diagnosing themselves using the Teaching Change Frame (TCF). This move to supplying secondary mediators is a crucial part of moving to *Analysing the Situation*, as participants already began to re-evaluate their actual teaching in light of what the first stimuli presented (see Section 5.4.1.2 & 5.4.2.3). While this use of the TCF presents the start of participants unpacking the intricacies of their teaching activity, they had not begun to form a clear 'picture' of the inner facets that had contributed to the re-evaluation of their practice nor their *questioning* up to this point.

At the same time, the need for a digital modality of the CL and its accompanying 3x3 Expansive Learning frame came to a head in the intervention process. The day after Session 2.1, student protests for *Fees Must Fall* took their anticipated violent turn, resulting in all classes at the ALC needing to find new premises. In an effort not to lose progress and to begin the representation process of the complex discussion held at the end of the previous session, I asked the teacher-participants to engage in a virtual-collaboration task of mapping their articulated experienced-challenges using the *Popplet* mind-mapping software through Google Classroom (see Figure 54). Their online collaboration focused on four aspects of our discussion: teaching, the coursebook, technology and lessons. Teacher-participants could access the *Popplet* from their home computer and could add their experienced challenges to it. The mobile modality of this intervention's environment on Google Classroom, therefore allowed us to continue our intervention work and have access to all previous notes, diagrams and access to first stimuli presented in previous sessions, effectively mitigating disruption in this crucial stage of the intervention process. In light of this, their actions in using the *Popplet* mind-mapping task formed an initial attempt to orchestrate their movement towards *actual-empirical* analysis by

visually depicting the core disturbances and challenges they experienced in their teaching of Advanced students at the ALC.



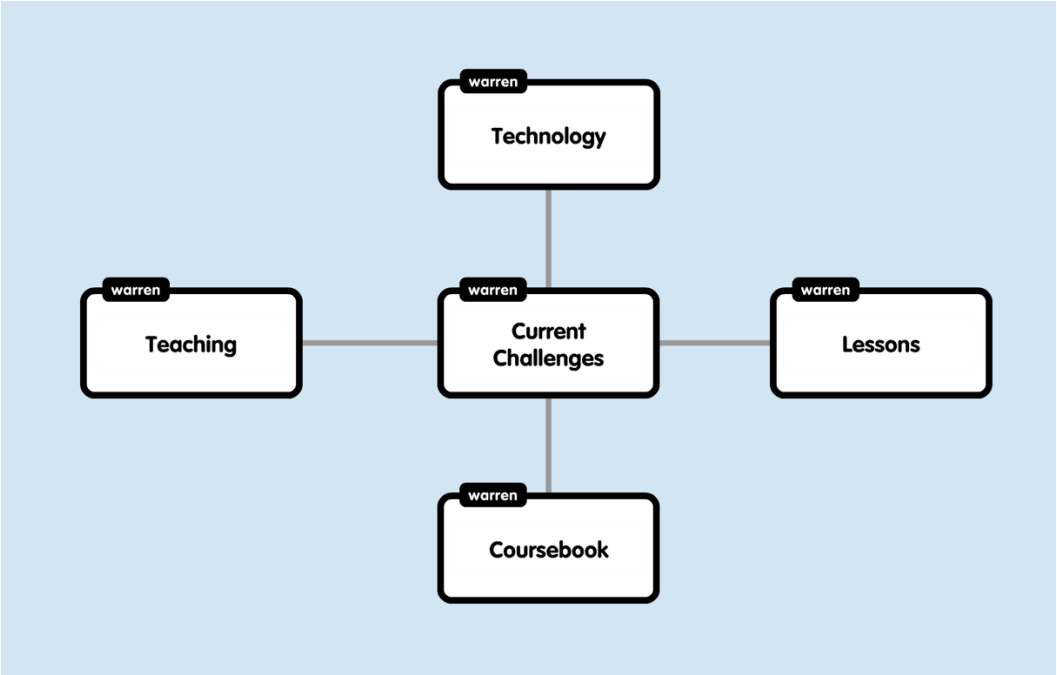


Figure 54: Popplet Task on Digital CL

Session 2.2 was planned to build on these elicited challenges by clearly bringing in *actual-empirical analysis,* where participants would form a picture of the internal elements of their activity that contributed to these disturbances. In the session, I planned for the teacher-

participants and I to collaborate in forming a representation of their activity, using third-generation CHAT. The construction of a representation or a 'picture' of their activity is an essential step as prior sessions with participants articulated a complex set of internal conflicts driving their interactions with Advanced students in the classroom. To uncover what exactly drives these internal conflicts necessitates the use of an external tool of representation that can aid participants in unpacking the complex object of their activity in their reflection, as "the more complex the object of reflection, the more important is the availability of an external tool for thinking" (Virkkunen & Ahonen, 2011, p. 232).

Moreover, in light of the student protests, Session 2.2 was held at our temporary research site. All classes at the ALC were held at new venues scattered around Cape Town's central business district (CBD). Before commencing the session, I had asked for permission to continue conducting sessions in one of the new venues that the ALC management had organised. Once permission was granted, I went to the site to see if wi-fi was available and in which potential classroom areas we could conduct sessions. I found a small area behind a conference venue that was being used as a classroom that had three whiteboards and wi-fi access that would allow us to continue our CL work unimpeded. A map of this temporary research site venue is seen below in Figure 55.

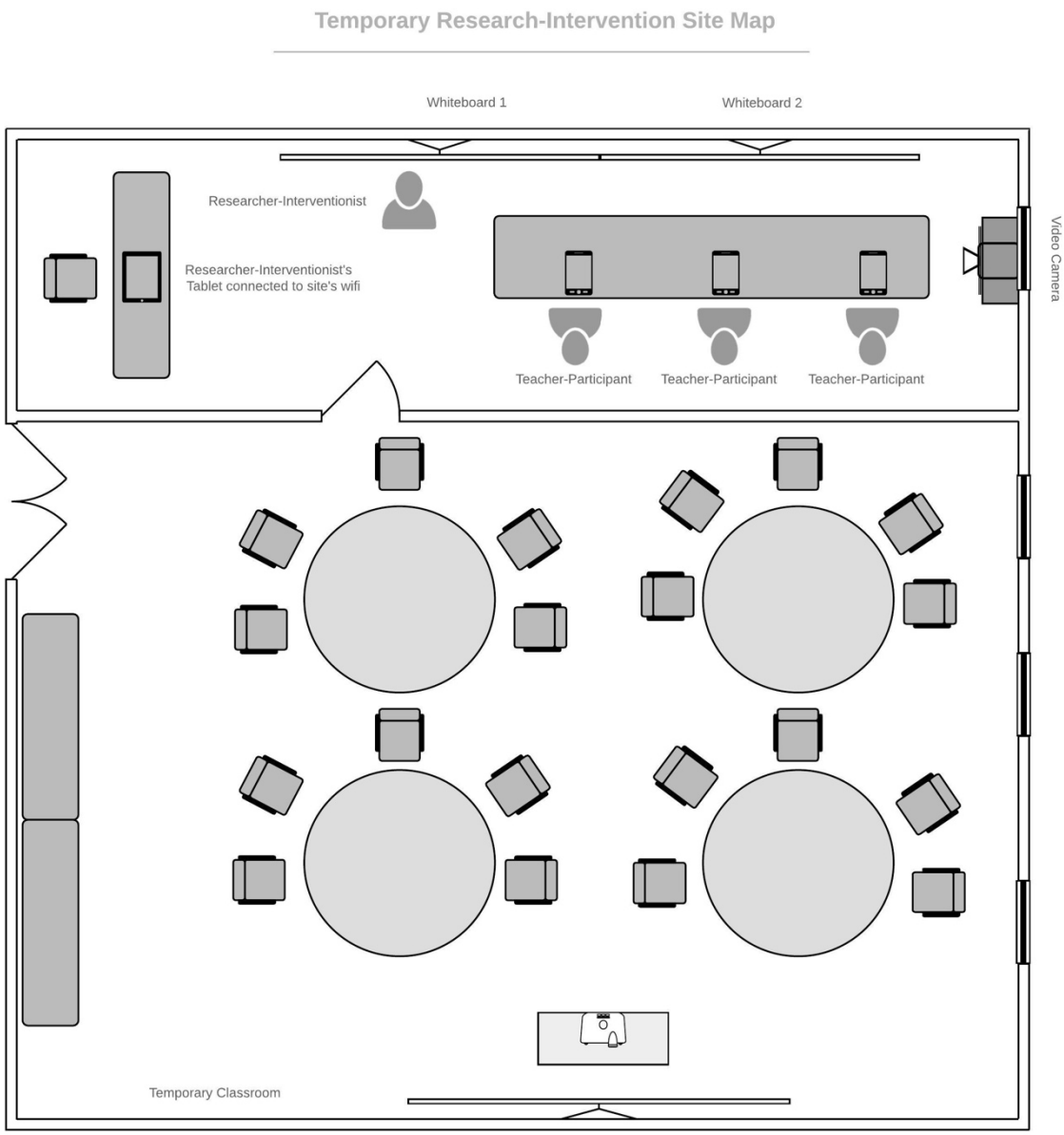


Figure 55: Research site B map: Session 2.2 (not to scale)

6.3.2. Discussion of Session 2.2: Actual-Empirical Analysis

6.3.2.1 Towards Actual-Empirical Analysis: Popplet Task 1st Review

In order to fully orchestrate our movement into this next part of the CLs, I began the session by referring to teacher-participants' continuing work on the *Popplet Current Challenges* reflective task. My aim in providing the *Popplet* was to elicit clarity of direction from the teacher-participants regarding what *they* saw were the main challenges evident following the last three sessions. This process was an essential part of focussing change work for this session by tracing the intricacies of the system that facilitates them (Bligh & Flood, 2015; Virkkunen & Newnham, 2013).

After referring to the task, Marjorie stated: "I think just being aware of it, um, is, is good, actually. Just being aware of what, uh, probably, what's the challenges here… that's the first step, I think" (Session 2.2). Here we can see recognition by one of the participants of this being a first step in the process. To further gauge how well the task was capturing their experienced challenges, I followed up by asking:

> and then is there anything you guys would, anything that you can think that we're missing, that we need to start heading as well? Or, I mean, I think one of the things in the *Popplet* was about, what you, you see or ask like by what technology or how we're gonna use it, you know? (Session 2.2).

My emphasis on the technological aspect of their current challenges had to do with a question Marjorie had posed on *Popplet* about technology which asked: "what do we choose to make teaching and learning most effective?" (see Figure 62). It was the only question that was posed in the reflection task, where all the others had been clear statements.

The discursive exchange Marjorie provided following my question is illuminating in several respects, especially as it pertained to the *Popplet* task as an initial step towards engaging participants in an *analysis* of their activity. In her first turn, she stated "it's fine saying, you know, technology's a great tool" (Session 2.2) which draws upon the contemporary ideological position of the potential benefits of technology as a tool for teaching and learning (see Section 2.2). However, she juxtaposed this position with the discursive marker 'but', *questioning* (Y. Engeström & Sannino, 2011) this usefulness with regard to how 'exactly' it would 'work for them' at the ALC. In previous sessions, much of the talk around using technology at the centre was about its benefits, but also about the 'work' it would do and how 'exactly' teachers could draw upon it without diminishing their role in the classroom (see Section 5.4.1). Her questions here suggest a dilemmatic manifestation of the inner contradiction, as Marjorie's talk pertains to the conflicting pull of a socially shared belief (Billig et al., 1983; Y. Engeström & Sannino, 2011) about the benefits of using ICT in the classroom and the awareness from previous sessions that there is ambiguity in the classroom in exactly how to realise these benefits. With this, we can see the *Popplet* task enabling a refocusing on the *questioning* that took place in previous sessions providing a basis for the *actual-empirical* analysis of the current challenges that would be tackled in the rest of the session.

However, Marjorie did not stop there. She immediately followed the above exchange with a follow-up question: "And how often are we gonna change it?" (Session 2.2). Rather than wait

for an answer she then recounted her previous experiences at another organisation where the constant change in technological tools became "a nightmare" for staff in as simple a task as taking a conference call. She then further added that she would "love if whatever we decide, to choose is the most applicable, but also one that sticks with us" (Session 2.2.).

As can be seen in these turns above, we see an extremely future-orientated purpose to her questions ("how often are we") and requests ("love if"). In fact, these turns seem to be more about setting an agenda for further change-work about technology in forthcoming sessions. This future-orientation is vital as developing participants' increasing ownership and direction of the intervention, their transformative agency, is seminal to the CL process (Y. Engeström, 1987, 2011b; Sannino, 2015). Marjorie's turn above expresses this agency in her *explicating* future possibilities based on her past experiences at her previous organisation, as well as *envisioning* a new model for activity that commits to the use of a single ICT platform (Y. Engeström et al., 2014).

At the same time, these expressions are rooted in her initial dilemma where she sees the potential for ICT at the centre but is also aware of the ambiguity of its use: what platform will be used ties into how exactly it will work. In this sense, I would argue her future directions emanate from her still-held *questions* which this reflection task has promoted. Marjorie's questions set the stage for the *actual-empirical analysis* where we can deconstruct Advanced EFL teaching activity at the centre to pinpoint *what* and *if* technology would be suitable for their current challenges.

6.3.2.2 Collaboration in Re-drafting a Picture of Activity

I based the introduction of *actual-empirical analysis* on a similarly-themed CL session held in Botswana in 2005. In the Botswana intervention, the researcher-interventionists supplied a draft model of the teachers' activity that was used as a platform to engage further elaboration of the activity system's representation from the participants (Virkkunen & Newnham, 2013). In this session, I followed a similar method by firstly supplying participants, through the use of the virtual 3x3 Expansive Learning Frame (see Figure 56) with a model strictly based on our previous discussions.

Following this, I opened the discussion of the model for further elaboration. I began to re-draw the model with the teacher-participants on the whiteboard in the venue, while they viewed my Researcher's draft on the virtual 3x3 Expansive Learning Frame (see Figure 57). Again, my

aims here were tied to developing their transformative agency in the intervention, as setting my drafted model as a negotiated site could further enforce the participatory and formative aspects of this research- intervention (see Section 3.2).

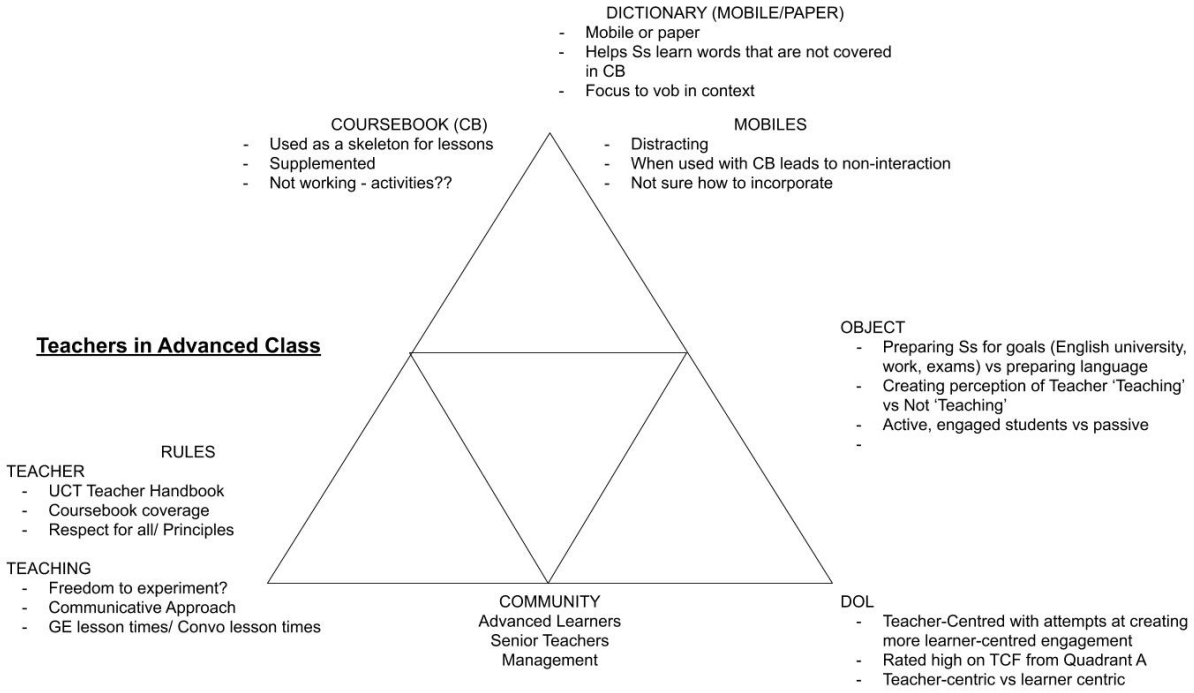


Figure 56: Researcher's Draft of Advanced EFL teaching at ALC based on Session 1.1 - 2.1

In presenting my Researcher's Draft I emphasised, from previous sessions, the multiple aspects of the object that teacher-participants had highlighted ("is this ability just communication or…?"); the types of division of labour ("division of labour is how things occur in the classroom"), and mediators used ("the mobile lesson as well right?") (Warren, Session 2.2). As can be seen in Figure 56 above, I also included several question marks around 'Teaching Rules' and the 'Coursebook' as a mediator to stress areas that needed greater clarity in our discussion.

What was interesting in my attempt at opening up this negotiated effort is that minimal objections were raised to how the object of their activity was posed, as well as the communicative emphasis of their teaching rules. In fact, teachers' reflections of the Draft model at this stage focused primarily on ALC rules and the use of mobile dictionaries.

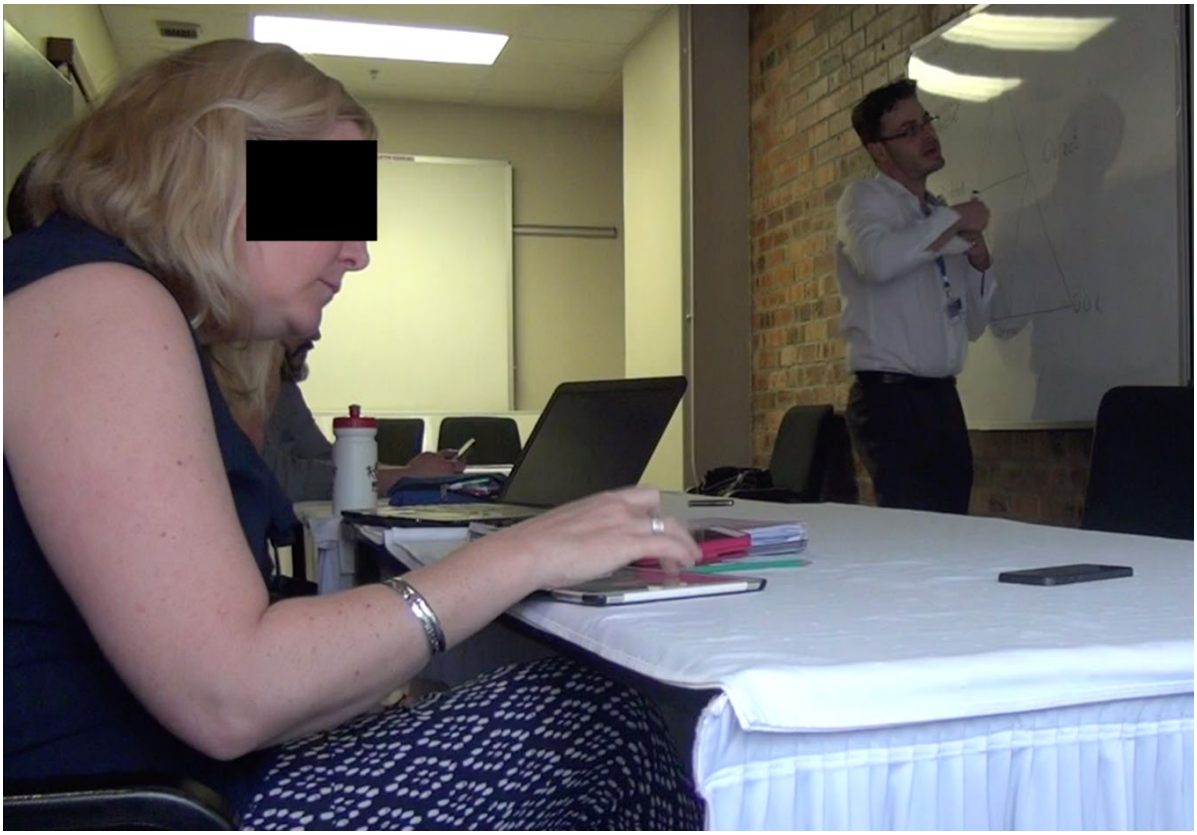


Figure 57: Re-drafting of Researcher's model (Session 2.2)

For instance, regarding the handbook operating as ‘rules', Ned contended that it was ‘how’ teachers "came down to" operating as a "cushion" between management, teachers and the student body in their enforcement of the rules that was missing in the model (Session 2.2). He stated that if the handbook was just used, it would lead to teachers ‘patronising’ students to follow the rules rather than "encouraging" them to follow them. Similarly, John disagreed that ‘freedom to experiment’ in teaching should be questioned (Session 2.2). Instead, he stated that there was freedom to experiment, but without any feedback from others at the centre, these experiments in teaching remained for them just that - ‘experiments’ (Session 2.2).

In both cases, we see in teacher-participants' re-drafting of the model that connections are drawn between the elements of their activity and how they are enacted in practice. In terms of the handbook, participants have noticed its placement within their activity's community, effectively bridging the rules between management, teachers and students. More importantly, they also highlighted that it is in how the handbook is drawn upon by teachers (subject) that may lead to varying outcomes (division of labour), such as enforcing through ‘encouragement’ rather than ‘patronising’ students. The same can be argued for the ‘freedom to experiment’ where John highlights that while teachers do have this ability, how it is enacted in the system

by managers (community) leads to little development in terms of teachers experimenting with their language learning approaches (mediator/rules).

The same kind of insight into the intricacies of their activity system also came to a head when we approached mediators of the system. While I had questioned the use of the coursebook, teachers instead took up the issue of mobile devices operating as dictionaries (Session 2.2). Both John and Marjorie gave narrative accounts of their own negative experiences with mobile dictionaries, where their use in class led to students finding incorrect definitions, which teachers identified as the site where "confusion came in" (John, Session 2.2). Here again, the teacher-participants were forging connections in the modelling of their activity, in this case, how specific uses of mobile phones in class may potentially disrupt lessons from approaching the object of the activity, namely communication.

At the same time, while the teacher-participants were beginning to elaborate on their model, I still felt at this stage, many elements of their activity were still under-represented and under-interrogated. I had prepared for this by setting a question similar to that posed in the 2005 Botswana CL (Virkkunen & Newnham, 2013). I now move to how this question enabled teacher-participants to unpack and elaborate a clearer representation of their activity.

6.3.2.3 Positive and Negative Teacher-Student Interactions

In re-drafting the representation of their activity system, teacher-participants are creating their own mediator/artefact to exemplify their practices and the disruptions they experience in teaching Advanced EFL students. In other words, they have abstracted their activity, its constituent elements and object to see how they inform each other, initiating a theoretical-generalization (Virkkunen & Newnham, 2013) of the ALC's teaching of Advanced students. As with any other mediational tool, a generalization enables its users to engage in more complex psychological processes (Karpov & Haywood, 1998; Tenenberg & Knobelsdorf, 2014). Similarly, participants' previous actions of (re)drafting the representation of their activity, leads to the model now becoming the mediator to engage in deeper reflection about their teaching activity (Virkkunen & Ahonen, 2011). In order to spark this more complex reflection, I directed the teacher-participants to look at the current redrafting of the model asking them: "where do we get those positive teacher-student interactions and where do we get the negative teacher and student interactions?" (Warren, Session 2.2).

Immediately, John responded in stating: "sometimes the good times and bad times would be with the division of labour" (Session 2.2). To highlight this, I marked division of labour on the re-drafted model, to illustrate to participants how the model was intended to be used during this part of the session (see Figure 57). In the discursive exchange that followed, he emphasised three different kinds of interaction with students in the classroom:

> JO: Um, so almost where you've got the student looking to, for them, for you to basically give them the answer [inaudible] … Or where you've basically got the students who are having just to sit back and let the students do the majority of the work […] So for example, you do… a class discussion or answers… [John mimics a student] 'I'll wait to see what so and so has put in'…
>
> WA: And where does that come from? Does that come from, like, the, the teaching approach or does that come from coursebook? Does it come from the rules of the school [inaudible]?
>
> JO: I don't know. I think mostly [the coursebook] […] So, I think the biggest one for me, though, is if you've got them conversationally speaking to [each other], it's almost they're expecting you to be the all-singing and dancing conversationalist, keep the conversation going. It's like it, it works… [John mimicking himself as a teacher in that interaction] Wait, I can't just keep talking-talking…There's going to be like the bare, the bare minimum coming back from you as well, so I don't... I'd be…

Excerpt 19: Session 2.2

The three negative types of teacher-student interaction within the division of labour that John highlights are when: students expect the teacher to answer; students let others do the work; and when the teacher is expected to be "the all-singing and dancing conversationalist" (Session 2.2). His turns stress a highly personal, emotionally charged account, most evident in him impersonating students' attitudes: "I'll wait to see what so and so" and himself in these situations: "Wait, I can't just keep talking, talking" (Session 2.2). These discursive elements above demonstrate a *conflictual* manifestation of the contradiction wherein an individual (the teacher) feels negatively impacted by others' (the students not communicating) behaviour (Y. Engeström & Sannino, 2011). At the same time, the fervent nature of this account suggests the emergence of a *critical conflict* manifestation of the contradiction as John's turns express an impassioned recount which ends in his own guilty feelings ("I can't just keep talking") about extensively managing conversation in the classroom (Y. Engeström & Sannino, 2011).

To more clearly distinguish the underlying contradictory motives John may be facing, I asked: "Where does that come from?", making an effort to highlight specific disruptive features raised

in previous sessions that teacher-participants outlined as primary contradiction / disruptive sites (see Section 5.4.1.2, 5.4.2.3, 5.4.3). His response to my question highlights the coursebook, but also the 'biggest one' for him is when students engage in conversation, i.e. communicate with each other.

The other teacher-participants added to John's account, emphasising how Advanced students approached lessons at the ALC. While Marjorie agreed with John's emphasis on the coursebook, she also noted that it was students' 'entitlement' of having paid that was another central issue (Session 2.2). Ned stated this most clearly: "It serves this sort of passive receptacle that the student has kind of like… You [the teacher] need to handle…the product" (Session, 2.2). John exemplified this further by articulating a moving account of how the 'passivity and entitlement' of students impacts his ability to follow through on lessons, as students "come to the next one and it hasn't been done, so now there's this massive gap" (Session 2.2). He then related how this all comes down to the teacher, again mimicking a student stating: "You [the teacher] should have foreseen this happening, that I wasn't gonna do the work, so where's your Plan B?" (Session 2.2). In turn, his example of students' 'passivity and entitlement' incited others, with Ned reiterating the issue of feedback and students not valuing it (Ned, Session 2.2., see section 5.4.2.1) and the distraction of students posed by their mobile devices: "they come in and it's one word… or put their earphones in, with their phone on" (Marjorie, Session 2.2).

As can be seen in the above excerpts, there is a strong focus on 'communication' in teacher-participants' turns. All of the cited negative teacher-student interactions above emphasise communicative actions that either negate communicative interaction in language exercises (students looking to the teacher or copying a peers' work) or rely extensively on the teacher to handle communication and the lesson. Moreover, we can see teachers unpacking the intricacies of the system, where for instance the passivity of students in division of labour is seen to impact lesson and language object(ives) or how teachers view mobile devices, further reinforcing students' passivity in the classroom. These articulations showcase an expression of participants beginning to identify secondary contradiction sites (where two or more nodes of the system are seen to conflict) that are seminal to the *analysis* phase of CLs (Y. Engeström, 1987; Y. Engeström & Sannino, 2011).

A similar strong focus on communication is again seen in positive student-teacher interactions. For the teacher-participants, positive interactions were seen in "collaborating… and students are willing to do it" (John, Session 2.2.). The types of practices teachers referred to were when

students went with the teacher: "when they go where you go" (Ned, Session 2.2.), and when students "explain to your [their] partner why you're right and they're wrong" (John, Session 2.2). By doing so, positive interactions were when students could: "actually hear where they've gone wrong… or they've managed to… work it [language point] out between the two of them" (John, Session 2.2).

In this sense, their discussions around student-teacher interaction suggest a fixation on a conflict on motives emanating from communication. Above, all their articulations have debated the use(ful) value of student-centred pedagogy to facilitate communication in the classroom versus its worth-value in the classroom where students either see its value (positive student-teacher interactions) or do not (negative student-teacher interactions).

Teacher-participants also noticed this link between communication and student-centred teaching. Ned demonstrated this in stating: "I think that this industry, as a whole, does probably more than that [student-centred teaching], more of that than is necessary…" (Session 2.2). John added to this stating "it is drilled into us but this whole student-centred thing means, you know, like peer checking" (Session 2.2). In these two articulations we see not only a reference to the dominance of CLT pedagogy in the language teaching industry (see Section 1.1) but also a questioning of its reliance on peer checking embodying student-centred learning. However, Ned went further, essentially drawing an explicit link to CLT and commodification of teaching:

> NE: …because it's the model. Where also I think there's another more kind of financial respect, aspect to it is that you wouldn't be able to teach 30 hours' worth of lessons without that model. And that's the industry, like more than it's been changed.
>
> JO: You can say that again. Oh yeah, it is a survival tool.
>
> NE: Absolutely. But from a financial perspective, from a business perspective, because to a certain extent, that happens because to make the industry viable. I mean, people need to be able to teach that way because we have to. If you had other models, you'd be able to market a third of that, right? [Inaudible]. I don't know, I mean, maybe I'm wrong, but I do think that there's a reason… Let's just appreciate it.

Excerpt 20: Session 2.2

In the turns above, the teacher-participants implicated another motive behind CLT in the language classroom. For participants, the use of student-centred pedagogy (i.e. CLT) is linked to a 'survival' mechanism, as teachers would not be able to endure a 30-hour teaching schedule

premised on teacher-centred pedagogy. In doing so, Ned stresses the use-value of CLT/ student-centred teaching in the EFL industry is tied to its exchange-value in open market where it makes the foreign language teaching industry not only financially viable but also marketable. The *analysis* actions taken go to the heart of CHAT, which is founded on dialectical-materialism (Langemeyer & Roth, 2006) that stresses how the commodification of labour results in a contradiction between use-value and value in exchange (Y. Engeström, 1987). In this case, participants *analysing* their system using the Draft Model have led them to trace possible roots for its 'use' in the classroom – it makes teaching manageable. The conflict then being experienced revolves around how the CLT/ student-centred approach is not always meeting its 'exchange' in the classroom, which is the inability to always 'manage' communication seen in the negative student-teacher interactions cited above.

In response to Ned's and John's focus on the commodification of CLT, Marjorie's *analysis* actions drew upon the historical problems of language teaching in South Africa. Drawing on her background as a high school educator, she discussed how the problem of English instruction at schools resonated with TEFL: "English is taught often as first language, but it's not the first language of the majority of the students, and mostly not the first language of the majority of the teachers" (Session 2.2). She went on to argue that due to this, the "nuances [of English] … are all being lost" as students are unable to "read or write properly, if at all" (Session 2.2). This led her to the conclusion, "if you're focussing just on language instruction, I think there are so many of those out to, you know, learn a foreign language in two weeks… it's obviously a dud" (Session 2.2).

Earlier in this dissertation, I discussed the questionable place of English as the language of instruction and its ties to educational access (see Section 2.1). In Marjorie's turn above, we see her referencing these issues and how they tie into TEFL. Just like South African students, many foreign learners, who are just as equally unable to read and write, desire to learn English. At the same time, EFL schools, like the ALC, market themselves as sites where students can learn a foreign language in a short time-span (see Figure 58 below) with student-centred/ CLT language instruction. However, if that instruction strictly focuses on communication, in the way outlined above by Ned and John, so that teachers can 'survive' and does not focus on 'nuances' of the language that will enable them to "read a science question" (Marjorie, Session 2.2) for example, then that facilitated teaching and learning is a "dud" that does not meet students' language learning aims. In effect, she adds another dimension to the conflict with the

motives being expressed, where the use-value of student-centred/ CLT instruction for marketing contradicts the value-in-exchange of the students who receive it.

STANDARD COURSE

On our standard course you will attend 20 lessons a week from 9am to 1pm. The course will teach you English vocabulary, grammar and pronunciation together with the four skills of speaking, listening, reading and writing.

QUICK GUIDE

Class times	9:00 to 13:00
Maximum class size	12
Lessons	20
Lesson length	50 minutes
Coursebook	Included
Levels	Beginner to Advanced
Start date	Every Monday
Minimum age	18

INTENSIVE AND SEMI-INTENSIVE COURSES

After studying General English in the morning, you will be able to choose from a range of electives in the afternoon, to allow you to focus on the skills that you most want to improve.

QUICK GUIDE

Class times	9:00 to 16:00
Maximum class size	12
Lessons	25 or 30
Lesson length	50 minutes
Coursebook	Included
Levels	Beginner to Advanced
Start date	Every Monday
Minimum age	18

Figure 58: Marketing of courses at ALC (Brochure)

It is at this point that I would like to review the teacher-participants' analytical learning actions so far. I previously outlined John's starting turns as discursively expressing a *conflictual* manifestation, that also denoted key elements of a *critical conflict* manifestation of the contradiction in terms of the emotional account and feelings of guilt he expressed. Looking at teacher-participants' turns above, we can see that they discursively built upon John's initial *conflict* which they share. I would argue that their discussion evolved into a *critical conflict*. Central to these types of manifestations of the contradiction is that the individual provides either a personal/emotional/moral narrative account that employs the use of metaphor to describe themselves facing competing motives in a social situation (Y. Engeström & Sannino, 2011). In participants' turn-taking above, we can see all these elements in varying degrees in their turns, as well as the conflict of motives they experience regarding their reasoning behind using communicative methods within teacher-to-Advanced-student interaction (see Table 13).

Table 13: Excerpts demonstrating critical conflict elements in participants turns (Session 2.2).

Personal, emotional, moral	Narrative structure	Vivid metaphors
"I find it so **frustrating**" (John) "it's one word, they **know** it's **one word**" (Marjorie) "they [students] **can't** get anything from it" (Ned)	"I'll see that the next lesson's" (John) "And then" (John) "when they come in" (Marjorie)	"absorb by osmosis" (Marjorie) "passive receptacle" (Ned) "It's a kind of war" (Marjorie) "it's a survival tool" (John)

Another central feature of *critical conflict* is that they are resolved by attempts to navigate a new meaning to the contradictory motives they experience (Y. Engeström & Sannino, 2011). These attempts to navigate new meaning became the focus of the turns that follow. It began with my asking participants whether they felt that this conflict in student-interaction emanated from the "communicative approach" in rules or "would you[they] say it's different?" (Warren, Session 2.2).

Ned stated: "definitely impacting the division of labour" adding that he was also "not so sure" as he would use different approaches as well in class (Session 2.2). He then pointed at the division of labour on the Draft Model: "I'm just asking the question, is the communicative approach connected to student-centred approach?" (Session 2.2). To which John stated: "yes, because it's fine when it's working but when it doesn't, you're finding ways to entertain that stays in line with the communicative approach" (Session 2.2). Further adding, while ALC markets itself as "being student-centred", teachers were not obligated to follow the course, but that "it is dictated" to them in how much they "borrow from" other resources (John, Session 2.2). Ned concurred, further adding "or how often the teacher is trying to be interactive" (Ned, Session 2.2).

In these turns, John and Ned were discursively negotiating the link between the student-centred- and the communicative approach at the centre to find a new meaning (Y. Engeström & Sannino, 2011) for its placement in their teaching. Their negotiation rests upon how the ALC enacts the communicative approach in their courses. John and Ned both highlighted this enactment towards the end of their turns above, stating that their teaching and interactivity rests on the 'communicative approach' rules of the centre in terms of how much teachers can borrow from other resources, or the level of interaction they should be having in class. These features

are not new, I previously discussed how the Director of Studies and Principal expect the coursebook and communicative approach to tie in with lessons at centre (see Section 4.2). What is more telling is that during this discussion John reached for a future-orientation of their activity: "I would want to take the rules as in, like, [the university], where they have no rules" (Session 2.2). In this, we see a candid link to an attempt to negotiate a new rule-base to operate from in their activity.

In these articulations, participants are explicitly expressing secondary contradictions. In this case, between rules (communicative approach) and division of labour (teacher-centric versus learner-centric). In an effort for us to keep track of these, I began to draw these links after participants had discussed them, as shown in Figure 59. In the above discussion, we can also note another secondary contradiction beginning to emerge - the coursebook operating as a mediator and its ties to division of labour - to which I now briefly turn.



Researcher listening to participants' identifying **rules** impacting **division of labour**

Researcher-interventionist drawing link from **rules** to **division of labour** to visually depict the link between the two.

Figure 59: Researcher-interventionist drawing links participants articulate between division of labour and rules (Session 2.2)

In reviewing the teacher-student interaction, the teachers' discussion took an unexpected turn towards the coursebook that was not directed by the researcher-interventionist. This began immediately after the previous turn, where John (see Excerpt 21 below), considered the difference between newly qualified teachers using the coursebook 'as is' leading to student passivity, versus the role the coursebook's content itself plays in promoting student 'boredom'. His weighing up of the difference posits a *dilemmatic* manifestation, where, on the one hand, inexperienced teachers' "fresh off a TEFL course" (Session 2.2) use of coursebook content is emphasised, and on the other hand, where the coursebook itself puts emphasis on the teacher as an entertainer (Y. Engeström & Sannino, 2011). These evaluations provide two opposing

reasons why teachers feel the need to become entertainers: their inexperience (which does not match this group) and the coursebook itself.

JO: Yeah, I mean if [overtalking] built on grammar [inaudible]. So, if you were noticing a teacher fresh off a TEFL course, then if, if you follow the coursework, which you are, then it's, it is probably gonna end, end up in a [inaudible]. So, I would say the coursebook would feed into that. I think as well when they find the coursebook boring, the content, then that's where the entertaining part comes in as well.

WA: Yeah [laughter]. So, it's kinda making you have to do it? [laughter].

JO: Yeah. [Overtalking].

NE: And it's [inaudible]. It's like a very, um, patronising thing to do. It's frustrating, really.

JO: I can't do this anymore [laughs].

NE: It's like you know when it's really [inaudible], they kind of, they already, the coursebook's got a very, very clear idea of who your student is.

MA: Right.

NE: And when it's not that it falls flat.

Excerpt 21: Session 2.2

Seminal to *dilemmas* is that they are typically reproduced, seen where Ned refocuses on John's earlier turn by strictly focussing on the coursebook content itself. There are two noteworthy elements in his reproduction. Firstly, he does not state this in light of the teacher's experience. Secondly, his and John's articulations emphasise *their* use of the coursebook as a "patronising thing to do… frustrating really" and a practice that they "can't do anymore", respectively. Given that, he expresses a sense of 'helplessness' at how the coursebook operates where even if it works well "it's patronising" when it matches the student group it works with, and if not the entire lesson "falls flat". Ned's comments suggest a *double-bind* manifestation of the contradiction where the participant expresses unacceptable choices in their coursebook use (Y. Engeström & Sannino, 2011).

Moreover, pertinent to John's statement is its orientation towards the future. In stating he "can't do this anymore" (Session 2.2), he is emphasising the problem of current practice. Moreover, his laughter after his statement could allude to the futility of this statement in an industry dominated by the coursebook (see Section 4.2.3.). This link to the future and present practice is seen in Marjorie's following turn (below), where she relates her current problems of textbook

questions to students to one of their initial practical transformations – a new coursebook. This emphasis on the practical transformation of activity is commonly how *double-bind* manifestations are reformulated (Y. Engeström & Sannino, 2011):

> I also think that was a very big problem when, um, [unclear] was talking before about, um, when we prepare our own coursework, we know, kind of, what part of the year our students would change, but then is it not a similar thing to teach and to test them when they're in the high school? Where you create a course book for a certain group of students. So, it'll be absolutely Arabic students, they relate to things in a different way. Like for example, um, the, the next part of one of my activities was, um, how women drive. It was a question there about how women drive. (Marjorie, Session 2.2)

However, this practical transformation is held taking into account a recent disturbance she experienced with her class. She relates how an international coursebook's question about how women drive did not match the cultural beliefs of the Arabic students in her class, resulting in her asking: "how on Earth is this [question on women's driving] gonna come across?" (Session 2.2). In this sense, she highlights how specific topics in international EFL coursebooks do not match the cultural values of the international group of students they are deployed to. She argues that looking towards the future, the coursebook they create should 'teach and test' the student groups teachers commonly instruct. In effect, Marjorie is highlighting how the interaction between the coursebook's content (mediator) conflicts with the community (students) and the division of labour (student-teacher interaction/ 'passivity'). This is most clearly seen when she states:

> And you just don't know if they're going to, because of this passivity thing, if they're just gonna go, pfft, right, we don't have a response to this or that in my country. Or if they're actually gonna get involved, you know. (Session 2.2)

Her look towards the future and the conflict she experiences was also shared by the other teacher-participants. Most notably, Ned where he stated, "my biggest issue when I was teaching it [Advanced]… was that the tasks are just too flimsy, they're too short" (Session 2.2). He began to use the metaphor of 'meaty' to refer to language work he would like to do, i.e. "meaty readings" which the other participants like Marjorie also used "a very meaty approach" (Session 2.2). In effect, he and Marjorie were problematising not only the content, but also the tasks that developed by international EFL textbook publishers:

> they [coursebook developers] often change obscure for involved because to go find a new, they'll give you obscure tasks to replace them because they think that it needs to be difficult, but then obscurity becomes synonymous with different. That's how it's seen. Or it's not, it doesn't, it doesn't add any purpose. It's not for anyone. (Ned, Session 2.2)

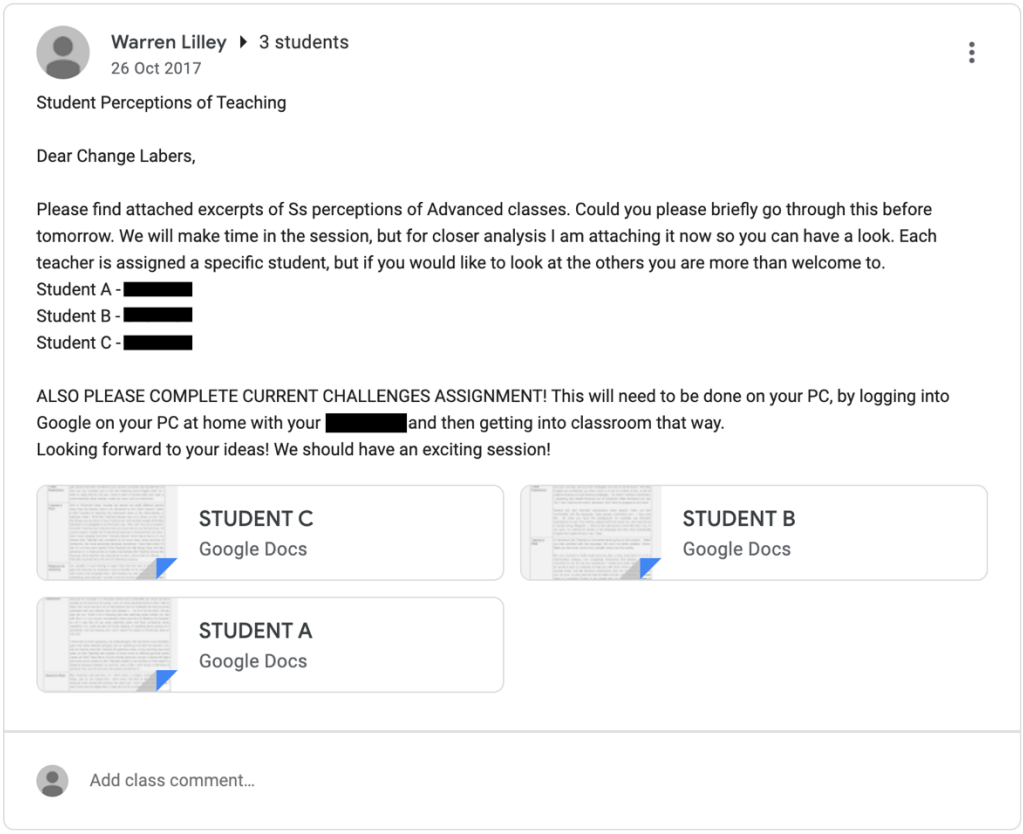
His turn above acutely summarises the teacher-participants' discussion regarding the coursebook. Over their discussion, the use of the coursebook has been linked to 'passivity' as the students find the content boring, culturally irrelevant or inappropriate. For teacher-participants, the design of the coursebook and tasks lead to 'patronising' and 'entertainer' teacher-to-student interactions in the classroom. In effect, their discussions using the Draft Model traced the genesis of the conflict they experience with coursebooks in Advanced lessons to: "it doesn't add any purpose. It's not for anyone" (Session 2.2).

6.3.2.4 Introducing Student Perspectives

At the same time, during our discussion around the coursebook, I attempted to prompt teacher-participants' insight towards the object of the activity by asking: "are we getting to their [the students] goals?" (Session 2.2). In response, John stated that "past student, they're like I have no aims, I have no goals, I've already passed CPE twice" (Session 2.2). His statement is rather telling about teachers' insight into students' needs, further informing the critique that formative interventions often miss the students' experience in their development (Y. Engeström et al., 2014).

While this study was limited in its ability to bring students into the actual CL due to their intermittent course lengths (see Section 3.3.2), I tried to overcome this by providing excerpts of student interviews to teacher-participants (see Appendix 9.2.3.1). I followed a similar presentation as in Session 1.1 and Session 1.2 with this double-stimulation task, by anonymising the student names and choosing a range of excerpts as a way in which to provide 'multiple' first stimuli for participants to choose and draw from (see Figure 60 below).

To facilitate this process, teachers were each assigned a specific student (either A, B, or C) the previous day and were asked whether, time permitting, they could read the respective excerpts provided. In the session itself, I allocated time for teachers to read, and then we engaged in a discussion around their insights gained from the different students' perspectives concerning our representation of the Draft Model on the whiteboard.



Warren Lilley ▸ 3 students
26 Oct 2017

Student Perceptions of Teaching

Dear Change Labers,

Please find attached excerpts of Ss perceptions of Advanced classes. Could you please briefly go through this before tomorrow. We will make time in the session, but for closer analysis I am attaching it now so you can have a look. Each teacher is assigned a specific student, but if you would like to look at the others you are more than welcome to.
Student A - [redacted]
Student B - [redacted]
Student C - [redacted]

ALSO PLEASE COMPLETE CURRENT CHALLENGES ASSIGNMENT! This will need to be done on your PC, by logging into Google on your PC at home with your [redacted] and then getting into classroom that way.
Looking forward to your ideas! We should have an exciting session!

STUDENT C
Google Docs

STUDENT B
Google Docs

STUDENT A
Google Docs

Add class comment...

STUDENT A

Advanced Class Experience	The thing that we were doing a lot it was um working in pairs or in groups because for example in in Russian schools and universities you know we don't usually do do this kind of activity. Like uh more personal work but here I like to learn very much we did a lot of discussions and for example we discuss some questions with your partner then you present it… um to to to the class. Um we also did um I think a lot of listening and also watching some videos um, like with the in in our course coursebooks there was kind of 'Meeting the Experts' so uh it was like uh we were watching video and then answering some questions. Um, yeah we also did some reading uh speaking about essays uh I remember only two essays and I and I spent five weeks in Advanced class so not a lot. I think that we were speaking a lot really [laughs]. We had some some Brazilian guys that really talkative [laughs] and so speaking a lot with the teacher. Um, but my teacher was [the Teacher] for grammar class, uh my morning class and yeah um [the Teacher] also explain us some uh difficult grammar points because we didn't have like a normal normal grammar course in advanced class just some points so [the Teacher] explain it but not like uh there wasn't a distance between between us and her. Just a little, I don't know, a little time of grammar then and uh we were discussing something or...
Teacher's Role	[the Teacher] was just like, uh I don't know, a creator, somebody who just helps, just uh um control, I don't know, the flow or the stream [laughs] because yeah during the process we were just, I don't know, I felt eh more I don't know

Figure 60: Student Perspectives Double Stimulation Task example

At first, teachers were quite resistant to what students had to say. For example, Marjorie highlighted how one student wanted to focus on more real-world examples of language use and Ned focused on how his student's excerpts focused on more "more serious writing" (Session 2.2). Ned expanded upon this stating: "But I think to a certain extent it's what they think they should be doing… which is something different altogether" (Session 2.2.). His use of the linguistic marker, 'but', suggests a *dilemmatic* discursive manifestation of the contradiction (Y. Engeström & Sannino, 2011). It reappears in his follow-up turn which further explicates his problem with students' expectations: "But it's almost like the, it's like what they, it's not their expectations, it's what they think the expectation should be"(Session 2.2). *Dilemmas* are discursively manifested ideologies which express conflicting evaluations (Y. Engeström & Sannino, 2011). In this, Ned's *questioning* has to do with students' expectations not readily meeting 'what' they should be doing in language classes. He emphasises that students' expectations are born from what they 'believe' they should be learning rather than what they really 'are' or must do in class. While it can be inferred that teachers, like himself, know what they should 'be teaching', it is apparent that he questions the value of students' expectations.

The initial resistance to students' insights became questioned the more exposure teachers had with their interviews. For instance, Marjorie's student's interview highlighted a similar view of the coursebook content and class-makeup. Just as teachers had highlighted above, the student stressed the course, i.e. the coursebook was 'boring' due to the class and their interest in the course's 'subject,' i.e. content. Marjorie added to this stating: "At least they have an idea that… there are so many variables" (Session 2.2). The recognition that the impact of the coursebook on student-participants was similar to the impact expressed by teacher-participants is particularly noteworthy, as it illustrates this is a common problem area within the teaching of Advanced student activity.

However, the greatest instances of discussion and insight gained from the students' interviews revolved around technology and language learning. Ned was triggered by a student who mentioned the value of the mobile dictionary and the necessity of the teacher (Session 2.2). His comments led to Marjorie recounting her student's insights into mobile dictionary use: "she needs time to look at the dictionary and then use that in class. Whereas, I'm usually reluctant to allow them to use their dictionaries…" (Session 2.2.). Her point here links to the earlier discussion around mobile dictionaries where Marjorie and John both recounted how dictionary-use confused students and hampered their communicative ability (see Section 6.3.2.2). Ned

reacted quite strongly: "What is it? Why is that, though? Why would he do that? I also do the same thing, I just look away, advise their vocab" (Session 2.2)

It is unclear here whom Ned is interrogating with these questions. It could be himself, or it could be the student. What is clear is that his emphasis on *what* and *why* suggests an urgency to understand *why* EFL teachers conduct their practice as they do. Viewing this as an action within expansive learning we can posit his questions here as exhibiting signs of psychological dissonance, Ned is unable to account for his actions concerning the way he conducts his practice – he is articulating his own inner doubts about his practice, which suggests a *critical conflict* (Y. Engeström & Sannino, 2011). Marjorie weighs in here suggesting that is:

> more natural if they'd be trying to teach them a bit of context, especially when it comes to an exam… but considering so many of them do it, and they're so used to their phones. I wonder if it's not a case that they're actually learning more. (Session 2.2)

Her turn also seems to express the different motivations underlying how mobile dictionaries are used in the classroom. Against this background, the use of teaching vocabulary in context ties in with the communicative approach (Griffiths, 2011) and how learning is measured at the ALC, i.e. exams. However, the use of mobile dictionaries accounts for how learners use their mobile devices to facilitate communication in their day-to-day lives. This discrepancy leads her "to wonder" or to question her own practice regarding this (Session 2.2). Ned seemingly brought this train of thought to its logical conclusion: "this communicative approach… does that really need to stop?" (Session 2.2). To which Marjorie added: "maybe what we do is we're not close to the students enough" (Session 2.2.), which may be considered an expression of the primary contradiction being faced.

The teachers then turned attention to the Draft Model, looking at the rules of the centre. The teachers highlighted the restrictions around phones were not "necessarily" enforced, but that students were limited in their use ("we don't let them… finish") and how they were used in class (Session 2.2). John drew attention to how he had tried to overcome this by focussing on technological-language immersion: "I said if you're gonna play PlayStation, that's fine. Change all the settings to English" (Session 2.2). Here we can see the participants drawing secondary contradictions between the mediator and rules of the system, where the ability to harness technology for teaching and learning is impacted both by the centre and the communicative approach.

Expansive learning holds that once secondary contradictions become explicit to the individual/participants, their actions will turn to look for a mediator or change that can overcome the contradictions they are experiencing (Y. Engeström, 1987). Marjorie's following turn shows such a move: "then maybe that's what we should be doing… they are using technology all the time… Then instead of us limiting them, maybe what we should be doing [is] incorporating it" (Session 2.2). As if following suit, the discussion turned to focus on the problems that students experienced and conceptualising future-orientated methods that could potentially overcome these.

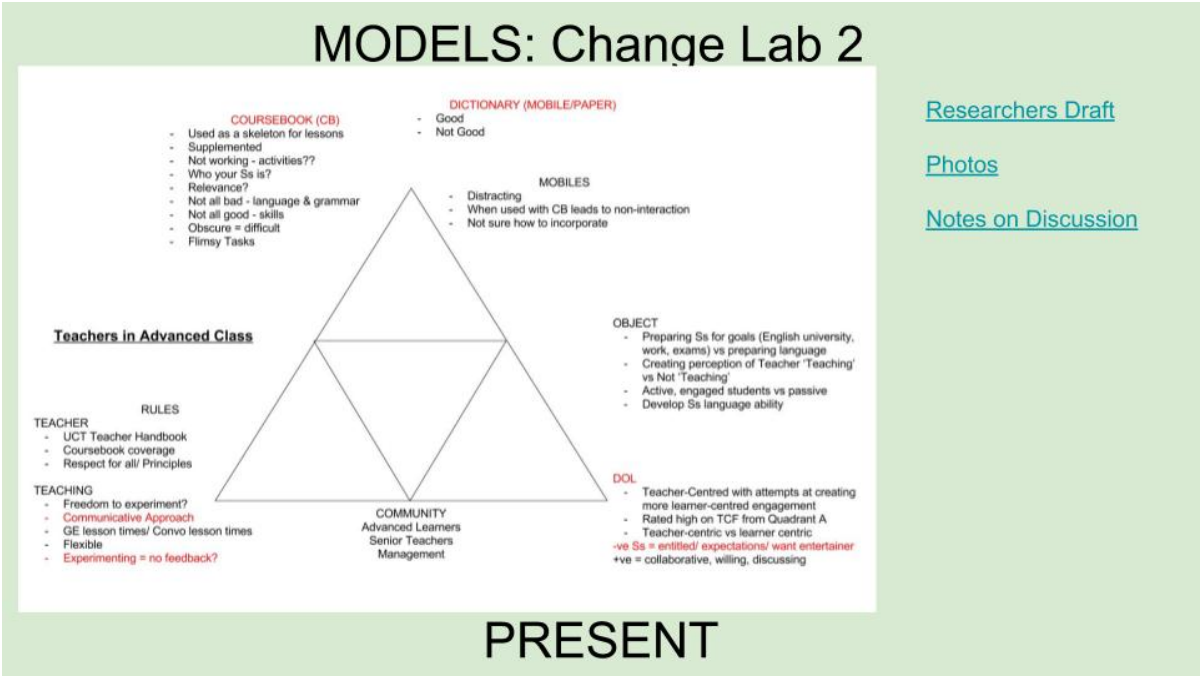
One of these areas had to do with a student expressing the need for more language and structure in lessons, to which the metaphor of 'meaty' became apparent again: "they want more meaty stuff" (John, Session 2.2). Marjorie first brought this back to expectations: "that for me goes back to what do we tell her students?". However, John reframed this, "I think it's more, like the students saying something… Feedback on this. Feedback on what they're actually gonna be producing… That's the most important piece" (Session 2.2). What is noteworthy here, is that previous discussions around 'expectations' have underscored mitigating students' expectations of what language learning entails when entering the centre – nothing has to change, except setting 'realistic' expectations of the students. In John's turn above, we see this no longer holds weight, as there seems to be firm resolve to make language learning at the centre align more with what students are expecting.

The turn to changing language teaching continued even when students' interviews brought up issues of using technology and content in the classroom. Students shared how using technology in lessons could be less "efficient" (Ned, Session 2.2) or the questions in the coursebook do not need "quick filling" (John, Session 2.2). It led to the idea that perhaps content should seek "intersecting interests" rather than "one language, one topic" as in the coursebook (Ned, Session 2.2). It even led to the idea of the mobile phone becoming a tool for the student and "the rest of the class" to learn good language examples from others if used with anonymity and "quick responses" (Marjorie, Session 2.2.).

6.3.3 Summary: The Challenges of the Communicative Approach

The aim of *actual-empirical analysis* is for participants to create a representation of their system in order to trace its conflicting intricacies (Y. Engeström & Sannino, 2012; Kramer, 2018). In our session, by redrafting the Researcher's model, teacher-participants were able to

unpack how the disruptions surrounding division of labour ('student passivity') were tied to 'communicative approach' rules of the system and how the coursebook operated as a mediator (see Figure 61). As Virkkunen & Ahonen (2011) note: "a system of representation makes the division of labour, collective creation, and collaborative thinking possible on a much broader scale" (p.232).



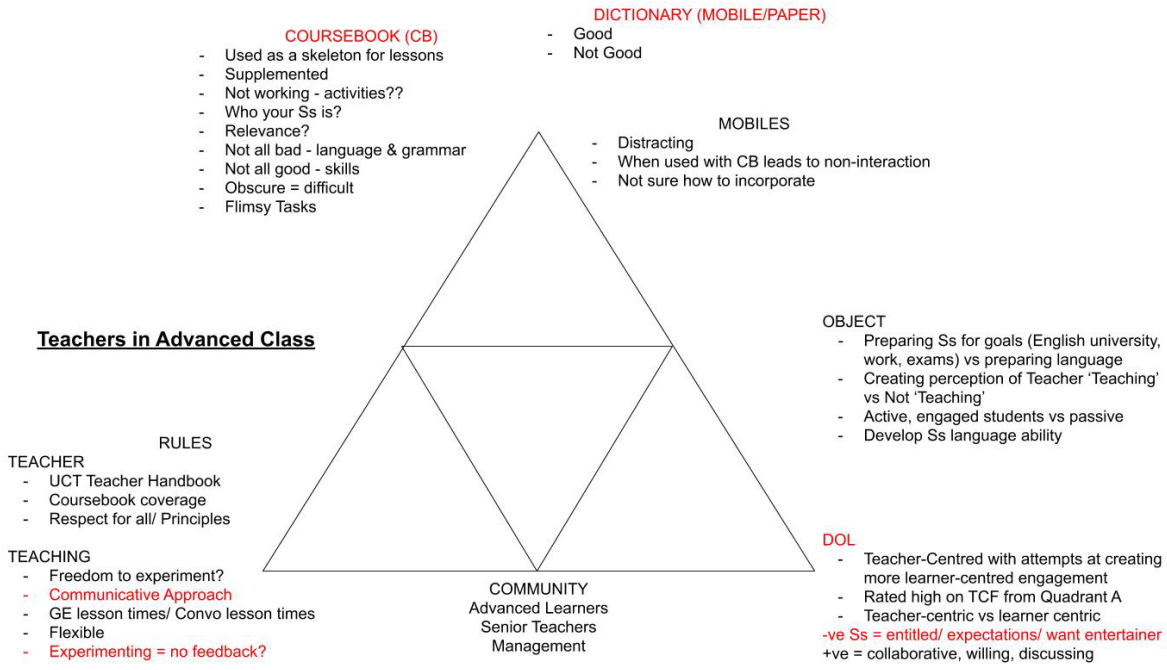


Figure 61: Re-Drafted Researcher's Model of Advanced teaching activity on 3x3 Present Models Frame

The mediation afforded by the Draft Model further enabled participants to better define the primary contradictions of the system in the commodification of the communicative approach in the classroom and how international EFL coursebooks in practice respond to the diverse needs of the students they are used to teach. This clarity can be seen in the re-drafted model (Figure 61) and how they were better able to describe the Current Challenges in the *Popplet* Task (see Figure 62 below) in line with what was brought up during the session. It is further demonstrated in the future-oriented actions that took place in the session where teacher-participants actively began reflecting on how they could positively change the 'war' or 'challenge' ways facilitating communication in the contemporary classroom were presented. This was not restricted to Session 2.2, but also the beginning of Session 3, where teachers, such as Marjorie, immediately wanted to start working with technology:

MA:	I think what's important… once we know what technology we're using and how we're using it, that's going to inform a lot about our teaching. Will inform our choice of course book and our lessons. Because if our focus is technology then that must then be the first thing we decide on […] Do you agree, or do you think that teaching should be first?
JO:	Is the technology dictating the methodology or [overtalking].
NE:	You would have thought it would be the other way around. Okay. So, I kind of see tech as a tool rather than as a […]
JO:	I mean this teaching could take a form of methodology or do you map our current teaching methodology onto tech?
WA:	I mean these are our gripes.
NE:	So maybe your aims should come first. And then you do I want to achieve this, what's the best tool for the job?

Excerpt 22: Session 3.3

The above extract also shows participants increasingly leading the session. However, Marjorie's attempts to start with technology is stopped by John and Ned, who question the usefulness of the tool coming before the aims (Session 2.2). This attempt to start from technology is a common criticism of using technology in education (see Section 2.2.4) which aligns with 'learning from' technology (Amory, 2014). Instead, Ned focuses on CHAT's perspective of technology as a tool, emphasising it is the 'aims' that should dictate rather than the technology being used.

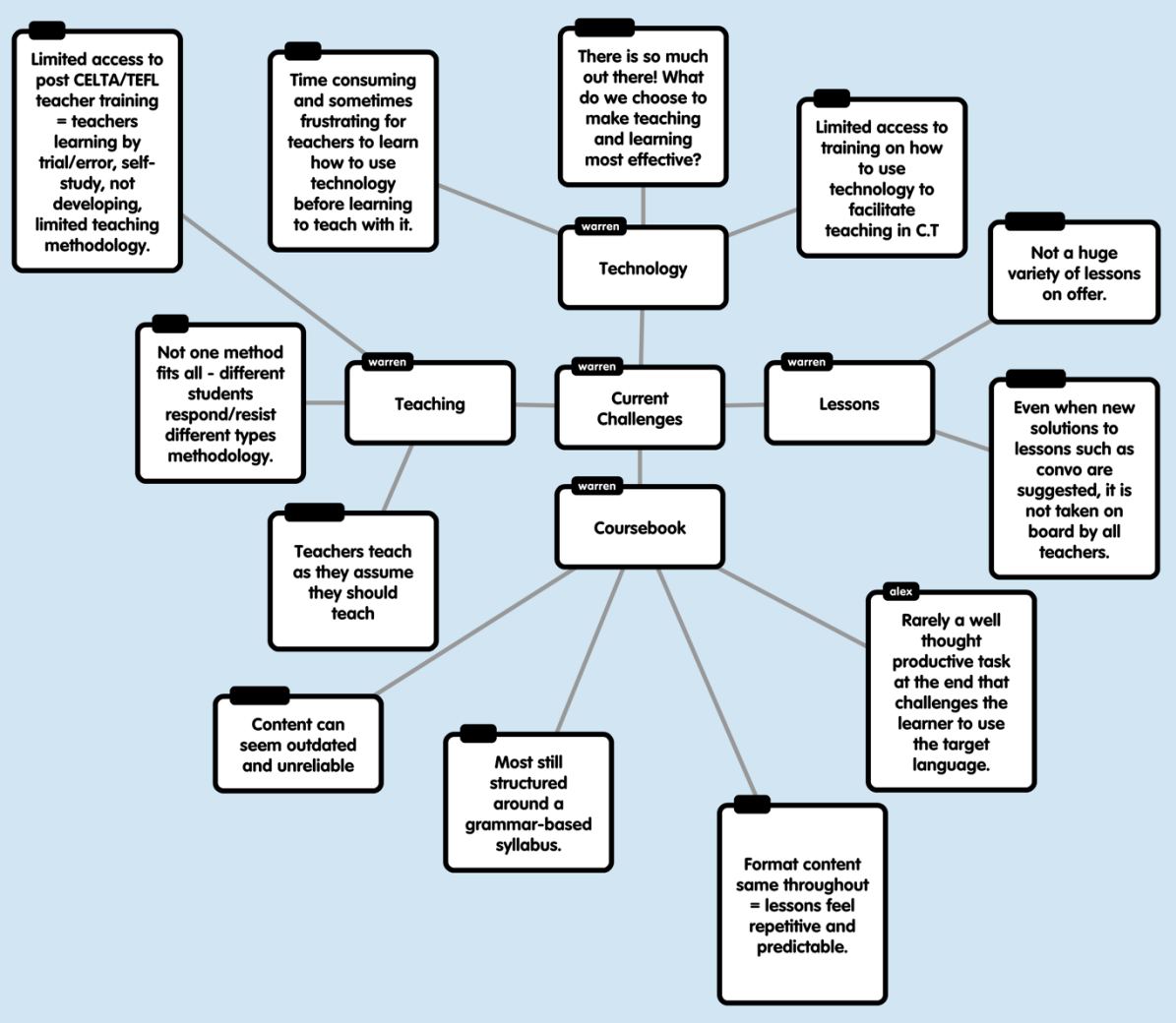


Figure 62: Completed Current Challenges Popplet Task following Session 2.2

Actual-empirical analysis emphasises how the initial object we focus on (like creating a representation of our activity), then becomes a tool that allows us to approach a more complex object (Virkkunen & Ahonen, 2011). Session 2.2. showed that this process allowed participants (and the researcher-interventionist) to come to view their current practices in an entirely new light. Armed with representations that accounted for their challenges (as they saw them) and their activity (as they understood it) I felt prepared to facilitate participants' *historic-genetic* analysis in the next session.

6.4 Session 3 to 4.1: Accounting for the Present by looking into the Past

6.4.1. Rationale for Session 3 and 4.1 development

Historical-genetic analysis is premised on tracing the root of the present challenges in order to find a theoretical concept of practice that can be used for future developmental work (Kramer,

2018; Virkkunen & Newnham, 2013). To an extent, this tracing of the systemic cause has emerged in teachers tracing the commodification of language teaching and how international EFL coursebooks have been set up. However, these are not unique to their system itself, and to do so requires participants to trace their own activity system's development.

One of the methods to enable historical-genetic reflection is 'Document Analysis'. It entails participants historically reviewing documents which pertain to the organisation's development, noting down any pertinent changes concerning: students, their activity's object and the other constituent elements of activity, as well as their current challenges (Virkkunen & Newnham, 2013). Knowing the organisation, I was well-aware that an online record of the weekly meetings that were held by management and the teachers was available, and I requested that the participants bring these, or any other documents they felt would be relevant, to Session 3 so that we could analyse them.

However, following the end of Session 2.2, I was concerned about participants' ability to access these resources and complete the task set (see Appendix 8). To moderate this, I planned to engage the participants in 'Structured Focus Group Recollection'. In this method, the researcher-interventionist engages the group in a historical recount of their activity, such as when they started with the ALC and any other prominent changes they perceived, which ultimately results in the development of a *Historical Change Matrix [HCM]* (Virkkunen & Newnham, 2013). There are important caveats when facilitating this method: the research group must be historically diverse enough to account for the activity's development over time; the researcher must not predetermine what is recounted, and the Change Matrix must occur after the joint-recount (Virkkunen & Newnham, 2013).

In reviewing my selection of teacher-participants, I had selected them due to their time with the ALC and the positions they occupied. Ned had been with the ALC from the beginning, while John had joined shortly after and was the Assistant Director of Studies. Marjorie, on the other hand, had joined earlier in the year and was involved in a recent development project at the centre. This diversity gave me a focus group which could account for the historical changes of the ALC's development from its inception to date. I also planned that during the interim period, after the session, teacher-participants would create and populate the Change Matrix of their activity, which we would then review in the forthcoming session, alongside a *Document Analysis*.

Having a ‘back-up' analysis task for the participants proved to have been the correct step to take. This is because participants arrived at the session, lamenting that the student protests and the lack of personnel at the university had hampered gaining access to the online systems (due to safety concerns) where the meeting notes and other historical documents had been stored. Moreover, the temporary venue's Wi-Fi had access issues, resulting in my iPad being the main access point for the virtual CL and 3x3 Expansive Learning Frame. I now turn to discuss the insights gained into the ALC's historical development from the ‘Structured Focus Group Recollection'.

6.4.2. Discussion of Session 3 – 4.1: Historical-Genetic Analysis

6.4.2.1 Historical-Genetic Analysis: Structured Focus Group Recollection

Even before the session started, participants knowing the focus of the session came in and opened up about the historical development of the ALC, emphasising its prior technological-use. Seeing this as a starting point, I opened the joint recollection by asking participants: "if you guys had to track over the course of time. I mean, like, what are the important things that you guys come up… You were talking about we were quite tech-based" (Session 3). Ned, having been with the ALC from the start, responded:

> right at the beginning we were all online, everything registers… and it, sort of, became more and more paper based because I think it was easier in the end just to tick a box than sort of open… (Ned, Session 3)

John expanded upon this stating that the reason for becoming more paper-based was that the centre had tried to do this on the "cheap side" (Session 3). He juxtaposed this with doing technology "properly and seriously" (Session 3). In an attempt to clarify the motivation behind this, I asked: "what was the aim of doing that really" (Warren, Session 3). Central to this method is the researcher-interventionist's ability to clarify without pre-determining the direction of participant's recollection (Virkkunen & Newnham, 2013). To which, John responded that the aim was "simplifying admin" (Session 3).

Marjorie lamented this move from ICT to paper, where she found the current practice of "writing out everything for me just seems so annoying because I don't have a record of what I've done"(Session 3). Her focus here is on the writing of lesson plans where teachers are expected to write out what they will cover over the week (see Section 4.2.3, Figure 25). Marjorie's issue with this practice is these plans "all get given back, and no one ever looks at

it, let's be honest" (Session 3). Instead, she imagines the possibility of having these plans online where teachers could easily access their lessons on their phone. Such a step for her would bypass how the centre “keep[s] reinventing the wheel” (Marjorie, Session 3).

John and Ned criticised her position. John labelled his criticism of the use of technology under "schematics and sustainability" where a person "might as well just crack out a lesson plan whilst eating our sandwich…" (Session 3). His high metaphoric use seems to hyperbolize how Marjorie’s imagined ways of working with technology do not fit with the organisation's ‘schema’ or it being ‘sustainable' in the long term. For John, it would be ridiculous to write a lesson plan while having lunch. Ned, on the other hand, criticised Marjorie's position on two fronts. Firstly, regarding digital lesson plans, as it would mean "reincorporating into something which is going back which I never do" (Session 3). By this, he meant that his way of planning does not necessarily tie in to how the lesson plan writing works out. Secondly, concerning online registers, he listed the reasons it failed: "A, nobody did it… Or B… when this [the student protests] had last year we couldn't get online… and simply because… it didn't exactly fit what was needed" (Ned, Session 3). He then provided an example of how the online registers did not match the ‘late student’ rules for entering class.

The above exchange about initial attempts to use technology contains sharp criticisms against Marjorie's proposed ways of working, highlighting a *conflictual* manifestation of the contradiction. Both John and Ned are highlighting how, in the past, the use of technology negatively impacted their abilities to manage their administrative roles (Y. Engeström & Sannino, 2011). They summarised the reasons behind this administrative impact. For John, the issue was "we chose the technology, it wasn't the right, so we just went back to paper" (Session 3). Ned's focus centred on how "people very work differently" like he does as he "will pull something [content for a lesson] and if that's the thing I use, I will go for it" (Session 3). Moreover, they both centred on the time of working online: "it's the labour of taking that lesson and…" (Ned, Session 3) "realistically, based on the 20 minutes per lesson time you get" (John, Session 3).

In their statements above, we see the expressed *conflict* coming from a variety of sources. They highlighted how technology as a tool was not always able to meet the diverse ways teachers work at the centre, nor the particular ways in which teachers' time is accounted for, or how students' attendance is tracked. Contradictions in activity systems can be just as constrictive as they are expansive (Y. Engeström, 1987; Lilley & Hardman, 2017). In this case, the

technological mediators selected were not able to meet the changing and diverse needs of the ALC activity, meaning they went back to 'what works' - paper.

Following this, I tried to garner a sense of timing of this change: "When was the tech-based online? Was it from the beginning and then when did it stop?" (Session 3). Ned recollected that the change was gradual, relating it explicitly to how the centre at the beginning "didn't have a home really" (Session 3). He described how at the start, teaching occurred in "assigned rooms" across campus that had very basic equipment, "so we wanted stuff that you could access from anywhere… so I would set up or think about a lesson I wanted to do and then whack it onto G Drive" (Session 3). The main reason behind this was printing and that the centre "had no resources" (Session 3). The change to paper came when they "had a home, so your copier is 4 metres away from the door"(Ned, Session 3).

John then followed up the failed attempt to utilise the university's Learner Management System (LMS) and *Drop Box*. Ned related the reason why the LMS system "didn't take off" due to how "it seems to lend itself more to, like, storing a whole lot of resources" (Session 3). John gave a different position, stating that the reason why was a lack of leadership: "if you're going to engrain any big change like this, you need somebody to oversee it, from the start… to stay on everyone's case" (Session 3). He expanded on this further by highlighting how staff were not always prepared to use technology, so "they just went back to what they could already do, which works and is already timesaving which was paper-based" (Session 3).

In tracing their reason for the primary use of paper-based materials, like coursebooks, participants highlighted two significant factors informing their changes. The first is time. The labour in creating/curating digital resources versus the labour it takes to use 'ready-made' resources and walk to a photocopier "4 metres away" (Ned, Session 3) is a strong motivating factor. The second revolves around how technology does not meet or does not suit the unique learning needs of the ALC where the emphasis is less on storage and more on facilitating learning in line with their approaches. Apart from this is the other emerging issue of how the use of new resources or technology is managed in an organisation, that has to cater to a diverse skillset of teachers and no clear role as to who manages training staff regarding their use. When this is not in place, participants highlighted, staff go back to what they know 'works' as they do not have the time to learn other 'time-saving' alternatives.

This issue of managing staff and time came to a head when discussing the Continuing Professional Development Programme (CPD). All previous intervention sessions have highlighted how teachers had the 'freedom to experiment' but that their experiments in teaching are never given any feedback or direction (see above & section 5.4). John related this issue clearly in his imagining of how it should be handled, where teachers would learn: "just how to use **one** thing. Everybody go try it [CPD focus] this week, give it a go and next week see what happens. And then next week they will get some feedback" (Session 3).

To see how the CPD development had developed into its current form, I asked: "has it always been that way or has it every changed?" (Session 3). Ned described how the CPD program was born out of a need for professional development. The initial strategy moving forward from the managerial team was "to wait till we [the ALC] settle a bit", but then teachers took it upon themselves to start: "why don't we just do what we can for now" (Ned, Session 3). The focus of these sessions emphasised sharing a lesson or an approach. Sessions could "be anything, it doesn't matter, just share it" (Ned, Session 3). Ned stated that this was similar to his previous language school, where, as a junior teacher he was able to "get a lot from those sessions" as there was "a big pool of experienced teachers (Session 3). John juxtaposed this in how the timings of these sessions had changed: at the beginning CPD "was more frequent", and when he had arrived it had felt "almost mandatory" where now it was "optional"(Session 3). He further emphasised the two hours of planned preparation time all teachers were allocated for the development of these sessions, but CPD sessions did not seem to be happening: "that's a bit of a shame because I think a lot of people have got an interest in things on offer that I could definitely learn from" (John, Session 3).

The issue of time and payment became a clear problem recently. Marjorie explicated that she would do more if she were getting paid for preparing it, not the actual two hours that were given for teaching the session. She asked the question: "what is in it for you?" (Session 3). This was a problem for a recent teacher who had extensively prepared for his CPD session, to which John imitated asking him: "are you getting paid for doing it? And you can spend fourteen hours on a CPD" (Session 3).

Participants' criticisms, in turn, led to a discussion of the conflict between extrinsic motivations (time and money) versus the intrinsic motivation (self-motivation) of teachers at the ALC. For Ned, this was linked to his intrinsic motivation to find direction in an industry that "is just not paying enough" (Session 3). He stated if there was a clear direction in where the ALC was

heading, he would be motivated to stay "but if it's not then you have to, sort of, be concentrating outside of what's happening here" (Ned, Session 3). The other participants agreed, referring to recent change of Director of Studies who had left due to the centre becoming "a bit too stagnant" (John, Session 3) and the inability for any upward direction: "if they're not going to offer, firstly, full-time employment and secondly, at least more hours… then it's difficult to feel motivated within that" (Marjorie, Session 3).

The above exchange demonstrates the emergence of a *critical conflict* manifestation of the contradiction. Participants are attempting to reconcile the difference between their extrinsic- and intrinsic motivation of their teaching, as well as professional development at the centre. There is an emphasis in their recounts of how 'unfair' it is, which have placed them in a 'paralytic' state: they will stay, *and* they will look elsewhere for work (Y. Engeström & Sannino, 2011). Their focus on 'time-money' and personal motivation, aligns with a negotiation over their labour-power (Daniels & Warmington, 2007) in an organisation dominated by job instability and uncertainty. This may well be why Ned discusses his first meeting with the Principal where he asked if "this [the ALC] is going to run like every other school in Cape Town where you've got a bunch of teachers on a salary and everything around that sort of just [makes sound of aeroplane going down]" (Session 3). He describes how this has not been the case "well, it has been working like that" (Session 3). John further supported Ned's position regarding the intended English for Academic Purposes (EAP) program being disregarded as "it's not lucrative and the university don't want it" (Session 3). In this sense, teachers feel their further opportunities for personal growth and job stability are overruled by the profit-incentive of the ALC and the university's aims (see Section 4.2.5).

With this in mind, 'time' then is not only a motivator concerning which mediators can be incorporated at the centre, but also a motivator for teachers in their actual labour. Teacher-participants discussed how the continuous "rolling intake" of students linked to generating profit for university meant they were "struggling with not having any breaks in-between". (Marjorie, Session 3). Ned and John could be inferring this when they respectively stated: "to me it changes the entire aim of the thing" and "that's the inflexibility again" (Session 3). Again, the generation of profit is inextricably tied to teachers' time. In turn, the contradiction between teachers' flexibility as part-time employees does not match the inflexibility of a centre that provides year-round language teaching. The recognition of this contradiction of the teacher

versus the ALC is best explicated by Ned explaining how he now works with this time, evidencing a contradictory layer of causality (Y. Engeström, 2006b):

> I guess that's why, like, so much focus is sort of going outside exactly what we do. And that's why I was quite defensive with my time. Hang on, wait this isn't for a specific purpose, and it's going to kind of…. We're in line, we're aligned, my interests and the school's interests are aligned and then I'm going, hang on, why? Because if I am going to spend the time, I am going to spend it on my goal. (Ned, Session 3)

When *critical conflict(s)* are articulated individual(s) seek resolution of the contradictions they are facing by trying to negotiate a new trajectory to overcome their expressed conflict (Y. Engeström & Sannino, 2011). For John, this realisation was on how work is done at the ALC needed to change: "these things wouldn't happen if they just stuck with one thing… and kind of, helped everybody along the way instead of saying 'off you go no' or 'you do it'" (Session 3). The conflict that has been articulated lies in how teachers bear the brunt of responsibility at the centre. In trying to negotiate a new sense of direction to overcome this, John is imagining new ways of working, which in CLs is a primary focus (Y. Engeström, 2000, 2011a). The other participants agreed, with Ned emphasising a new approach to how work is done: "I think the realisation that the first incarnation of something is probably not going to be perfect… It's fine, it can change" (Session 3) and the need to "appoint someone's who going to assist things" (Marjorie, Session 3).

At the same time, teacher-participants were also aware in their negotiation of the 'newness' of the school and its need to become more "established" (John, Session 3). One of the more recent tasks in order to set the school "aside from other schools" (John, Session 3) was further work on the afternoon EAP courses. The recent development impetus was to "[have] a G drive of materials and activity, rules, and… methodology or techniques that would make lessons more fun and energetic" (John, Session 3). However, due to the recent student protests "this has been put on hold" (John, Session 3). This turn again demonstrates how intricately teachers' work is tied to not only the centre's financial motives but also how their work is circumscribed to the same conditions of the academy. The constraint on advancing their EAP syllabus is based on the ALC's placement within the academy and its own disruptions at the time. This constriction suggests that in focussing on any further development would mean taking into consideration the ALC's placement as part of a South African higher education institution.

The other recent development teacher-participants focused on was the development of the conversation ('convo') class syllabus. It was described as "the first successful thing… that has

actually been done" (John, Session 3). Interested in participants unpacking this, I asked: "Why was it so successful" (Session 3). It led to the teacher-participants' explaining three significant reasons for its success, which I describe below.

The first revolved around its promotion of ease by using new tools: "I've enjoyed doing it because trying to get it online has been trying to unbook it one sense" (Marjorie, Session 3). The new materials at this point were all accessible in the G Drive of the ALC, but this had not stopped Marjorie thinking that this "first iteration" could not be improved upon (Session 3). As the project leader, she thought the use of "Google Docs… maybe Google sites" would be a "really good way to move all the information onto one site and everyone can access it" (Marjorie, Session 3).

The second reason for its success was how the 'convo' syllabus had been developed and initiated at the ALC. The project had emanated from CPD sessions, and the work of sourcing materials was broken down by pairing different teachers together (John, Session 3). The collaboration between teachers was seen as a crucial difference: "when you put the pre-intermediates and the intermediates teacher, we had someone to work with and collaborate… you're not just making that; you're also learning stuff from other teachers" (John, Session 3). Marjorie added to this stating how working with two other teachers had brought different opinions and ways of working to the fore: "I enjoyed working with both of them because Tyra and I think extremely differently whereas Cersei and I think similarly" (Session 3).

Lastly, teachers stated that it was how the 'convo' syllabus allowed teachers the freedom to work according to their style of teaching. Ned used the metaphor of being able to "cherry-pick" (Session 3) what he wanted to use in 'convo class'. Marjorie described this as the "whole point us to have, like literally click on your folder and boom, you've got a ton of resources that you can go "oh, that looks nice, I'll use that one" (Session 3). It was this 'flexibility' and teachers' ability to work with sourced-content in any way they like, like Ned who "was actually splicing two [convo topics]" (Session 3) that was implicitly linked to this project's success.

CLs are designed to encourage new ways of work (Y. Engeström, 2007a). In these above-stated reasons for the 'convo'-syllabus success, we see a way of working that has reoriented teachers' earlier sites of disruption in their activity. The 'convo' class has 'un-booked' the centricity coursebook at the centre to encourage the use of new tools, i.e. mediators, to enter teachers' activity. These tools have promoted freer access and flexibility for teachers to customise their

lessons as they see fit, reorienting division of labour to suit their needs. Moreover, it was how the project was initiated and conducted through the collaboration, which was highlighted. Teachers were able to work together to configure sources they felt would work well in their classrooms. All of these reasons for 'success' starkly contrast with how teacher-participants described their current activity and reflected on other less successful initiatives at the centre which focused on isolated individual projects and demonstrated a lack of flexibility in design.

In sum, if we look at participants tracing their work, there is a movement from more individually-emphasised work, where the teacher is held solely responsible, towards a more collaborative style (Y. Engeström, 2006a; Virkkunen & Newnham, 2013). The recognition of such a movement would bear important implications when *modelling* the contradiction (see Chapter 7). Furthermore, their discussion of the most development changes signalled the end of their historical recounting, and ushered in the next phase of the method – the creation of the historical matrix.

6.4.2.2 Creating the Historical Change Matrix and Teachers' Reflections

The creation of the *HCM* forms another representational mediational artefact from which participants can, both be distanced from their history, and the same time, find themselves within it (Kramer, 2018; Virkkunen & Ahonen, 2011). To this end, it is seminal that their understandings form its creation. In order to facilitate this, the researcher-interventionist must ask the research-participants to stipulate natural progressions of time in which to track the important historical developments against the nodes of the activity system (Virkkunen & Newnham, 2013). In our discussion, participants stated that five months would give them "five periods of five months very nearly" (Ned, Session 3) from which they could map their historical development (see Table 14 & Figure 63 below).

To that end, I asked participants at the end of Session 3 to find documents so we could conduct a *Document Analysis* to support our discussion from the session. However, participants described the difficulty that student disruptions had placed in terms of accessing any online documentation: "Apparently campus is off-limits because they're [student protesters] are causing shit again" (John, Session 3). The inability to access campus proved to be quite a problem for participants, as in the interim between Session 3 and Session 4 only Marjorie was able to get onto their ICT systems and retrieve two weekly meeting notes for the forthcoming session. This lack of documentation positioned me in an uneasy situation where I recognised

the need to involve participants in the construction of this representation, but having very little time to do so:

> I am also struggling to see that the teachers have done any of the tasks I have set for them. While I do deeply understand the difficulties they are facing, having the Change Matrix completed would have gone a long way to helping me plan the next session. (Warren, Researcher's Diary)

To assuage these difficulties, I decided to take a similar approach as taken in the *actual-empirical* analysis' when I presented the Researcher's Draft of teacher's activity. I extensively reviewed the video recordings of the session and began to map participants' descriptions of their history, to the best of my ability, to the *HCM*. In Session 4, my goal was to supply this to the participants and see their insights. It can be viewed below in Table 14.

Table 14: Teacher-participants' Historical Change Matrix

Time/ Period	November 2015 - January 2016 Feb 2016 - June 2016?			July 2016 - November 2016	May 2017 - September 2017	October 2017 - present
Object: Goal wanting to be accomplished	To simplify the administration of courses Move to paper-based admin over time	Collection of resources for easy to access use in class	Training for Teachers	Move to temporary premises to continue teaching	Curriculum and lessons for conversation classes	Move to temporary premises to continue teaching
Tools: Pedagogical ideas, models and teaching tools?	Technology/ apps used for administration (attendance, lessons etc.) Paper and other resources grew over time/ technology applications did not	LMS/ DropBox for course EAP Course	Teachers CPD once a month on a Friday	Book resources	Conversation Shared Curriculum/ Lesson Drive	Book resources
Community: Who was involved?	Teachers, Management	Teachers, Management, Student	Teachers, Management	Teachers, Management, Students	Teachers and Management	Teachers, Management, Students
Division of labour: new kinds of tasks, ways of teaching?	Teachers to use technology apps for administration. Difficult - no time to prepare, and unfamiliar. No clear delineation of duties Teachers working things differently, move towards traditional ways of working - comfort	Teachers to store resources online for use in class Greater links to university academic status	Teachers to produce workshops based on own time. Other teachers to come optionally.	Teachers having to move resources to temporary sites. Difficult to engage tech for teaching as lack/ restriction of Wi-Fi/ connectivity	Teachers collaborated together on the project. Saw it through till current state. Still ongoing development. Only in 1st iteration Strong emphasis on breaking down the mammoth task (500 lessons) to make the task manageable	Teachers having to move resources to temporary sites. Difficult to engage tech for teaching as lack/ restriction of WIFI/ connectivity
Rules	Little time to initiate,	Little time to initiate, little training to initiate Difficulty in becoming a part of the university	Not mandatory, but Dani could make teachers come. No pay for preparation of workshops	Continue lessons as is as much as possible in new spaces	Teachers must contribute, work together, checks in place to check status of reaching goals Flexibility in how these lessons are incorporated in instruction	Continue lessons as is as much as possible in new spaces
Other important info?	No permanent home/ establishment Cheap, not professionally implemented, didn't suit needs at the time. Gradually disappeared	Move to paper resources for learning - ease of access. No training. No plan of how to implement vision	Sessions have been reduced over time. Little reward for setting up training. Few opportunities in house for progression.	Student Disruptions	Difficulty enacting now due to student disruptions/ protests	Student Disruptions

Before Session 4, I also allowed participants to add to my draft of *HCM* by making it a virtual-collaborative document, as well as to review the weekly meeting notes that Marjorie had collected (see Figure 63). As can be seen, participants' abilities to do so before the intervention session were limited (seen in the low number of Handed-in's), as student protests and their dispersed placement around the Cape Town meant that they had extremely restricted access to wi-fi in order to complete these tasks.

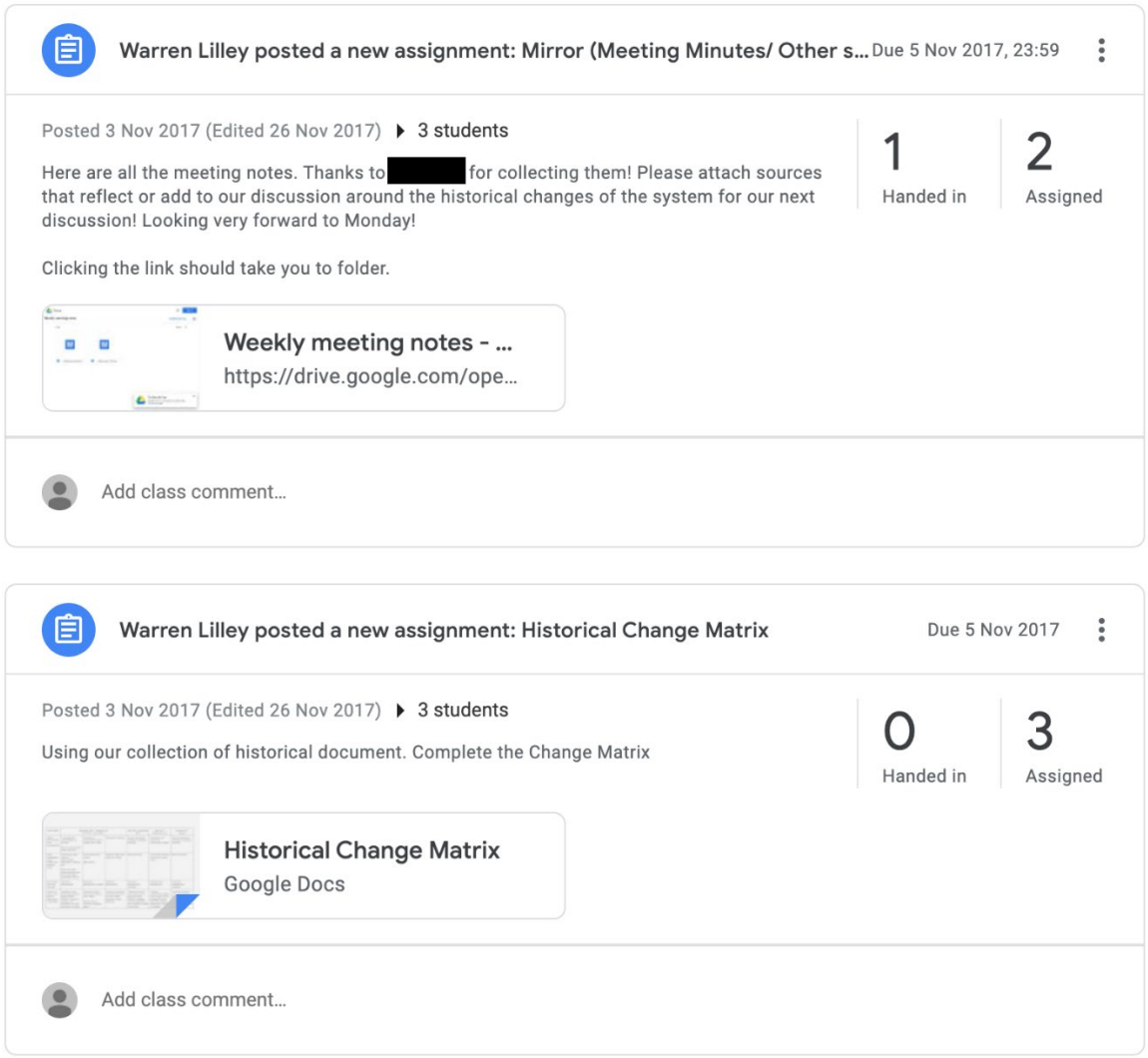


Figure 63: Collaborative Virtual Tasks set after Session 3

By having access to the virtual CL, I was able to see participants' difficulties in completing these tasks set. Seeing that, I changed my plan for the session and replaced the *Document Analysis* with a strict focus on the *HCM*. I then planned to move to modelling the contradiction between the tools and object of participants' activity to Session 4, based on insights gained from the *actual-empirical* analysis from the last session (see Appendix 9.2.3.2, Chapter 7).

In opening the session, I briefly presented my draft of the *HCM* to participants. I discussed my difficulties regarding the first 'Time/Period' in finding the exact timings, designating the issue with a '?' (see Table 14 above). I then asked participants to review the document and see "if there's anything [they] disagree[d] with [to] let me know" (Warren, Session 4). Teacher-participants made no commentary on any changes needing to be done when reviewing the Researcher's draft of the *HCM*. Seeing this as a signal to move on, I asked for participants' reflections on what the *HCM* showed about their activity's development.

The first reflection made was the resource-centredness of each period: "resources, everything has to do with deriving resources" (Ned, Session 4). Teachers also noticed that their motivation for "increased resources" was closely linked to 'sharing' them with wider the ALC 'community' (Session 4). However, they also noticed that the 'community' tied to these resources was teachers and managers while "students aren't involved at all. It says they are…" (Ned, Session 4).

Here, teacher-participants are identifying an issue with the *HCM* and perhaps their activity in general, as they see the students' placement within it problematic. They expanded on this, stating that the "type of students that [the ALC has]" move frequently "as they're off doing their own thing so there isn't enough time" (Marjorie, Session 4). Moreover, was that the students were "not a united sort of student body. It's like what you have on the day" (Ned, Session 4). In stating this, teachers are drawing attention to the issues of time with the ALC's student body. Students at the centre have different lengths of stays (see Section 3.6.1) which makes their involvement particularly challenging. This recognition illustrates that it is tough to involve students in how the centre is set up (its rules), as well as issues regarding teaching and learning time.

The issue of the ALC's rules and how it manages 'time' was seen to impact how developmental projects were handled in the past. Participants noticed that "the division of labour is very teacher-orientated" (Ned, Session 4) and that "it [projects] all starts with teachers too" (John, Session 4). This emphasis on teachers was seen to be tied "directly with the rules" (Ned, Session 4). Teachers lamented that there was "no time to initiate the project, whether it's a project, or training, or lessons, or anything like that" (Marjorie, Session 4). They described these expectations regarding time as "unrealistic" (John, Session 4) as "[they] don't have time, there's not enough slack in the system to be able to gain, to make any gains" (Ned, Session 4).

In teacher-participants' reflections of their activity's historical development, they again highlighted how ‘time’ impacts their ‘division of labour’ at the centre in terms of its development. The nature of how ‘labour-time’ is worked out for teachers at the ALC and its intricate ties to the teacher's ‘labour-product’ in teaching and further development at the centre have been a historical conflict from its inception. Marjorie states this explicitly: "it's very teacher-orientated where teachers have to use a lot of their own time to do the work. And we're not reimbursed necessarily for that but if we are its minimum" (Session 4). In this sense, teachers are placed as the ultimate source of labour for the ALC in that they must not only handle their teaching responsibilities but must also further shape the ALC's development, even if that means that their labour tied to this development is not taken into much consideration.

The student protests also featured in teacher-participants' discussion around the historical development. They emphasised that when these disruptions take place "[they] go back to what [they] know and [they] can do easily]" (Ned, Session 4). These easy resources included: "grab a book" (Ned, Session 4) or "any lesson that you've done that you can just pick up and do" (Marjorie, Session 4). The emphasis here, led to one teacher trying to fit ‘student disruptions’’ into the activity model, "I'm not sure where the disruptions would fit" (Marjorie, Session 4). However, Ned stated that this would be missing the point:

> the disruption is like an extreme time thing. It's like a, it's a sudden and extreme version of, of what's, what's carrying on all the time. Like I said, it just puts it into sharp focus for a short space of time. And we basically go back to the very, very basic things that we know we can do for a second” (Ned, Session 4).

His emphasis here on how the student disruptions condense actual practices is particularly noteworthy in terms of CHAT, in that Ned is accurately stipulating the significance of disruptions in activity systems based on their ability to show an ‘extreme’ version of actual-problematic actions in activity (Y. Engeström, 1987; Y. Engeström & Sannino, 2011). It re-emphasises how *time* impacts the division of labour of teaching at the centre, as the little time afforded to development results in teachers relying extensively on readily available resources.

6.4.3 Summary: The Contradiction between Time and Workspace

Historical-genetic analysis aims to drive to the heart of the historical motivating contradictions that have informed any system's development (Kramer, 2018; Virkkunen & Ahonen, 2011; Virkkunen & Newnham, 2013). In the teacher-participants' discussions and representation of

their system's development, the delineation of 'division of labour' resting within their role has been explicated two sources at the ALC: time and workspace.

The contradiction of time for labour has been a keystone factor, influencing the ALC system's development. Teachers must have time for teaching (actual-labour) and must have time to initiate projects to further support and develop that teaching (labour-potential) (Daniels & Warmington, 2007; Warmington, 2008), as teachers must take responsibility for creating the time in which to develop themselves and their resources that are tied with the centre's development. In an organisation where teachers work part-time, but the centre itself runs year-round; this leads to the conflict of where is there *any* time to do anything. This conflict may be why so many projects are initiated and fall-through. It may also be why teachers feel that expectations of their time and their reimbursement for it are not adequately meeting what is expected of them. Their contradiction lies in how the 'inflexible' rules of the ALC system and teachers' time is managed intensify teachers' responsibilities within the 'division of labour'. In turn, it constricts teachers' to resort to methods of instruction and selection of resources that do not require 'much' time, like coursebooks.

Moreover, it is how 'space' is concealed within the centre's historical development. Development was only initiated when the centre had found a 'home' at the university (Ned, Session 3). It was from here that drivers for further development and resources were initiated. It also bears extreme significance that the success of the 'convo' syllabus project was directly tied to finding a space in which different teachers could collaborate and work with others. In this regard, the lack of collaborative workspaces to foster development is also tied to the centre's constricted development. There simply is a lack of space in which to collaborate, again prioritising the sole individual responsibility of the part-time teacher.

To this effect, by tracking the historical-genetic reflection of the teachers' activity, two core elements of the contradiction have been identified. The time and space demands in the centre's rules teachers must comply with in order to do their expected work both drive the heavy-emphasis on division of labour, and the use of 'easy-to-use' and 'quickly-obtainable' resources.

6.5 Summary: The War within the Communicative Language Classroom

This chapter has been concerned with participants' *analysis* actions in uncovering the deeper motivators for the problematic aspects of their activity and their origins noted during the *questioning* phase (Sannino, Engeström, & Lemos, 2016; Virkkunen & Newnham, 2013). In

reference to the design of a blended CL (RQ 1.2.), this section showcases how technological tools can be leveraged as tasks to aid participants' analysis actions, especially in research sites that experience disruption.

In light of RQ 1.1 and 1.3, which focus on the emergence of contradictions and how teacher-participants draw upon them, they have uncovered that their time and workplace demands have historically constricted most of their efforts to develop resources and teaching at the centre. Added to this is the realisation that this constriction of methods and resources in the classroom is neither achieving the communication they wish, nor adequately catering to the needs of the 21st-century language student. In effect, they are locked within a cycle where the contradictory aspects of their activity, including their historical antecedents, further inform and perpetuate the contradictions of their actual practice of not meeting students' language learning needs.

In analysing participants' learning actions, we see that the majority of the discursive articulations have emerged as *critical conflicts*. These manifestations are central to tracking their development over this phase of the CL, as the conflicting motives that drive their activity are becoming increasingly recognised (Y. Engeström & Sannino, 2011). This has been seen in how teacher-participants' identification of secondary contradictions between 'division of labour', the 'mediator' and 'rules' of their activity have emanated from a common contradiction found within an inflexible system and a language teaching approach that does not meet the needs of 21st-century language students.

However, there are lingering questions in their actions up to this point. Firstly, participants' have not been able to express this contradiction in its purest form, which is the aim of *theoretical-genetic* reflection (Virkkunen & Ahonen, 2011). Furthermore, questions revolving around the communicative approach as being student-centred have not been appropriately answered, nor has the issue of labour-power been adequately explored. In the next section, I discuss how I attempted to facilitate participants' actions towards answering these questions for themselves.

Chapter 7: Modelling Systemic Causes for Solutions

Cultivating a new Model for Teaching Advanced Language Students

"…there's no point in technology unless it fundamentally changes something" (Ned, Session 5.1)

7.1 Introduction

Over the last two chapters, I have discursively traced participants' manifestations of the disruptive elements in teaching Advanced language students. Their initial *dilemmas* and *conflicts* focused on their teaching (division of labour), the resources they use (mediators) and the communicative approach (rules) in language teaching. In further analysing these sites, participants were equipped to articulate, with clarity, the conflicting motivations behind these disruptions resulting from the commodification of the TEFL industry, as well as the time-and-space demands placed upon them in the ALC's placement within the university. These *critical conflicts* not only described the competing motivations behind their teaching practice, but also showed the reverberating impacts of these contradictory motivations around the constituent elements of their activity system. At the same time, teacher-participants were also able to envision a myriad of novel ways to transform their practice (see Chapter 5 & 6).

However, there are still issues in the evolution of teacher-participants' discursive manifestations of the contradiction at this point. Firstly, several lingering questions have not been adequately unpacked. For instance, is the communicative approach (CLT) the same as the student-centred approach? Or, what are the external and internal motivations that lie behind Advanced students entering the ALC classroom? These types of questions tie in with the issue of participants' discussions still lacking a distinct discursive manifestation of the *double-bind* they face (Y. Engeström, 1987; Y. Engeström & Sannino, 2011). In other words, participants' discourse still lacks a clear identification of their experienced contradiction to guide further intervention work within CL sessions (Virkkunen & Newnham, 2013).

This part of my analysis focuses on my attempts to further facilitate a formative line of inquiry that would enable participants to direct their volitional actions more clearly. It describes our work in practically *modelling* their articulated contradiction sites with appropriate secondary stimuli (Sannino, 2015) to further our developmental work. In turn, my analysis work shifts slightly in this chapter. It moves to account for how participants drew on the historically evolving discourse of their contradiction to expand their learning actions, and in this way find

pathways towards overcoming it. Consequently, it highlights less of 'how' these contradictions emerged (as in previous chapters) but 'how' the contradiction became more clearly articulated in participants' discourse, and informed their construction of a future pedagogical model. Below, I describe the first part of this complex task, further modelling the contradiction.

7.2 Building upon Theoretical-Genetic Analysis to *Further Model* the Contradiction

Theoretical-genetic analysis relies on two underlying forms of analysis. *Actual-empirical* analysis aims to elucidate current cultural practices, while *historical-genetic* analysis aims to uncover their historical antecedents (Kramer, 2018). These analyses, drawn from the cultural and historical strands of CHAT, aim to elucidate the simplest form of the contradiction i.e. the 'germ-cell' (Virkkunen & Ahonen, 2011). As stated in the previous chapter, the representational work conducted in both these analyses expedited much clearer insight into contradictory motives and secondary contradictions involved within participants' activity.

However, while an approach towards the 'germ-cell' can be seen in teacher-participants' articulations surrounding the contradictory motives drawn from the commodification of TEFL and rules of the ALC, it still remains highly abstracted. This is not new to CL interventions. The complexity in generating a 'germ cell' and expanding this most simple concept into a new form of activity is seen as the most daunting task in interventions; one that cannot always be approached within one formative intervention (Sannino & Engeström, 2017).

Intertwined within this complexity, is the transitory role that secondary stimuli, drawn from *theoretical-genetic* analysis, play in facilitating the generation of the 'germ cell' or auxiliary motive (Sannino, 2015; Sannino & Engeström, 2017). To do so, secondary stimuli must be appropriated or aligned with the first 'problem' stimuli in order to produce this transition (Sannino, 2015). Added to that is the necessity that this transitional effect is done through a 'series' of secondary stimuli (Lund & Rasmussen, 2008). The *actual-empirical* and *historical-genetic* analyses in the previous sessions did not serve as endpoints, conversely, they triggered further questions, fostering points of inquiry that require additional modelling and analytical work (see Section 6.5). This type of work is seminal in the creation of the new model, as its development:

> calls for many complementary levels of design and representation… a new kind of action has to be developed as well as a related new tool, new principle of the division of labour, and new collaborative relationships… a new rule that makes the new action possible. (Engeström, Pasanen, Toiviainen, & Haavisto, 2006 as cited by Virkkunen & Newnham, 2013, p. 96)

To realise such a level of design and representation, I drew upon *further* transitional-secondary mediational artefacts along with each CHAT construct of tool, division of labour and rule in this stage of the intervention. Below I describe how transitional artefacts further *modelled* the specific contradiction which, in turn, helped to cultivate teacher-participants' ideation of a new model as well as the systemic causes which needed to be overcome.

7.2.1 Modelling the Object-Tool Contradiction: External & Internal Motivations

7.2.1.1 Rationale: The Problem of an 'Externally-based' Language Teaching

The primacy of the coursebook in teaching has been a focal point of participants' discussion throughout the CL intervention. Participants have highlighted that its placement as a mediator is problematic on several fronts. Firstly, teacher-participants emphasised that the coursebook played an integral role in their experience of students' passivity in the classroom which resulted in their need to 'entertain' their 'disinterested' students in classes (see Section 6.3.2.3). They linked students' non-participation to how coursebook-content inappropriately met the needs of an extremely diverse group of students, with their own goals and cultural-values (see Section 6.3). In addition, they linked students' disinterest to the tasks contained within coursebooks, noting that the tasks lacked any substantial work to make them 'meaty' enough for teachers to do any 'real' language work (see Section 6.3.2.4). In other words, what is driving teacher-participants' internal motivations for their teacher-centric lessons is linked to the inappropriateness of the coursebook's qualities. In this sense, according to the teacher-participants, the coursebook's 'use-value' as a mediator in its construction is negatively impacting its 'value-in-exchange' in the communicative language classroom.

Teacher-participants' second issue with the coursebook lies in its actual placement within the ALC. The coursebook itself has been centralised as both content and test advocating a position where teachers must 'teach-for-the-test' (see Section 6.3.2.4). Teacher-participants also emphasised that their use of the coursebook is also strongly linked to time and space (see Section 6.4.3). The ease and accessibility of the coursebook in a work environment where time is a precious commodity, meant that teachers gravitate towards what is readily available.

Moreover, students come to the centre expecting the use of the coursebook (see Section 6.4.3). These motivations for coursebook-use stemming from the ALC centre itself, as well as the students are external drivers that reinforce the primacy of the coursebook in its mediational role. What is more, the coursebook is primed to be an external instigator of activity as mastering its content and passing its tests evidence further progression towards the object of developing students' communicative abilities in English.

As it so far stands, teachers' discursive manifestations of the contradiction located the centricity of the coursebook in their activity as a critical factor in the disruptions they experience in their classrooms. Much of this disruptive potential has been allocated to the external elements of the coursebook: its inappropriate construction, its centricity as both mediator (what is to be taught) and assessor (how much has been grasped) towards the object (mastery of English). This appears to emphasize teaching that is motivated by external elements to facilitate instruction rather than fostering methods to promote internal motivation.

What is still unclear are the internal factors of teachers' activity that may be motivating the problematic activity teachers experience with coursebook use. To find more clarity, I needed teacher-participants to hone in on this aspect of the contradiction. To do so, I needed to find an appropriate transitional secondary-stimuli that could facilitate their ability to see the external and internal elements which drive their activity in a new light (Virkkunen & Ahonen, 2011). In short, establishing clarity craved a representational means that could allow them to illustrate how internal and external motivations drive the learning in their activity and the tools used to achieve it.

Y. Engeström's (1994) diagram of productive learning is such a model (see Figure 67 below). Drawn from early CHAT and DWR research, it provides a holistic overview of the external and internal factors that enable and motivate effective instruction (Y. Engeström, 1994). In relying on teachers to represent their own activity by using this model, I hoped to elucidate, for both participants and myself, a better understanding of the conflicting motives that drove the contradiction they were experiencing in their practice. By doing so, I aimed to facilitate participants' identification of the conflict of motives that would help direct their volitional actions towards an auxiliary motive (Sannino, 2015).

7.2.1.2 Discussion: Analysis with Y. Engeström's (1994) Diagram of Productive Learning

The transitional nature of secondary stimuli requires the effective mediation of the 'problem's' first stimulus (Kramer, 2018; Sannino, 2015). At this point in the intervention, there was a noticeable gap in the teacher- participants' exposure to the mirror data which captured this first 'disruptive' stimuli. To remind participants and further align their modelling work within a task principled on double stimulation (Y. Engeström, 2007b), I created a slide on the virtual 3x3 Frame which included excerpts from each of the three student interviews reviewed in Session 3 (see Figure 64).

Both excerpts A and B were focal points of the teacher- participants' previous discussions around the problematic role of the coursebook in their activity (see Section 6.3.2). Excerpt C, on the other hand, was drawn from the third student interview (see Appendix 9.1.3.9). I included it on the slide as it provided an example of Session 3 teacher-participants' discussions revolving around how the coursebook and their teaching did not always meet individual students' needs (see Section 6.3).

In Session 4, I directed teachers to access the slide below (Figure 64) on the virtual 3x3 Expansive Learning Frame via their mobile devices. Before the session I had used the venue's whiteboard to redraw the Re-drafted model of Teacher's Activity, intending its placement to operate as a Model of Present Practice (see Figure 65) for this part of the session.

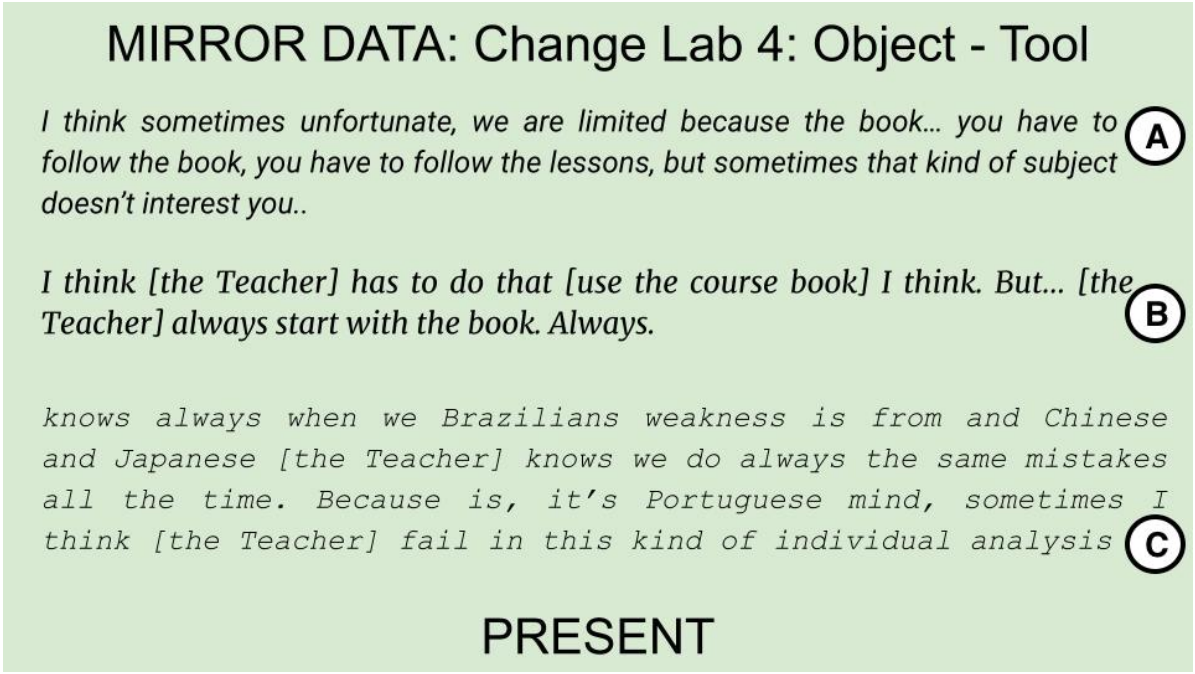


Figure 64: Object-Tool Mirror Data Slide on Virtual 3x3 Expansive Learning Frame

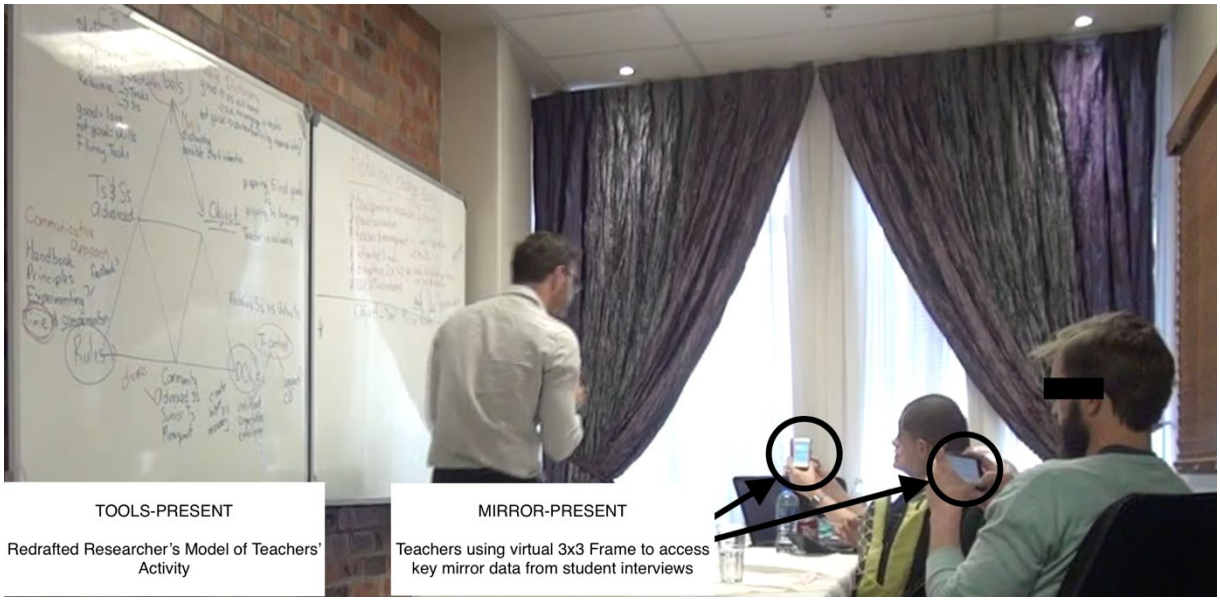


Figure 65: Researcher-Interventionist and participants using whiteboard and access to virtual artefacts

Reviewing the mirror data alongside the Re-drafted Model of their activity led to restatements of the external drivers of their activity (see Appendix 9.2.3.3). These included the impact of time ("the time allowance makes us bound to the book" [Ned]), the issue of coursebooks containing uninteresting topics ("there'll be one subject…that just grabs the interest of everybody" [John]) and meeting students' expectations of coursebook use ("they expect that we use the book…" [Marjorie])". However, this re-exposure led Ned to the realisation that in their activity "[teachers were] actually doing three things" (Session 4). He surmised that within their instruction, teachers focused on content, the language aim or function and a "kind of meta-awareness" in their lessons (Session 4). It led him to question the place of topic or content in the textbook: "so like a stale topic doesn't really affect the language aim or the meta-awareness itself?" (Session 4).

To this, both Marjorie and John objected. Both provided examples of how content *did* matter, with John's instance being most pertinent to this discussion. He reflected on a recently developed lesson on sports science: "that was the content. And then you've got people who are like chemists, and like a physicist…. It doesn't apply to them. I mean the language goal was there" (John, Session 4). Following this, the impracticality of the coursebook content for language instruction was further reflected upon with teachers lamenting: a) how it would always be "out of date" (John, Session 4) due to nature of print publication; b) the need for 'safe' internationally appropriate topics as "everybody [every student] can talk about food"

(John, Session 4) and c) that there were vast discrepancies as some "students [have] a narrow general knowledge" (Marjorie, Session 4).

In their reorientation towards first stimuli, teachers have captured a collective sense of 'helplessness' in light of their coursebook-orientated activity. In their teaching activity, they are caught within a system that demands its use, but as their discussion shows, how a coursebook is constructed and operates within the classroom results in a pedagogy where even the language goal can still remain out of reach. Y. Engeström & Sannino (2011) would describe this shared discursive 'helplessness' as a *double bind* manifestation of the contradiction, as teachers recognise themselves facing both their need to use the coursebook and their inability to move away from it.

Participants' following turns further reinforced this, as when *double-binds* discursively manifest, participants begin to look for practical resolutions (Y. Engeström & Sannino, 2011):

NE: I mean, in a way we're going about this ass about face. Like if, if we attracted students that were here because of what we're doing not that we were doing things for the students it would be different. So, I mean, and 'THE UNIVERSITY' possibly is in the unlucky position where it could possibly go there like. So, you, you say, right, you're doing the EAP course with 'UNIVERSITY' contents in, you know, in Africa in contextualising that. People come there for that…Then you, then you gotta know much, much more [unclear] chance.

WA: So they, because they get here doing what they want...

NE: Yes, they've chosen this because of the content and because we did give other, all three so well.

JO: Yeah.

MA: But you were saying with the lit course, if you just offered a literature course where you can actually just teach language through literature and you did a similar thing. You take a, sort of, a list of, um, materials that 'THE UNIVERSITY' in each department uses, for example, first year and you go with that, I mean, that would be phenomenal. Because then we're offering what 'THE UNIVERSITY' is offering, you know, in-line with their...

NE: Yeah, and, yeah, and then also you, kind of, have the least sanctioned content [inaudible, laughter]. Anyway...

JO: But then, I think, somewhere you've got to find a healthy in-between between content and language because, obviously, most, most content expertise [unclear] to have a high frequency of the target language in there. And obviously to be accessible to the level which are: listening to it, reading it as well.

Excerpt 23: Session 4

The above practical resolution, given rather ineloquently by Ned, involved inversing how language teaching is done at the centre where "[they are] going about [teaching] ass about face" (Ned, Session 4). It would involve an Advanced language pedagogy that drew students to enrol from what is done in the class, rather than what is currently done in meeting students' expectations, and a language course which would draw upon the centre's unique position within the university and its "contents in… Africa… in contextualising that" (Ned, Session 4). In a nutshell, a course which focused on content, language aim/ function and meta-awareness and would be "in-line with" the academic institution (Marjorie, Session 4). A course not entirely based on "sanctioned content" like a coursebook as in their current activity, but a course which drew upon coursebook in "the least" amount (Ned, Session 4). Practical resolutions regarding *double-binds* are discursively filled with linguistic cues which signal a group collaboration ('we') and future-orientation ('we must', 'let us do') (Y. Engeström & Sannino, 2011). We see these linguistic cues throughout participants' turns above, most notably an emphasis on this resolution that it would, at least, give teachers "a chance" (Ned, Session 4) to overcome the contradictory aspects of their pedagogy with international coursebooks.

At the same time, in these posed future-orientated directions teachers also imagined possible issues, such as John when he warns of the need to 'balance' content and language function with 'accessibility' to the material (Session 4). He further noted the 'time' aspect, pointing briefly to the Re-drafted Model of their activity, stating "that impacts the time thing" (see Figure 66 below) but that the time demands of curating such content in their current system's formulation would make "the textbook [come] back" (Session 4).

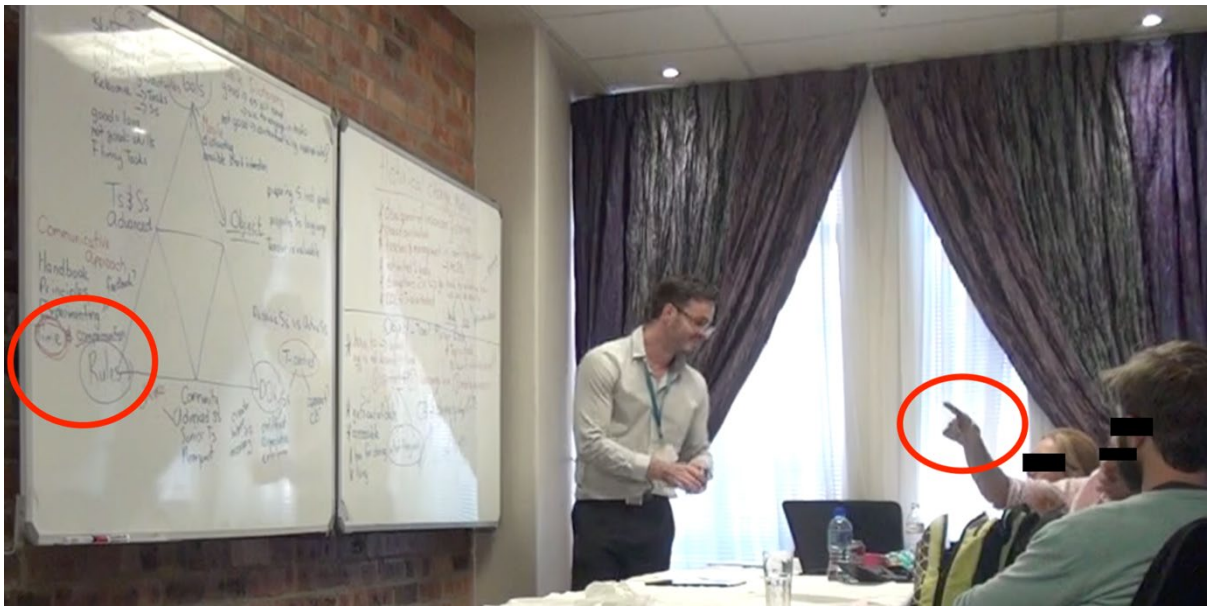


Figure 66: John drawing upon the Re-drafted Model to discuss the issue of 'time' in relation to

John's turn signals an imagined tertiary contradiction where the new proposed teaching model conflicts with 'time' rules of the current system (Y. Engeström, 2000, 2011b). Moreover, participants moved towards their experiences of EAP classes where passing the English language test prompted students to engage with content despite it not interesting them. John provided the example of an EAP student who found the topic of manufacturing uninteresting "but [the students] still, obviously, went through it and took it apart because the objective was to do the questions" (John, Session 4).

John's example prompted Ned to state: "So, your content then is not the motivation, it's the exam, at the moment?" (Session 4). This turn proved interesting on two fronts. Firstly, we again see an intervention-participant taking greater autonomy within the session: Ned is directing the discussion. Moreover, participants have moved onto the question of motivation. Seeing this as a perfect opportunity to focus our discussion on internal and external motivations, I introduced the transitional-secondary stimulus, Y. Engeström's (1994) model of productive learning diagram (see Figure 67 below).

Diagram 1: The external and internal factors in teaching (1)

External factors (means by which students' observable behaviour and situation are controlled)	**Internal factors** (means by which students' mental work is guided)
Instructional objectives	
desired observable performances described in the form of behavioural objectives	contents to be mastered, described in the form of cognitive objectives, or orientation bases of performances
Study motivation	
stimuli, rewards and punishments to keep the attention of the students	students' interest in the subject matter awakened through intellectual confrontation and cognitive conflict
Choice of teaching content	
ready-made facts and performance schemes	models, principles, systems of ideas, and modes of discourse
Methods of teaching	
variable forms of teaching; entertainment; maintenance of momentary alertness; assurance of students' external activeness	stepwise realization of an entire cycle of learning by means of complete instructional treatment
Output of planning	
time schedule, lecture outline, transparencies	curriculum for a thematic unit of instruction, explaining the progress of teaching from the viewpoint of learning
The instructor in the teaching situation (teaching skills)	
presentation skills; command of immediate social interaction; organizational skills; audiovisual techniques	command of the content of the subject matter; flexible reliance on the curriculum; instructor's ethics

Figure 67: Y. Engeström's (1994) Diagram of external and internal factors of productive learning (p. 10)

The diagram sees effective instruction built upon six factors (see above) that can be either externally or internally based for students (Y. Engeström, 1994). Concerning 'external', Y. Engeström (1994), highlights these as observable actions or behaviours, while 'internal' refers to inner processes, such as sense-making, that direct students in their instruction. At the core of the model is that most instruction is externally-based, and in order for *productive* learning to occur, teachers need to move towards an internally-based pedagogy which exploits external factors to heighten students' internal motivation (Y. Engeström, 1994).

After introducing the diagram, I allowed participants to review. Almost immediately, participants reacted strongly to orientating their pedagogy towards internal factors, such as when Ned stated: "I would always cope going more that way [internal factors]" (Session, 4). Teachers were also quick to outline 'communicative skill' development as the desired external performance, and the choice of content being based upon the coursebook (Session, 4). However, they struggled to identify internal factors which would motivate students towards language learning. For instance, when discussing 'instructional objectives' participants highlighted how "[they] have to… to a huge degree, teach to the test" (Marjorie, Session 4) and that the problem of internal factors for Advanced students was that "there's nothing else to aim for" (John, Session 4).

The difficulty of expressing internal factors was further seen to concern 'content'. Instead of giving examples of internal factors from current practice, participants strongly emphasised ideal future-orientated actions for students, such as getting them to "actually appreciate English… to be able to enjoy it to the fullest" (John, Session 4), which would come from lessons that would inspire debate, negotiation and an emphasis on tasks (Session 4, see Figure 68 below). The inability to achieve this ideal was related to how the external factors, such as planning and the coursebook, negatively impacted their ability to be creative:

NE: Yeah but, but, I mean, won't the… a lot of planning, is actually not spent doing that. It's, it's spent doing a layout. [Inaudible]

JO: Otherwise don't bother. it's not spent creating amazing task-based lessons. It's spent filling out boxes, replying and even never actually follow up, [laughter], just so [the Principal] can go "good".

MA: What I find so frustrating with communication over good, um, convo classes was that we still had the same template but, um, the teachers are so used to exactly that. We just write the page and everything on that, that trying to change that whole up mindset it would be much better, I think.

Because if had the folders under your seat, then each folder becomes a day. You don't have necessarily to plan or write it down. You just use folder one, folder two, you know what I mean. So, there's five folders under each topic, every folder you can use in a day or you can swap them around.

To make it a little bit more, um, in terms with the teacher, I think, um, at the end of the day we go back to planning. And at the moment you get that plan in front of you and takes away all your creativity flies out the window and you just stick to what do.

JO: Three things you said, coursework, creativity and goes out the window.

Excerpt 24: Session, 4

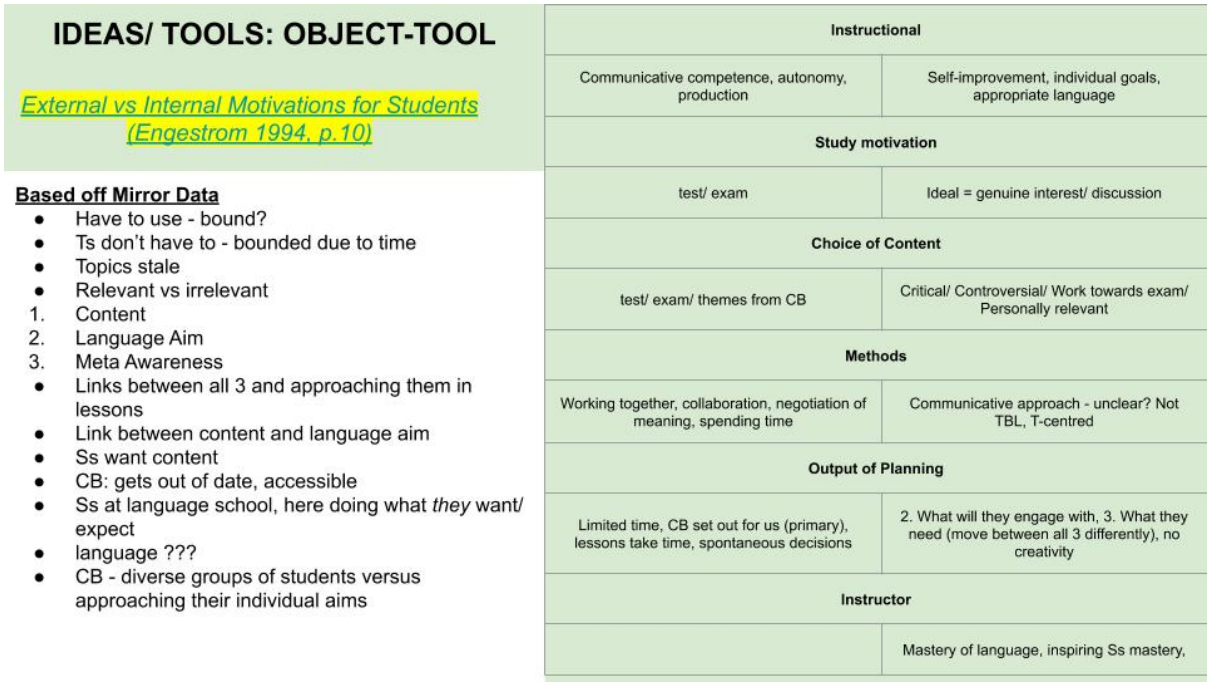
As can be seen above, planning for Advanced lessons is tightly controlled by two mechanisms: the limited time teachers have to plan and the focus on the coursebook. It is exemplified in Ned's actual lesson plan where the aims and procedures are directly related to coursebook unit numbers, and the procedure is almost bare (see Figure 25). The plan's purpose is linked to demonstrating to the Principal that lessons are being done as well as aid "somebody [who] has to do the lesson with five minutes notice" (John, Session 4). In this, participants have further identified the strong external locus of planning in their activity. Planning operates as a means to demonstrate work and overcome the limited 'time' teachers have to do lessons, not to inspire students' desire for improved proficiency and enjoyment of English.

As the discussion continued, teacher-participants were able to expand upon their reasons for relying on the coursebook. John related the difficulty teachers experienced in planning their own lessons was knowing "exactly what to teach" an Advanced student (Session 4). This difficulty stood in direct contrast to the 'easiness' of the coursebook that could show teachers what they needed to teach and would not carry any of the risks of teacher-designed lessons which could "sometimes go wrong" (John, Session 4). In effect, as with most other initiatives

at the centre (see Section 6.4.2), the drive for curating unique lessons was primarily "driven to the teacher to produce the kind of stuff we're [they were] talking [about]" (John, Session 4).

To this end, participants' use of Y. Engeström's (1994) model of *productive* learning diagram led them to a realisation that their teaching activity was highly externalised (see Figure 68 below). Their discussions and mapping using the diagram have highlighted how their communicative focus, coursebook use, 'teaching-for-the-test' and planning have facilitated a learning environment where language learning is fixated more on what or how learning is exchanged rather than its actual intrinsic use-value for the students (Y. Engeström, 1994). Reviewing participants' discourse so far, suggested they might be caught up in a cyclical relationship where the external primacy of the coursebook and limited time further constrict and entrench the narrowing of their language teaching object.

At the same time, teacher-participants' discussions found space to imagine what internal factors they would like to imbue within their classroom. They discussed changes in planning and re-orientating language teaching. In fact, the internal column of their diagram of productive learning represents the idealised instruction they wanted in their teaching: a teaching which facilitates working more towards students' individual needs than teaching for a test.



IDEAS/ TOOLS: OBJECT-TOOL

External vs Internal Motivations for Students (Engestrom 1994, p.10)

Based off Mirror Data

- Have to use - bound?
- Ts don't have to - bounded due to time
- Topics stale
- Relevant vs irrelevant

1. Content
2. Language Aim
3. Meta Awareness

- Links between all 3 and approaching them in lessons
- Link between content and language aim
- Ss want content
- CB: gets out of date, accessible
- Ss at language school, here doing what *they* want/ expect
- language ???
- CB - diverse groups of students versus approaching their individual aims

Instructional	
Communicative competence, autonomy, production	Self-improvement, individual goals, appropriate language
Study motivation	
test/ exam	Ideal = genuine interest/ discussion
Choice of Content	
test/ exam/ themes from CB	Critical/ Controversial/ Work towards exam/ Personally relevant
Methods	
Working together, collaboration, negotiation of meaning, spending time	Communicative approach - unclear? Not TBL, T-centred
Output of Planning	
Limited time, CB set out for us (primary), lessons take time, spontaneous decisions	2. What will they engage with, 3. What they need (move between all 3 differently), no creativity
Instructor	
	Mastery of language, inspiring Ss mastery,

Figure 68: Ideas/Tools End of Session Notes on virtual 3x3 Expansive Learning Frame

Their use of the diagram resulted in teacher-participants being more lucid when describing the contradiction impacting their teaching. This clarity can be seen when Ned responded to the

problem of planning around the coursebook, stating: "We focus on teaching on a lesson. We should focus on teaching a student" (Session 4). His insight was underpinned by the recognition of "the coursebook as our [their] nexus, say it's our only tool. Then our [objective] will be a very general objective" (Marjorie, Session 4). In stating this, participants discussed how an 'opening up' of resources could "[cater] for more of a diversity of students. And more or different approaches" (Marjorie, Session 4). In effect leading towards a possible internal auxiliary motive for instruction which would be linked to "inspiring mastery rather than teaching a lesson" (Ned, Session 4).

7.2.2 Modelling the Object-Division of Labour Contradiction: Power in the classroom

7.2.2.1 Rationale: Accounting for the 'blended' intricacies of Teacher-Centricity

Alongside coursebook use, teacher-centricity within division of labour was a focal point of teacher-participants' discourse throughout the intervention. While part of this centricity has been linked to the coursebook, there were also links drawn to students' expectations that teachers need to handle the 'language product' of lessons (see Section 6.3.2.3). In our *historical-genetic* analysis, teacher-practitioners also took it hard that all past projects and work needed to come from them, centring their role within division-of-labour which was directly tied to the time and space demands of their activity (see Section 6.4.2).

In short, students, resources, and the rules of their activity system were all implicated in furthering the asymmetrical division of labour in teachers' roles within their classrooms. Given that these were all problematic aspects of their practice, I needed to find a transitional-secondary mediator which could account for all of these in the construction of power relations in the classroom, as all transitional-secondary stimuli must align to the 'problem' stimulus (Sannino, 2015). However, I found no analytical frames which sufficiently accounted for the diverse ways teachers drew on both technological (mobile phones) and semiotic (coursebook and language) resources in the classroom, nor how rules and students were caught up in teacher-participants 'mirror-data' 'lessons (see Chapter 4).

To overcome this, I adapted Frohberg et al.'s (2009) evaluative framework for m-learning studies. Their framework is underpinned by a recent elaboration of CHAT, the Task Model (Taylor et al., 2006) and was based on 102 m-learning projects (Frohberg et al., 2009). The strength of the original framework is how it evaluates teaching on a continuum of 1 to 5 upon all of the Task Model's constructs, with '1' evidencing more traditional, didactic teaching and

'5' emphasizing more constructivist learning (Naismith, Lonsdale, Vavoula, & Sharples, 2004).

However, the original framework does not account for the interplay between the semiotic and the technological activity planes of the Task Model. For instance, all 'mirror data' lessons evidenced both mobile phones and coursebooks to different extents in their lessons (see Appendix 7). Given that different tools engender different subject positionings (D. H. Hill & Cole, 1995) and purposes (Foot, 2014; Thorne & Payne, 2005), the need to account for this 'blend' of the technological and semantic spaces of the Task Model/ CHAT is needed if any insight into how power is organised within contemporary language classrooms is to be gained.

To this end, my adaption (Figure 69) embraces both the parallel technological and semantic planes of activity. For example, 'control' on the technological plane may stress the need for 'full teacher control'/ '1' when a teacher introduces a new mobile application for students to use in the classroom, while 'division of labour' on the semantic plane may emphasize 'mainly learner control'/ '5' when students have to use their learnings from that mobile application to produce a specific text. I see the interplay between these different facets along the parallel technological and semantic planes of activity as seminal in understanding the construction of power relations in a 'blended' language classroom (see Appendix 1 for a detailed discussion).

	Restrictive			Expansive	
Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules* Communication *Division of Labour*	*Technological* Full Teacher Control *Semiotic* *Technological* Isolated *Semiotic*	*Technological* Mainly Teacher Control *Semiotic* *Technological* Loose Couples *Semiotic*	*Technological* Scaffolded *Semiotic* *Technological* Tight Couples *Semiotic*	*Technological* Mainly Learner Control *Semiotic* *Technological* Communication within Groups *Semiotic*	*Technological* Full Learner Control *Semiotic* *Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

Figure 69: Lilley's (2019) Adaption of Frohberg, Goth and Schwabe's (2013) evaluative framework

Participants' discussions about the intervention highlighted the intricate interplay of each element of their activity in producing their feelings of needing to 'control' the classroom, whether by finding 'subtle' ways to subvert their own inadequacies with technology (see Section 5.4.1.1.), perceiving how the textbook places them in positions of power (see Section 6.3.3) or how the time-and-space demands of the centre orientate them towards taking control (see Section 6.4.3).

During the second part of the series concerned with transitional-secondary mediators, I aimed for participants' work with this model to garner a more in-depth account of what specific

'blend' of features was leading towards their discomfort associated with always being in control. In finding this, I hoped that participants could move towards an auxiliary motive which would allow them to achieve the type of internally motivated teaching they imagined possible and had represented above with Y. Engeström's (1994) model of *productive* learning.

7.2.2.2 Discussion: Lilley's (2019) Adapted Language of Description

The nature of *theoretical-generalization* is that any generalization makes it possible for its user(s) to participate in more intricate psychological actions by acting as a subsequent mediator/s (Karpov & Haywood, 1998; Tenenberg & Knobelsdorf, 2014; Virkkunen & Ahonen, 2011). Up to this point, there have been two representational generalisations of teacher-participants' activity: their Re-drafted model and their re-positioning of their mirror data lessons on the TCF (see Chapter 5 and 6).

As this session focused on the intricacies of asymmetrical power relations in the classrooms, I utilised both representational means as a way to provoke deeper reflection of their practice in their classrooms. Firstly, I directed participants to review their re-placement of their lessons on the TCF on the virtual 3x3 *Expansive Learning Frame* via their mobile phones (Figure 70). This representation symbolised the problematic 'disruptions' they had seen and commented on after they were first asked to review their lessons. On the venue's whiteboard, participants had access to the Re-drafted model, which characterised their 'problematic' activity, and which they could also draw upon. Both models evidence teachers' own reflections on the asymmetrical relations of power in the classroom.

I then directed participants to review the link on the virtual 3x3 Expansive Learning Frame containing my adaption via their phones, which was followed by a brief explanation of the framework. Participants were then given some time to review and discuss together where they saw their teaching lying (Figure 71). Upon reviewing, Marjorie stated: "when you break it down like this, you realise, you're actually more restricted than you thought" (Session 4). Pointing to the right as if the adapted framework was facing her, "I would love that they are doing that with the tools. The 'content construction' is starting to get a theme and then they come up with ideas, and they carry the class… but I'm too scared to do that. I always go back two steps" (Session 4).

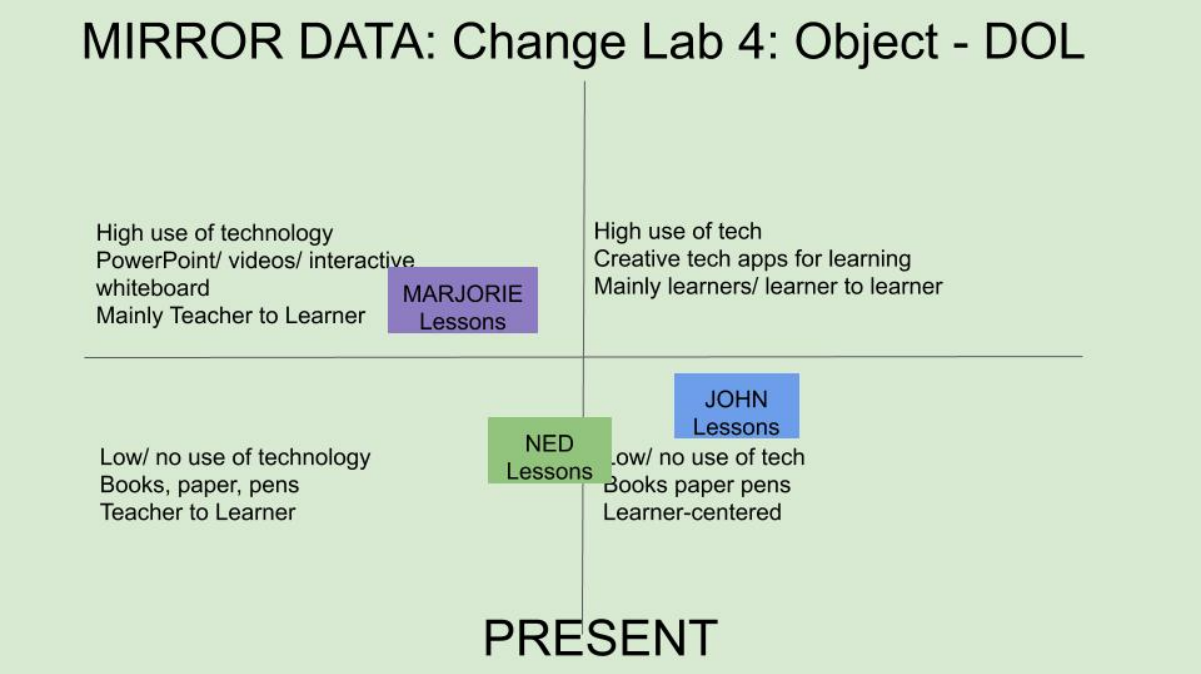


Figure 70: Re-placement of teachers' mirror-data lessons drawn from Session 2.2 (Session 4)

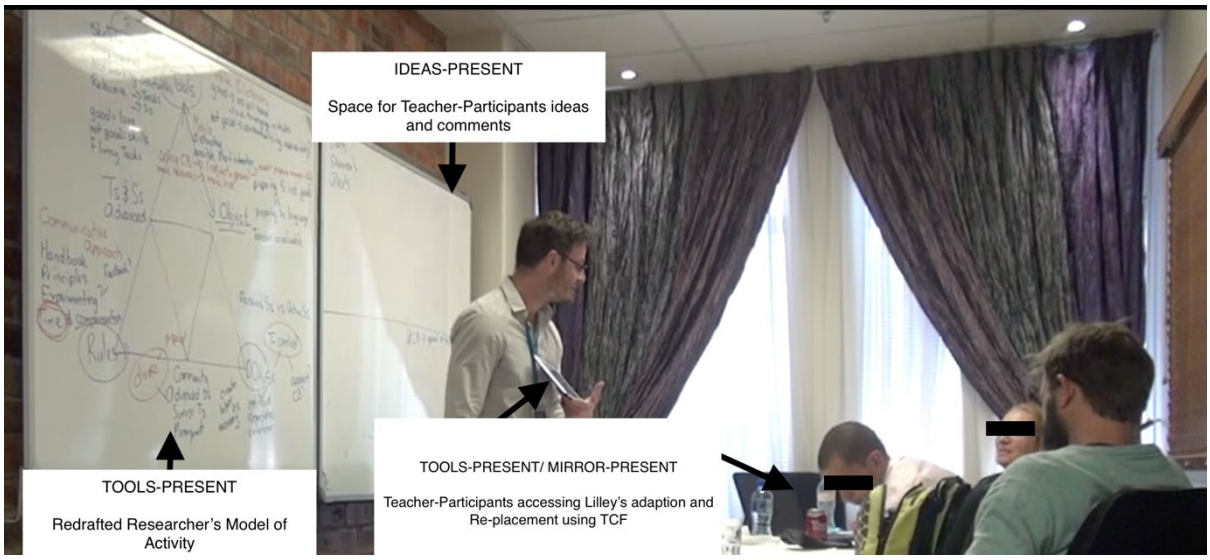


Figure 71: Teachers reviewing their teaching using TCF on their mobile devices

Her turn proves interesting on several fronts. Firstly, her 'realization' is tied to the use of the adapted framework that has led to her think her practice might be more restrictive than initially thought. Mediational artefacts within any activity capture a particular view/ lens through which to orientate their users towards specific aspects of the collective object (Foot, 2014; D. H. Hill & Cole, 1995; Roth & Lee, 2007). In reviewing the frame, it has offered her two views. One in which she can 'imagine' how "phenomenal" it would be to employ a more constructivist pedagogy, such as 'content construction' ('5' on the adapted framework) in her classes, but at

the same time, the fear she has in moving towards such a pedagogy (Marjorie, Session 4). Moreover, her discourse here illustrates a discursive manifestation akin to *critical conflict* resolutions where Marjorie's realizations echo her attempts to negotiate a new meaning of her teaching practice (Y. Engeström & Sannino, 2011). At the same time, this did not apply for all teacher-participants' lessons, as Ned stated that John's lessons "were a little more towards that side [the constructivist side of the framework]" (Session 4) in his review.

Seeing a new element of 'fear' in participants' turns, I asked them about "that scaredness… where does it come from?" (Session 4). Marjorie related it to her secondary school experience where students would go "off tangent any second" and teachers needing to be a "high patroller" (Session 4). John raised further this view, stating it was: "to validate me [the teacher] being there…. Because when it is that expansive… you just stand there" (Session 4). John provided more clarification on this, stating that this fear might be linked more with anticipation:

> I think the problem, as well, sometimes which I find stressful this side [the right side] is that when you get them and they're already like that it's a piece of target language. You can plan that much better. You can do... You know the feedback is going to be something around that. You know the rules inside out. There's little chance of me being caught out or having to do anything other than what you've already done whereas when it's creation you haven't basically come up... We formulate and think about everything. You, you, you can't anticipate (John, Session 4)

I attempted to elucidate' participants views by questioning if this 'high patroller' was linked to seeing themselves as 'expert' and students as 'novice' in teachers leading the classroom, to which participants agreed, "but for a number of different reasons" (Ned, Session 4). In discussing their positioning of 'expert' and students as 'novice', teachers expanded upon this practice in two respects. The first was the "expectation that you [the teacher] are the expert" and that teachers "sort of socialise them into that expectation from the get-go" (Ned, Session 4). The other, was that in giving students this freedom to construct, that teachers would be eventually stuck "without any" (Ned, Session 4) content or the question of whether students would even "actually do that?" (Marjorie, Session 4).

These concerns were linked to their pedagogical model that "doesn't allow for that" (Ned, Session 4), as well as how their coursebook work in their mirror lessons focused mainly towards left end of the Adapted framework (to know/ to comprehend) emphasising the focus to "comprehend" and where an attempt to reach "right [to analyse/ to synthesize] would be a, kind of, end product" (Ned, Session 4). Their comments here suggest a further link to the

communicative approach and its questionable link with student-centricity and a more constructivist approach, which they earlier outlined as being ideal (see Chapter 5 and above).

Teacher-participants took this a step further, by asking what exactly was meant by 'novice' and if previous little knowledge was restricted only to language (Marjorie, Session 4)? Ned raised that there were two sides to understanding students as a novice: a novice in language and a novice in knowledge. He stipulated that as teachers, they needed to recognise "while they [students] might lack certain language, they are certainly extremely capable" (Ned, Session 4). It led to a further aspect of their envisioned practice, which would be "to bring their [students'] expertise to the language" (Ned, Session 4) or how "everyone needs to be involved" (Marjorie, Session 4).

Teachers saw the way to do this through genuine discussion: "if they discuss something genuinely, there will be analysis that happens… They will be analysing each other's arguments" (Ned, Session 4). However, this was also problematised regarding the extent to which 'realistic' genuine discussion could garner enough language for analysis (John, Session 4), or even if the discourse would be genuine as some students "just use discourse markers" (Marjorie, Session 4).

In the above discussion, we see two moves from participants' discourse that illustrate the movement between the present and future activity which is seminal to the construction of a new model of activity (Y. Engeström, Pasanen, Toiviainen, & Haavisto, 2006; Virkkunen & Newnham, 2013). The first is an envisioning of future practice, where teachers wish to cultivate a language learning experience that moves more towards 'content-construction' and teaching students as 'experts'. At the same time, figuring this ideal, they outlined elements of their present activity that conflict with this ideal motive, where 'expanding' pedagogy jeopardises the ability of coursebook content and 'high teacher control' to effectively anticipate language 'mastery' in their classes. This conflict between contemporary practice and newly imagined forms can be linked towards tertiary contradictions, as their imagined motives for a new pedagogy in their activity is seen to conflict with their established practices (Y. Engeström, 1987, 2000).

7.2.3 Modelling the Object-Rule Contradiction: Communication & Work

7.2.3.1 Rationale: Stimuli to Analyse Workplace Culture and Communication

As can be seen above, the 'rules' of the teacher-participants' activity system, such as the need for a communicative approach, alongside time and space have featured heavily within the core of their perceived disturbances. To engage teacher-participants in a deeper reflection of the rules of their system, I turned towards their discursive exchanges around the historical change matrix (HCM) from Session 3 and 4. In these sessions, they outlined that in the historical development of the organisation, the onus of change and handling problems was up to them.

To find transitional-secondary stimuli to mediate this issue, I turned towards history. Concerning organisational development, teachers' reflections had centred on how the problems which arose, and the efforts to solve them, mainly came from teachers themselves. These responsibilities were absorbed, over and above their teaching responsibilities. Y. Engeström (Y. Engeström, 2004, 2006a) has highlighted how different historical types of work demand different configurations of knowledge and practice. For example, in craftwork, the knowledge and design are done by a single worker, while in mass production, this is separated into the worker who handles the production of the product and the designer who engineers the product (Y. Engeström, 2006a; Virkkunen & Newnham, 2013).

Based on the participant-teachers' discursive exchanges about workplace culture, their discussions outline the ALC as in a 'process enhancement' phase of development (Y. Engeström, 2006a). This stage is defined by frontline workers, like teacher-participants, who are expected to handle the 'final' teaching product, including any changes at the centre. Moreover, the design of the product, like teaching content, is separated from frontline workers. This separation is seen in the use of 'expert' designed coursebooks from major publishers in the UK and USA. At the same time, teacher-participants seem to be reaching towards 'co-configuration' in the organisation's development, where greater attempts at personalisation and responding to students' individual needs to direct teaching are warranted (Daniels et al., 2007; Y. Engeström, 2004, 2006a).

One of the significant obstacles to this has been 'time' for development but also the demands of lone teachers to solely deal with experienced disturbances. The recent 'convo' syllabus represented a move at overcoming this, where teachers worked together and curated content together in teams (see Section 6.4.2.1). To tap into this, as well as their historical ways of dealing with other problems and disturbances, I used Virkkunen & Newnham's (2013) four field model of *Four types of organizational cultures of dealing with problems* (see Figure 72 below). The model offers two dimensions: the horizontal being the level of openness and

collaboration, and the vertical being how well the disturbance is contextualised. The aim was for participants to locate their work practices of 'Training/ Experimentation' and 'Implementation of new features/ methods' according to this matrix. Doing so would allow us to identify more clearly where exactly the conflict in their ability to coherently realise these practices at the ALC was emanating from (Virkkunen & Newnham, 2013).

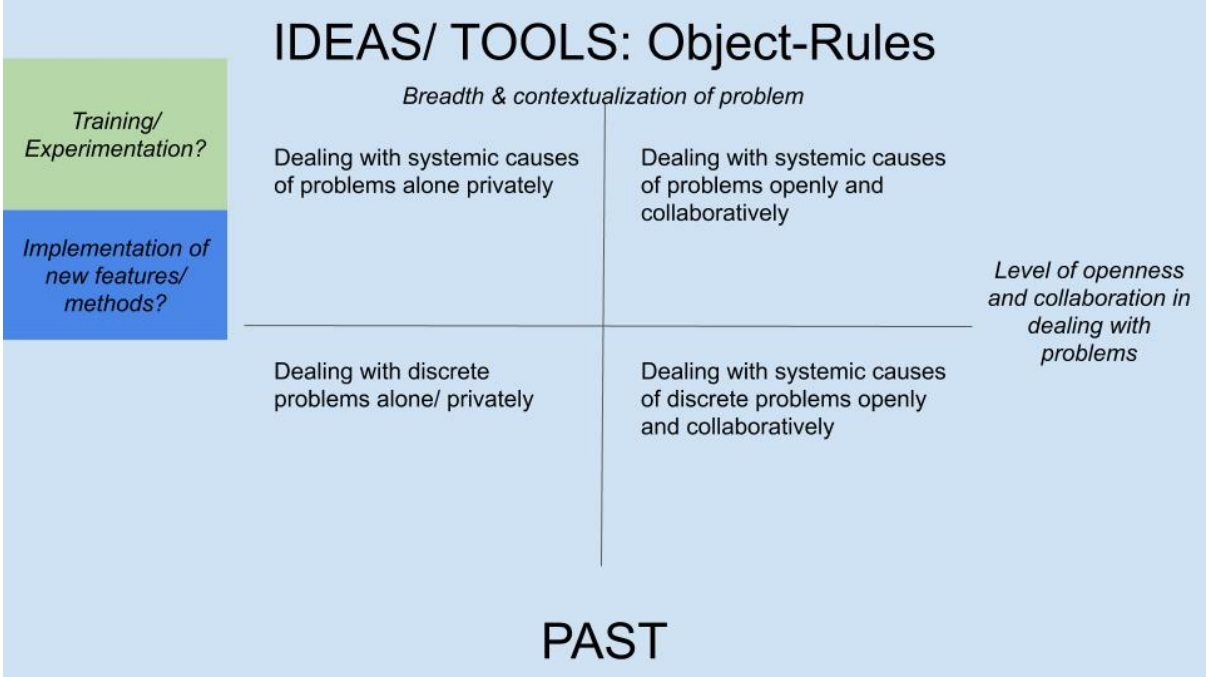


Figure 72: Virkkunen & Newnham's (2013) four types of organizational cultures of dealing with problems (p. 249)

Another aspect of the rules of the ALC was the lingering question of the communicative approach and its ties to student centricity (see Section 6.3.2.2). The 'communicative approach' is often misconstrued or poorly defined (Thompson, 1996). Participants throughout the intervention similarly identified the difficulty of labelling what is meant when they say 'communicative' language teaching (see Chapter 4, 5 and 6). Given this, I again believed that reviewing the development and placement of language teaching would be helpful in line with where the teachers wished to head with their pedagogy.

Based on this, I reviewed Tarling & Ng'ambi's (2016) TCF and adapted it towards the various historical approaches that have and are used in English Language Teaching (see Figure 73 below). Throughout this intervention, participants labelled lesson foci and tools used as being seminal in understanding their approach. To trace their pedagogy along these means, I referred to Howatt & Smith's (2014) work which historically demarcated the various approaches to ELT, as well as their methodologies. To this end, I combined the two models (see Figure 73),

where the horizontal axis focused on content-related language teaching/ teacher-to-student (i.e. grammar, literature) to task-orientated language teaching/ student-to-student (productive language tasks), while the vertical axis focused on the level of technology used to achieve this in lessons.

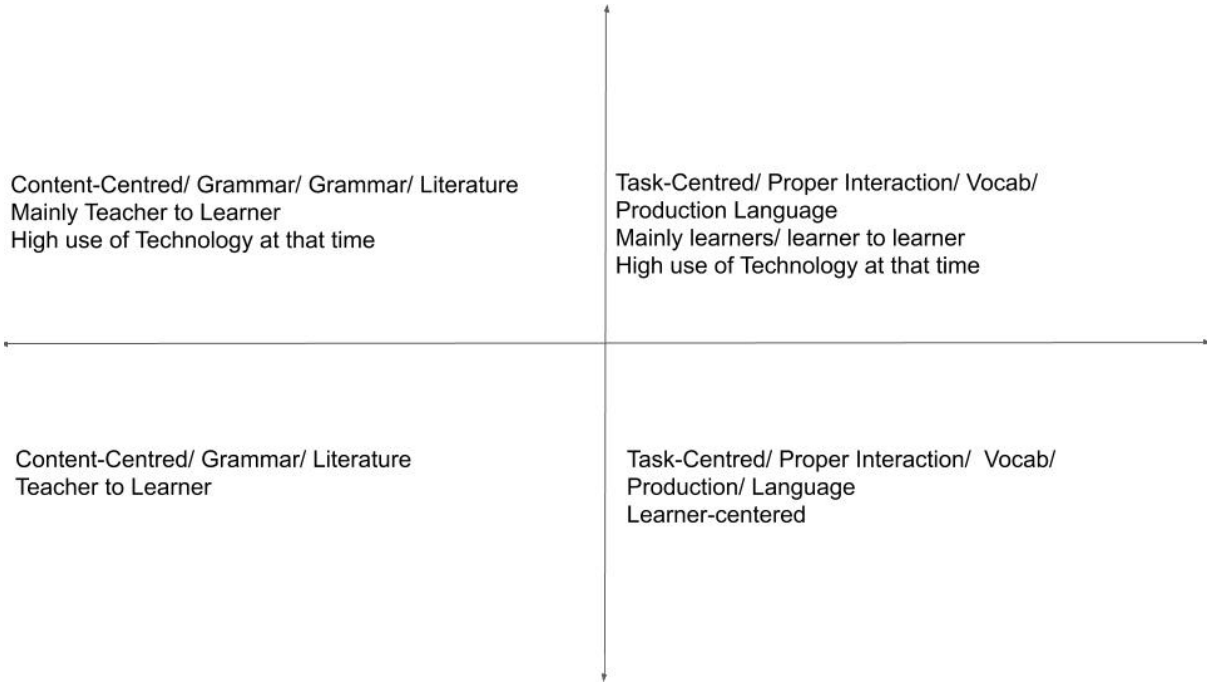


Figure 73: Matrix of ELT approaches in language classrooms

Virkunnen & Newnham (2013) note that the use of matrices, like those above, as secondary transitional-stimuli are useful when several conflicting ideas are promoted in response to the primary contradiction. Their usefulness is tied to how matrices offer a means for participants to unpack the essential differences of the contradiction alongside possible solutions, to find the most noteworthy for further development and direction in the intervention.

However, perhaps due to my own limited experience and time to develop a matrix (such as Figure 73) or the amount of analysis work that had gone before, these mediators were not as successful as I had hoped. As I discuss below, teacher-participants had reached a turning point in their intervention, one which was wholly unpredicted and opened up new insights of the central features of their experienced disturbance.

7.2.3.2 Discussion: A Turning Point in the Intervention

As with other sessions, Session 5.1 began with a review of our last meeting. However, there was a clear difference from previous sessions, in that participants seemed to be more noticeably

able to articulate their disruption in their activity. For instance, from the outset of the session, when asking for reflection of our progress, Ned stated: "it's all the same thing in a different form. We haven't really broken any moulds… So, anything that we have… I mean doesn't seem to change to nature what we do every day" (Session 5.1). This state of inertia was made explicit in teacher-participants' reflections on the object-tool analysis that was done in the prior session:

MA: Oh, and our ideal of the learner, or what the outcome is, our ideal is sometimes very different to the other the student's ideal or to what we actually are doing in class. Because there's that, you know, the strain of the test. So, teaching to the test as it were in order for them to succeed, but also not teaching to the test in order for them to succeed in real life, you know life or test [laughs]. So that, that balance.

NE: So, like the contradiction of the, um, like, what we really want to achieve and what we kind of, what's structurally expected […] Not expected, that's the wrong word… Structurally kind of forced upon us. Not that's, you know, I mean, by ourselves, often, as well.

JO: Well I was just thinking, um, where is this force coming from? It's not from the management, it's not like this is what you must do in this class, I mean.

MA: Because we can't even agree on…

JO: It's not.

MA: What message. What one, what's the word… The approach that we are using […] We say it's communicative but is it really, you know? What? […] Are we all doing that?

WA: And then you said like we all use task-based learning, but we haven't had very many task-based lessons that we have evidence of.

NE: No. [Unclear] them self. And genuine, like sort of, genuine tasked based […] And so, we talk about "task-based lessons" but it's pretty much just, you know, it's the same as anything else, just somehow getting tasks out. So, it's not fundamentally different.

JO: And that's not happening because… What are we saying, [it's?] showing how [not enough] resources, we don't have time to [make] task-based lessons.

Excerpt 25: Session 5.1

In the above extract, two noticeable features are present. First, is the clarity of the primary contradiction, demonstrated in both Ned's and Marjorie's turns, where the kind of language teaching desired in class is juxtaposed with the expected type of language teaching. Second, is teacher-participants' own volitional discursive actions, seen in both John's and Marjorie's questioning, in their attempts to detect where this 'structural force' is emanating from. In both their turns, we see a strong use of rhetorical questions to support their inquiry concerning management's role, or the level of true 'communicative pedagogy' in the classroom. The use of rhetorical questions and the strong emphasis of 'we' and 'us' is discursively significant as they illustrate teachers' recognition of what needs to change yet also their inability to do so (Y.

Engeström & Sannino, 2011). This is despite their recognition that management does not affect their efforts or their attempts to use task-based teaching in their classroom. This collective 'helplessness' was extended in that they recognized that any responsibility for change "rest[s] with the teacher" (Marjorie, Session 5.1).

This exchange led to a resurgence of the discussion of "who owns the production" (Ned, Session 5.1) and the lack of 'motivation' for teachers to create in the classroom (see Chapter 6) as by schools 'owning' teachers' work, there was no real need to create or share with others. However, this time, there was a discursive change in how teachers saw to resolve the issue. Ned stated: "The expansivity […] needs to… penetrate right into the core organisation" (Session 5.1). In 'expansivity', Ned was addressing the move towards a more open, constructivist language classroom as discussed in the previous session. What makes his turn interesting is his discourse stressing the need to cultivate fundamental change in how work practices are carried out at the ALC, not merely isolated reform in one aspect of their practice. His turn aligns within Expansive Learning in its recognition that true innovation does not come from a variance of practices but from a fundamental restructuring in how things are done (Y. Engeström, 1987; Virkkunen & Newnham, 2013).

For participants, this restructuring meant recognising the difference between preparing for a lesson and designing a lesson. Marjorie asserted that "we need to get paid more prep time just because it's not enough for what we want to develop" (Session 5.1). Ned positioned this differently, in that "if you cut design, what we do is teach a language", as ultimately as teachers they were just paid for "being in front of a class and keeping them [students] occupied" (Ned, Session 5.1). However, John offered a different view that was not exclusively tied to finance. He argued that the real issue was not linked to finances or being recognised for work, but rather that sharing lessons "would work perfectly if everyone was putting in the same amount of resources and at the same level" (Session 5.1). Ned summed it up in a different way – the need to move to a form of "co-ownership" at the ALC (Session 5.1).

The need for reconfiguring towards sharing/ co-ownership was prompted again upon their use of the Virkkunen & Newnham's (2013) four field model (see Figure 74). In discussing the model, teachers emphasised that while meetings emphasized open and collaborative discussions of systemic problems; in the actual handling of the problems the teacher was left to deal with this privately (Session 5.1). For training and experimentation, it was the inverse. While teachers felt that it was acceptable for their class experiments to be done by themselves,

there was no avenue to share these (Marjorie, Session 5.1). This issue, in turn, raised the matter of how lessons could be shared, as lesson plans took time (John, Session 5.1) but also not every teacher wrote down their lessons (Ned, Session 5.1). To this end, issues of future development emphasised the need to carefully consider the issues of time, how sharing could be is promoted and the space in which to allow flexibility regarding how teachers work in their planning.

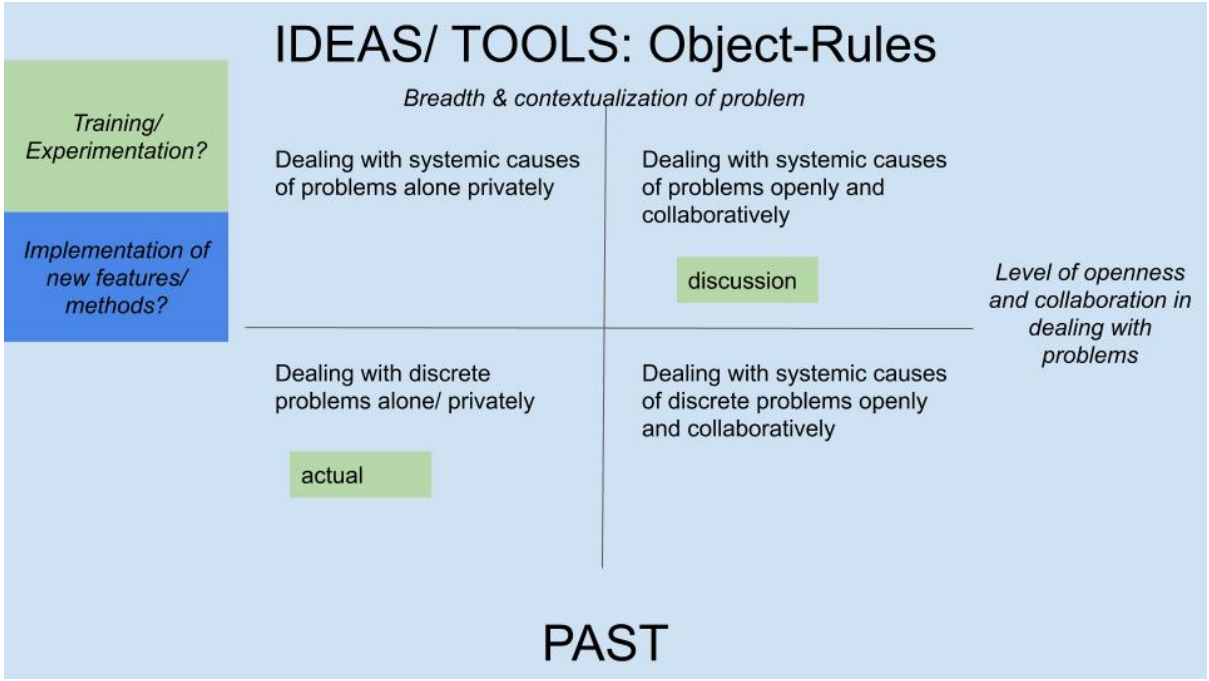


Figure 74: Teacher's analysis using Virkkunen & Newnham's (2013) 4 field model

Similarly, when placing the various approaches of ELT using the adapted framework, teacher-participants focused on what it would mean to involve learners in the creation of content (see Figure 75 below). In the placement of their own approach regarding others, they felt they were just "crossing the line" (Marjorie, 5.1). In this placement, teachers began to question the extent to which teacher-centricity would need to figure within this pedagogy in comparison to other ELT approaches:

> MA: But also, learner centred, is learning the ratio between the teacher and learner talk, for example. Because if it's learner-centred, the idea is they learn to talk more than the teacher.
>
> NE: But it, I mean… Does that have to be true really, because what, what you want is them to like kind of co-creation of wherever you've… Your language. So, I mean you, you kind of want to [try?] the process rather than, and if you do need to talk a bit more to do that, so be it.

Excerpt 26: Session 5.1

As seen above, both Marjorie and Ned are working within the new concept of 'co-creation' from Session 4. In placing their pedagogy and where they would like to head, they query if the distinction between teacher-talk versus learner-talk in the classroom 'have to be true'. This was also evident concerning content, whether their attempts to reach 'co-creation' would mean students would be: "involved with the creation of content or are they just receiving content and creating content from that" (Marjorie, Session 5.1). Again, lines of possible development have been outlined by the use of the matrix.

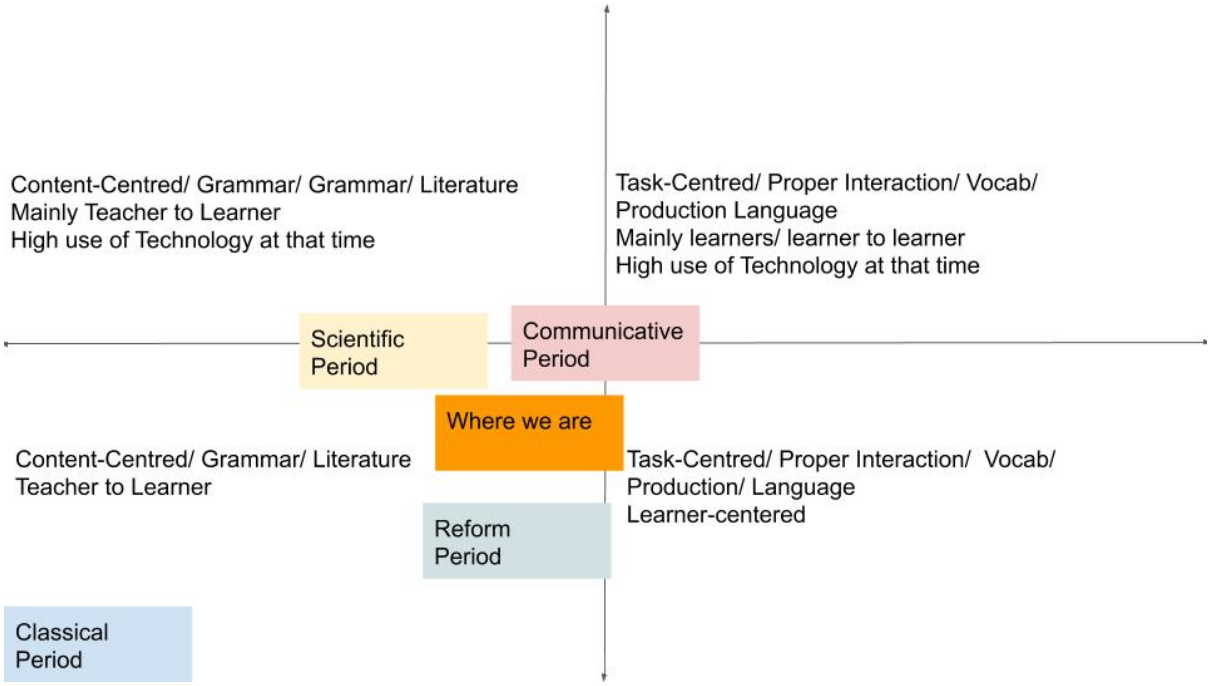


Figure 75: Teacher-participants' analysis using adapted TCF for historical pedagogies of ELT

At this juncture, however, most of teacher-participants' talk had centred on content and teacher- or learner-centricity of their pedagogy. In order to expand the discussion, I believed adding my own experience of the use of technology in lessons could be helpful to participants further envisioning 'what could be' in their classrooms. However, the researcher-interventionist's own positions and experience can only be shared within CLs if it abides by three rules: firstly, that this experience or position further promotes the collective inquiry of the intervention; secondly, that the idea posed is related to participants' reality; and thirdly, that its 'usefulness' is also open to further critique and evaluation (Virkkunen & Newnham, 2013).

Aware of this, I shared my own experience of how utilising technology helped me in my ELT when I was confronted with similar experiences of being coursebook-bound, and faced challenges facilitating student interaction and communicating in my classes. In posing my

experience, participants opened up by asking: "but what were you doing? Were you using the textbook or were you just starting off from scratch?" (John, Session 5.1). This line of questioning was pushed further by Ned, who asked: "Okay but what else were you doing?... because tech alone won't teach you anything… What was the fundamental shift, that actually had the effect?" (Session 5.1). These questions led participants to engage with what technology could do to support language learning as well as the potential dangers of it in the classroom:

MA: Because again, you know, you can have a phenomenal lesson, and then [inaudible asides] the technology fails, or, or new [unclear].

NE: But, but then there's the other thing as well, is that, that the community wants a fundamental shift in the sort of, um, the way to achieve our Objects.

WA: Yes.

NE: And you can, you could do exactly, I mean it's a very easy trap to fall into, is that you just use technology as exactly…

JO: Like the coursebook

Excerpt 27: Session 5.1

What we see in the above exchanges is that participants did not take my views 'as is'. Instead, they used my experience to further question and criticise whether technology had a place, as technology by itself was not seen to be fundamental. They related it to their similar realities of using technology in the language classroom, where it could 'fail' or its danger of operating precisely like a 'coursebook'. Moreover, it promoted their critical evaluation of what directions they wished to take in the intervention, as when I asked: "do you guys want to start from 'I've only begun to use tech', or do you want to start from furthering our object and enhancing that? That, that's your decision as a group that you have to make" (Warren, Session 5.1).

My question led to three vastly different responses. Ned felt that furthering the object of their practice would be the best course of action as he stated that "we don't even know if we want or, need the tech, without the object" (Session 5.1). Marjorie agreed. However, she stressed a very personal sense towards future sessions stressing that "when I teach, I want a balance, I want to have an awesome lesson, but I want it to be more awesome with the technology" (Session 5.1). John echoed this personal sense, yet his discourse echoed more ambivalence, as he was distrustful of the extent to which our work could truly impact teaching at the ALC: "you can't control what teachers do in their classroom. Ultimately you can show them… But whether or not they'll actually take that and then go ahead" (Session 5.1).

In these responses, we see a divergence from collective change, most notably in John and to some extent in Marjorie as well, in that they both stress their *own* resolve in wanting to enhance their own pedagogy. Their resolve is understandable, based on previous analysis work. In a strongly hierarchical teaching organisation that prioritises external factors, and where teachers as lone individuals are expected not only to teach but prioritise their own development (see Figure 68 above), there is little worth in engaging in development for others. The use-value is tied to what they can earn and enhance as there are no mechanisms currently in place, where the exchange of this development could be beneficial (financially or socially) to them and other teachers. Again, the strong asymmetrical structure of ALC activity constricted teachers' ability to envision a way out of their practices.

However, other teacher-participants seemed to be more aware of this. Ned stated this most clearly by stating: "that's what I would like to see, is a kind of cultural shift" (Session 5.1). This shift envisioned would open up teacher observations to include other teachers in the form of an 'open-door' policy or the sharing their five best lessons (Marjorie and John, Session 5.1), as well as the idea that observations would no longer form a 'check' (Ned, Session 5.1). In their attempts to envisage a different practice, teacher-participants were honing in on the central feature of the contradiction where Ned stated: "I would like to see a complete change in the business model idea… Because that's always the problem… in EFL is it's foundation is essentially a business model… their [education and business] goals diverge for me" (Session 5.1).

The other participants agreed with this. Seeing their recognition of this conflict of motives, I placed our Redrafted Model of their current problematic activity to the central display and asked them to come up with an envisioning of practices (see Figure 76 below) or tools that "could overcome this [contradiction]… in realistic terms" (Warren, Session 5.1).

Participants readily took this on. Their suggestions included the following: (1) a bi-weekly orientation of CPD (continuing professional development) where one week was devoted to planning, and the other would be on development; (2) follow-up of CPDs that would involve more constructive feedback and follow-through; (3) a clearer definition of what was meant by 'communicative approach' at the centre; (4) a move to more productive, genuine tasks in lessons; (5) an online needs analyses; (6) an exploration of how technology could enhance teachers' abilities to reach students individual goals. These ideas were compiled on the Future Model/ Vision Slide of the virtual 3x3 Expansive Learning Frame (see Figure 76 & 77).

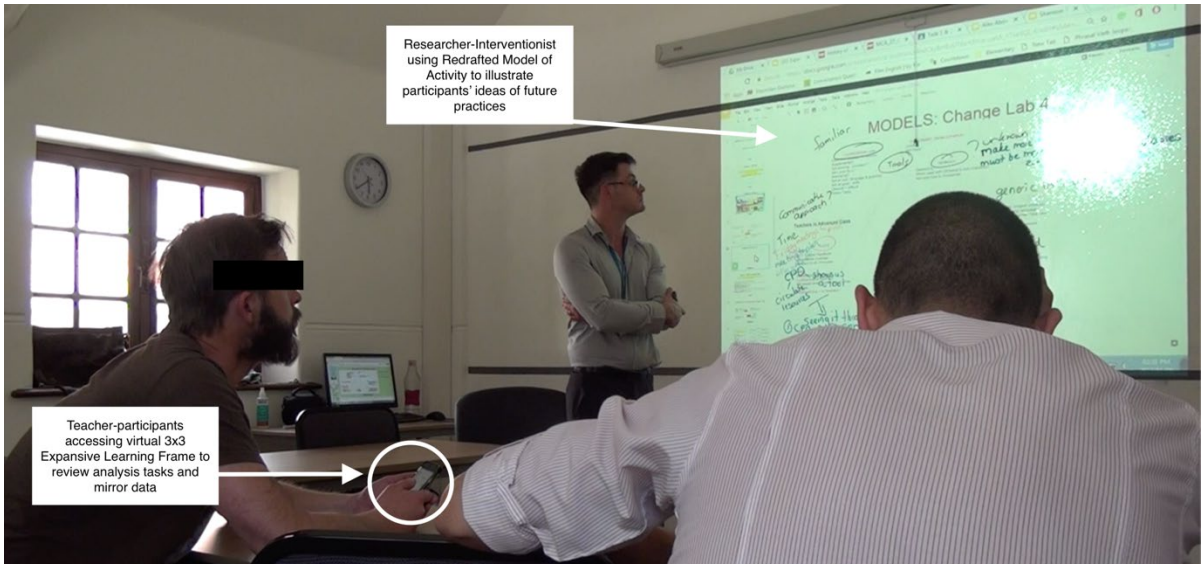


Figure 76: Researcher-interventionist and teacher-participants using virtual 3x3 Expansive Learning Frame to come up with possible ideas to overcome problematic activity

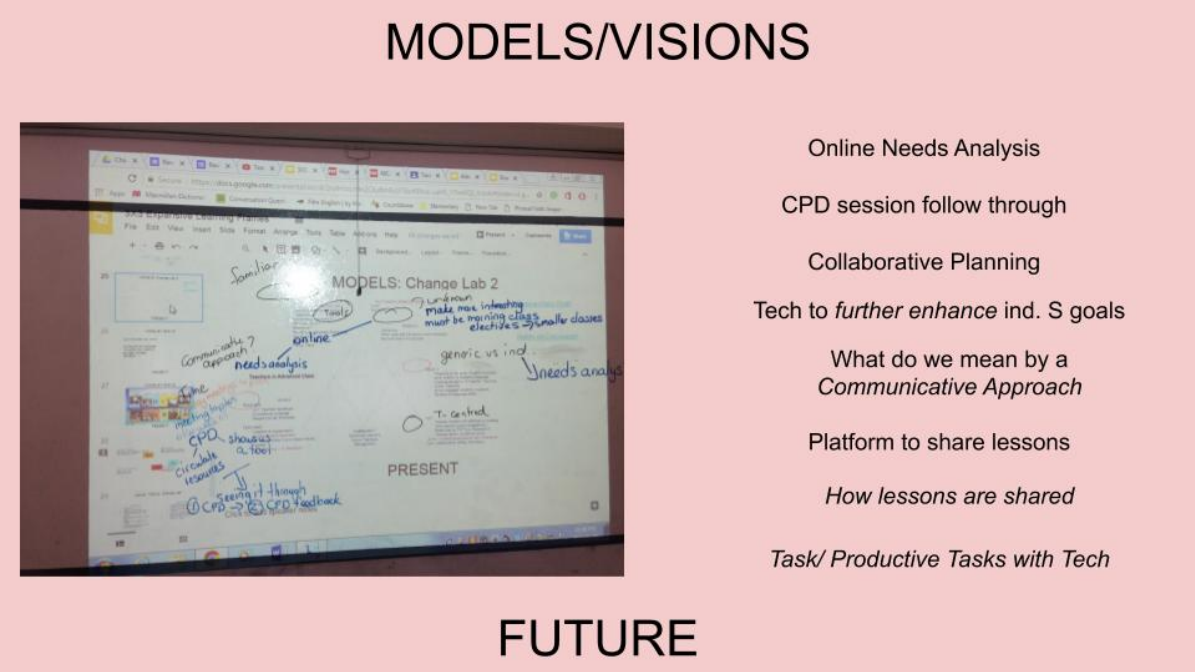


Figure 77: Future Model/ Visions slide with participants ideas of future practice

However, following this, Ned asked an unexpected question: "…the use of technology in classrooms and organisations, does it change power relations?" I was quite taken aback as this was not planned. In answering, I referred back to previous sessions with them, underscoring how they had highlighted the ways the coursebook was "restrictive" and that if they wanted to engage with this, "it could be a question if we can try to make it more even, but that depends on you guys [the teacher-participants]" (Warren, Session 5.1). Ned responded by further asking about a possible "democratising effect in the class" and if that would carry further in terms of

the organisation (Session 5.1). I responded by asking "but would you want a system that more democratised or would you want it more…?" Ned stated that he would "absolutely", which led to the following noteworthy discussion:

MA: But what I mean is, if the power dynamic there in place of [Mac?] is that what you're talking about? You give the students the power to use the tool that they are really comfortable with.

NE: But also that they have, um, that you, they have sort of wider range of things that they can bring in.

MA: Yes.

JO: Yeah.

NE: And then they can shape the outcome in a way that. So that, that they have more power in the construction of whatever's produced.

WA: I mean you were just [pointing to MA]. More, different resources, we can reach to learners in different ways.

MA: Ways, ja. What I, I just always know, about that this one, is the fact that their teacher recorded so you can always go back to it, change [it so?] students, and upload things. At the end the lesson you can say if you find a video that you like, then ja, you know, which is great.

[…]

NE: And how does it affect our actions in the organisations? [Background noise]. I mean this is what I'm [background noise]. And I can see why, I'm starting to see that technology maybe will have a very, very fundamental affect because we have access to this resource.

Excerpt 28: Session 5.1

In the turns above between John, Ned and Marjorie, we see a movement to a new motive forming between the participants. In previous turns, we witnessed participants lament how the asymmetrical delineation of power at the ALC constricted their efforts to orchestrate change both inside and outside the classroom. Their earlier envisioned practices (such as changing the CPD, as well as time for planning and analysis) have attempted to circumvent this constriction by making more time available, but this once again rested mainly on teachers. Instead, the teacher-participants' above discussions showcase a move towards a classroom pedagogy that is motivated by democratising that space and hopefully, in turn, the entire organisation as well. This 'democratised' pedagogy would be one where learners and teachers harness the power of technology to 'construct' and 'shape the outcome'. In essence, teacher-participants were starting to 'see' a new motive that could overcome the problematic teacher-centricity they experience: a 'democratic' classroom space. It concluded with Ned stating: "there is no point in technology unless it fundamentally changes something" (Session 5.1).

To further promote participants' actions with their emerging auxiliary motive of 'democratising'/ 'inspiring mastery' within the classroom, I assigned them three tasks. The first was to review all our work over the sessions and to virtually 'comment' on the slides with regard to areas they felt were important that would be conducive to the building of our model (see Appendix 9.2.3.4). This commentary task was supplemented with an interactive *Google Form* entitled *Reviewing and Generating ideas for our new Model* (see Appendix 9.2.3.4) where participants were to put forward their initial ideas. Keeping in mind my 'use of technology' testimony in the session as well as participants' own interest in this area, I included a *YouTube* video playlist of other educators' experiences in utilising technology in the classroom. The use of this playlist aimed to further cultivate more 'openness', 'choice' and expertise towards teacher-participants' ideation of technology-use in the classroom.

The third task involved a presentation to management, where teacher-participants would share what they had found and areas where they would like management's input regarding future directions to pursue in terms of their inquiry. The presentation, however, resurfaced teachers' strong reactions to the structure of the ALC as they then felt worried that their changes would be "misconstrued" (Ned, Session 5.1), or that as teachers, they did not "want to seem as if we're [they're] attacking". In response to this, we then decided it would be best for me to present to management, with teacher-participants giving me input on the slides that I would then show to the management team.

7.2.4 Summary: Towards a clearer pathway for development

This part of the CL intervention focused on realising the necessary first steps to build a new model of activity. These steps included modelling the systemic causes of the contradiction within the present activity to locate ideas and solutions that can be used to inspire future development actions (Y. Engeström et al., 2006; Virkkunen & Newnham, 2013).

We can illustrate this development using Figure 78 below as an overview of the process described above, where teacher-participants' current teacher-centric, transmissive pedagogy was reflected on as problematic by participants. Our analysis and modelling work in the use of a series of multiple secondary transitional stimuli inspired teachers' own motivation towards a different kind of pedagogy. A pedagogy that would need to take into account the institution's placement within Africa. A way of teaching which seeks to inspire student 'mastery' through 'opening up' the available resources in the classroom so students and teachers can both bring

their expertise within the classroom to construct language together. In other words, a more 'democratic' classroom.

At the same time, our analysis and modelling work also clarified several systemic challenges which would need to be overcome to create such a pedagogy. These difficulties include the issue of 'time' and 'planning' to facilitate change efforts, including how 'sharing' is handled within the ALC. Added to this, is the still questionable role of how technology could be incorporated so it would not act as 'course book' but instead 'open up' construction in the classroom. It is with this knowledge in hand that I now turn to their efforts to realise a classroom pedagogy for Advanced language learning.

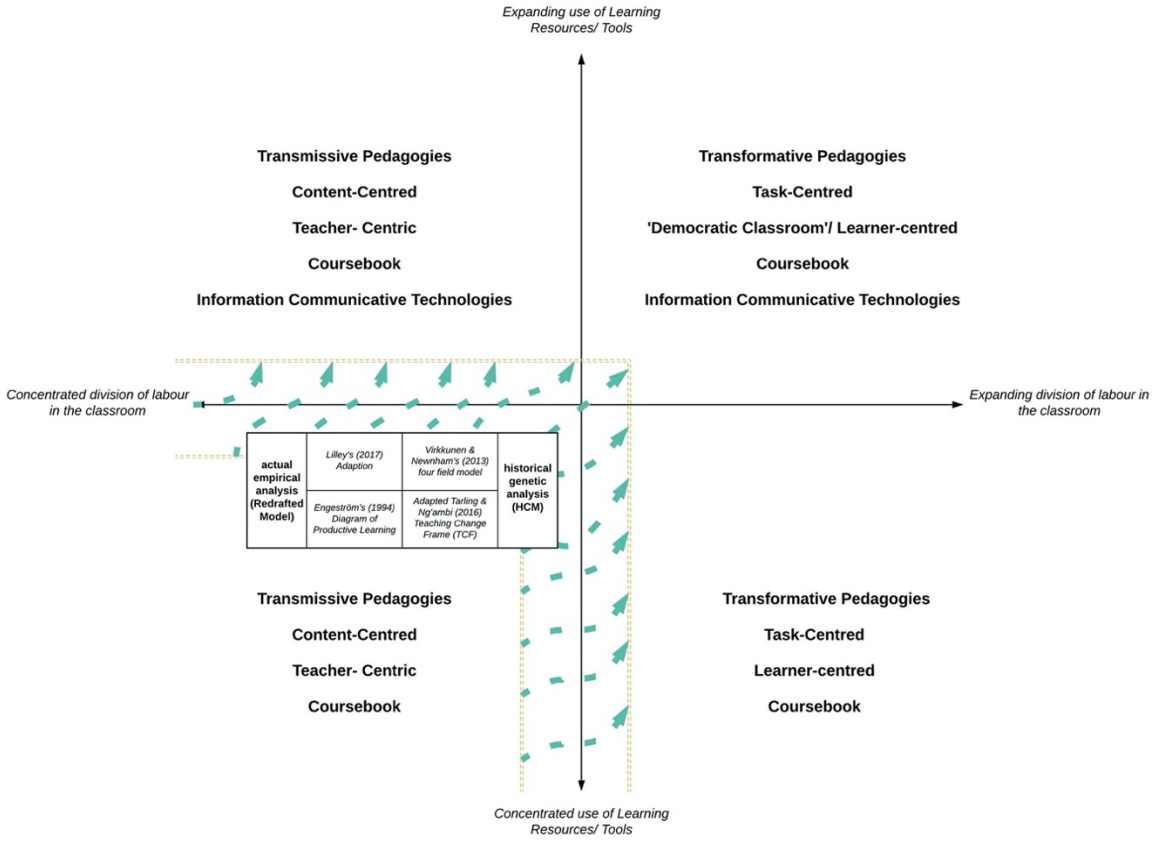


Figure 78: Overview of analysis and modelling systemic causes of teaching Advanced students at the ALC

7.3 Creating a New Model: A language pedagogy based on co-creation

This final section of my analysis describes the Expansive Learning process that led to teacher-participants' formation of a new pedagogical model for language teaching. This process entails creating a visionary model of activity through the use of a secondary stimulus which facilitates

participants' further experimentation and transformation actions of the system (Virkkunen & Newnham, 2013). It explicitly details this process from Sessions 5.2 to 6.3 in which teacher-participants came to form their new model of pedagogy for Advanced language students and culminated in participants' final experiments in using this model in their own classrooms.

7.3.1 Session 5.2: Management's reflections on proposed future developments

As discussed above, teacher-participants felt more comfortable with me, as the researcher-interventionist, presenting their ideas and solutions to the management-participants in fear of any possible reprisals following the CL (Session 5.1). In preparing for the presentation, I gave participants virtual access to the slides to foster collaboration and elicit their final approval before presenting their ideas to management. I believed this was important as it could enable teacher-participants to still have their input without it possibly negatively impacting their position at the language centre. To this end, I made sure to anonymise any instances of their names, as well as any means through which they could be identified (see Appendix 9.2.3.5).

Upon presenting their ideas to management-participants, they often agreed with teacher-participants' insights. For instance, in highlighting participants' criticisms of CPD at the centre, Dani readily agreed: "there's no follow up […] what I think is missing as well, is the CPD and then the commitment to use this and then feedback the following week" (Session 5.2). This willingness to engage with teacher-participants' criticisms followed from their own positions as managers where they lamented how "it's difficult to manage teachers" (James, Session 5.2) and how as an organisation they were "always looking at the short-run" (Dani, Session 5.2) primarily due to the high and low seasons of student enrolment (Session 5.2). These concerns were further compounded by the financial resources available, as the centre would need to generate more income to pay for any costly changes (James, Session 5.2). Moreover, James lamented that top-down initiatives were challenging to implement as teachers report directly to the management-team, not the university (Session 5.2). Their concerns, again, highlight the wider asymmetrical delineation of rules and placement of the ALC within the university, constraining its ability instigate any long-term changes (see Chapter 4).

To this end, there were some solutions proposed by teacher-participants that were readily taken up. In bringing up the need for more follow-up and structure towards CPD, all management-participants readily agreed about its beneficial effects. Immediately following the session, James tasked Dani and Briana to set this up (Session 5.2). A similar move was taken with

'sharing' which Briana planned to immediately implement "we could do that with the split into low level, mid, high… each Friday, someone just shares something" (Session 5.2). In fact, James saw the viability of using the university's LMS platform to manage this virtual sharing going forward (Session 5.2).

However, there were other aspects that the management-participants outlined as outside the parameters of the intervention. The first was the use of an online needs' analysis for students. According to James and Dani, this had been tried out previously and had not worked (Session 5.2). Similarly, the need for more time to plan collaboratively was also dismissed as "ridiculous" (James, Session 5.2). Teachers' planning would need to be done in their "personal time" (Briana, Session 5.2) according to teachers' own desires and would not be formally addressed by this intervention (Dani, Session 5.2). Similarly, regarding the centre defining what it meant by 'communicative approach' it was stated as "something that we [managers and teachers at the ALC] need to try and answer for ourselves[…] in a different forum […] outside of Warren's study" (James, Session 5.2).

With this in mind, the parameters for future development were to focus exclusively on the use of technology to reach students' individual goals for teaching and learning (Session 5.2). It would need to focus on technologies which would be readily available to teachers and students, as the cost to "develop an online system… would take a year and half and cost a flipping fortune" (James, Session 5.2). These mandates are important as interventions must adhere to the strategic management objectives of the organisation itself (Virkkunen & Newnham, 2013). To that end, and following how critically 'time' and 'collaborative planning' were needed (see Section 7.2.4), I asked James if I could use some of my remaining sessions, after our development of the model, to give teacher-participants the space in which to experiment and plan lessons together. He readily agreed, stating it would be beneficial to the teachers and the research-intervention itself.

7.3.2 Rationale: Orientating Teacher-Participants towards Model Development

With a clear directive from ALC management regarding which solutions to pursue, my plan for Session 6.1. and 6.2 was to involve teacher-participants in realising a new model to harness technology for their lessons that circumscribed their aims of 'mastery' and 'democracy' within the Advanced language classroom. My planning was enhanced through my ability to study participants' online comments upon reviewing the virtual 3x3 Expansive Learning Frame (see

Figure 79 below/ Appendix 9.2.6) as well as their use of the *Google Form* (see Appendix 9.2.3.4).

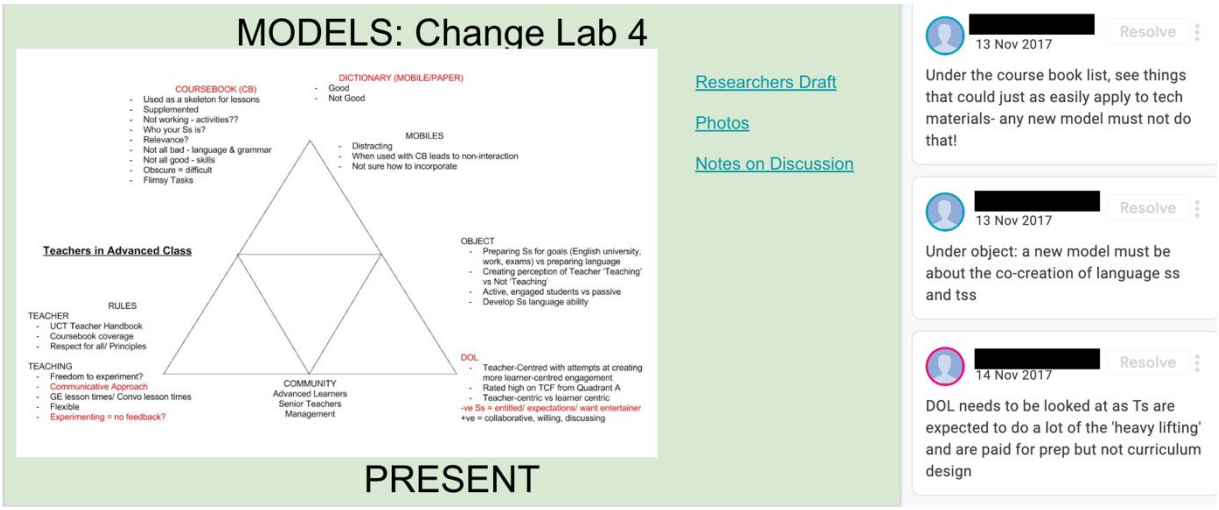


Figure 79: Example of Teacher-Participants' comments on virtual 3x3 Slide to highlight areas of importance for future model development

As can be seen above, teacher-participants were able to virtually collaborate, sharing their comments on the form new developments should take and be wary of, especially concerning tools and the division of labour, not emulating current activity. Moreover, we see a move towards 'co-creation' as the new object that teacher-participants envision as being seminal to the future model's development. This focus was similarly positioned in the two *Google Form* responses where teacher-participants were even more open about their willingness and apprehensions about the use of technology in the classroom.

The *Google Form* responses are noteworthy as they show an agreement surrounding the significant issues facing the classroom, but a clear difference in what would be the best way to move forward (see Figure 80 & 81 below). In the first response to the first question, we see a clear identification of the significant conflict areas discussed throughout the intervention, namely the difference between student and teacher expectations, the coursebook's primacy in teaching, the difficulties of the what is meant by a 'communicative' approach, and the extent to which technology could feature in the ALC's activity. These areas were present in the second response, albeit more briefly, in similar references to a "group that is too diverse" and comments around the lack of communication and tasks. However, in light of the second question about which elements should be used for future development, participants' responses differed, as one prioritised the use of technology and the second worried that technology would not be suitable.

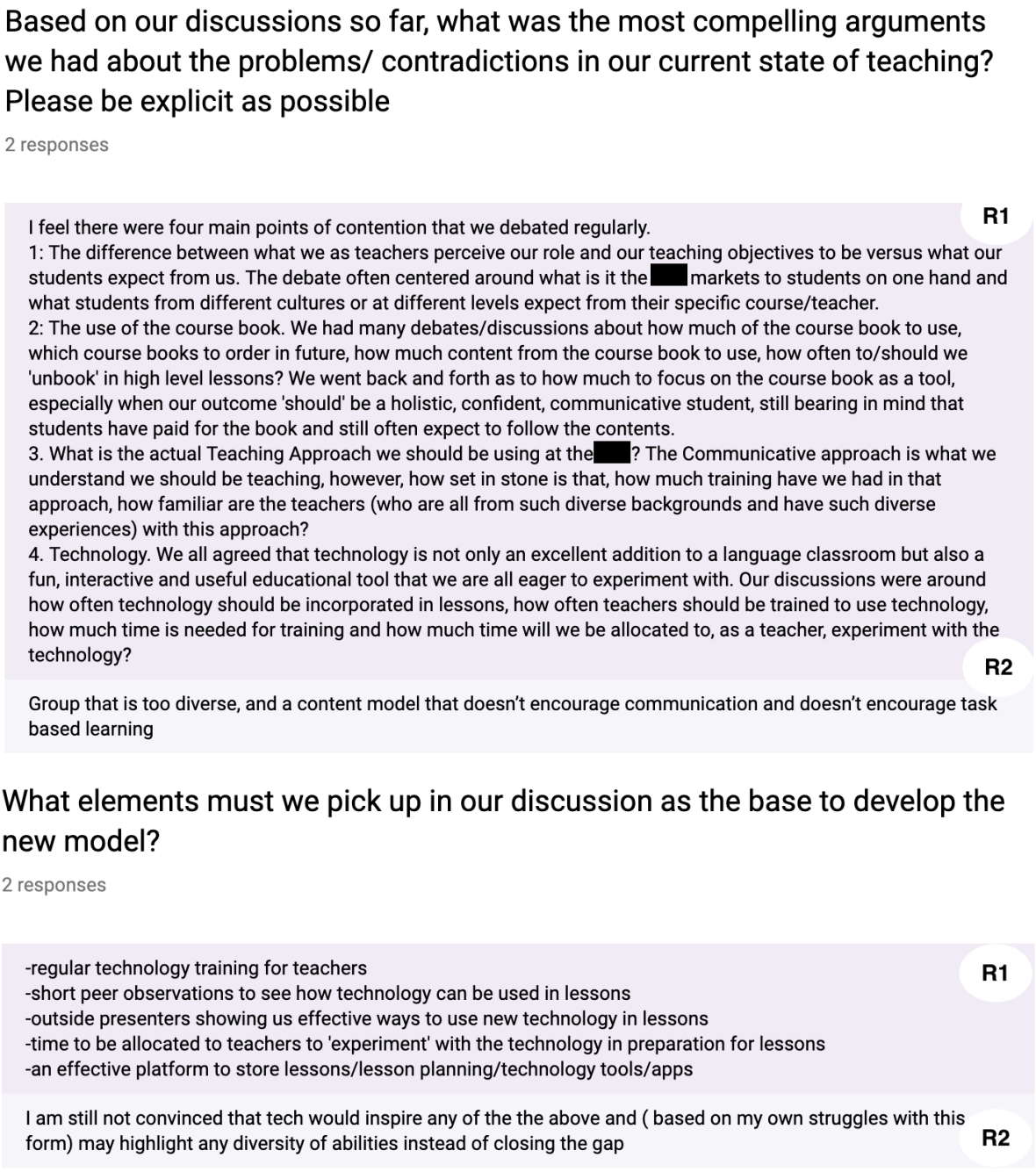


Figure 80: Google Form respondent 1 on issues of current model and future model development

Similarly, when engaging with the curated *YouTube* playlist of other educators' experience of using technology, the same difference in participants' responses can again be seen. For the first respondent, we see enthusiasm regarding the use of technology for future development, especially as it would pertain to professional growth. One the other hand, the second respondent also felt that technology (due to personal experience) would not be able to facilitate teacher-participants' interests in creating long-term genuine language tasks for the classroom, as

technology was more suited for "communicating content rather than inspiring language" (see Figure 81 below).

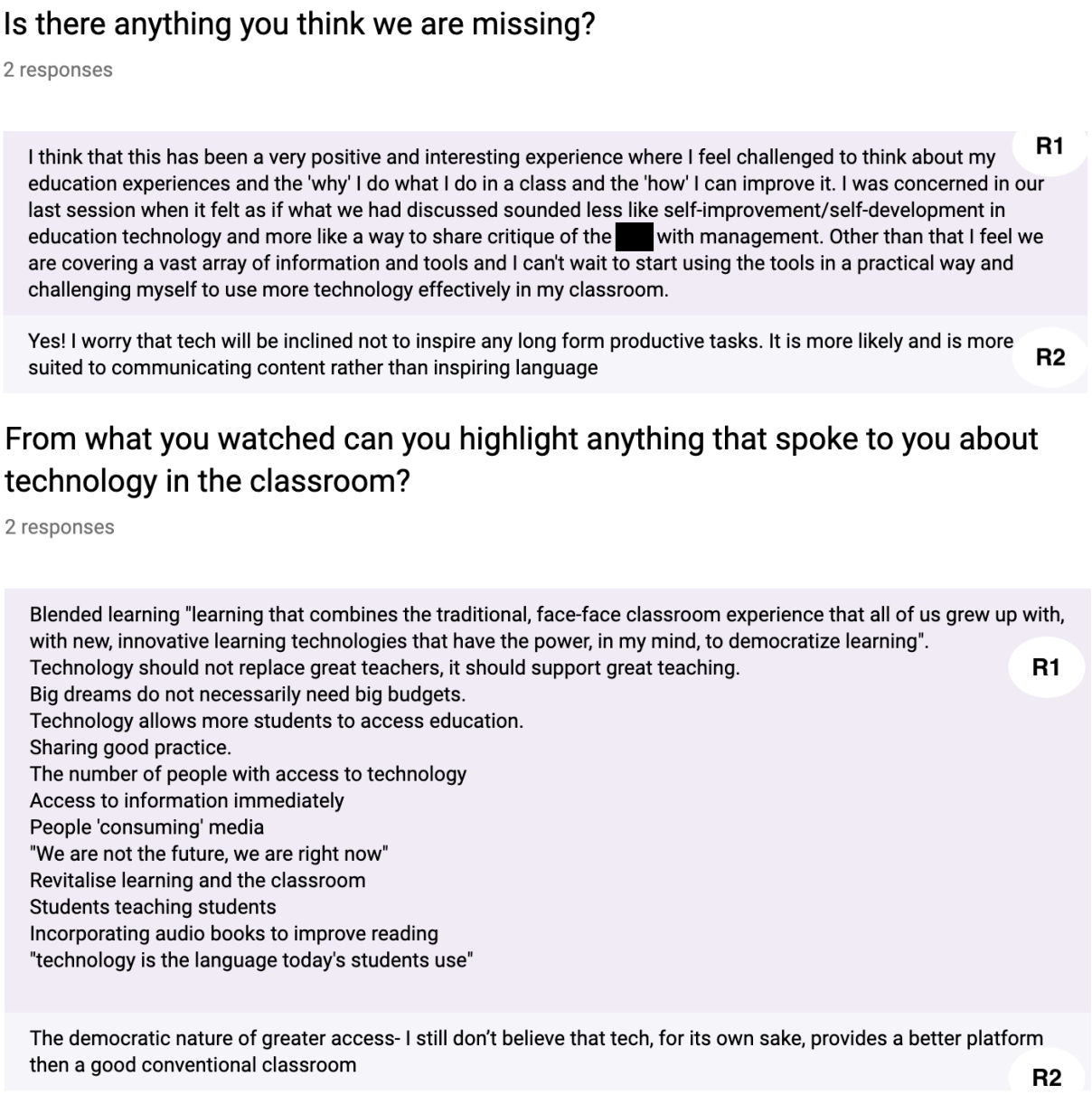


Figure 81: Google Form respondent 2 on issues of current model and future model development

Y. Engeström & Kerosuo (2007) warn us of the danger of losing sight of individuals "who have their own emotions, moral concerns, wills and agendas" (p.340) in conducting change work. The use of the 3x3 Expansive Learning Frame commentary and *Google Forms* tasks had provided an additional space for participants' agency to feature as they were able to voice their concerns, desires and agendas for future change work going forward. It illustrated that while there was an agreement in participants' direction towards the object of 'co-creation', how to meet this, would again need to be directed by them. However, this development would, at the

same time, need to keep management's prerogatives for future development clearly in sight. This meant that other suggested avenues, such as one participant's response advocating a change in ownership principles, was outside our mandated work (see Appendix 9.2.3.4), despite its possible far-reaching consequences for the organisation's development.

Faced with such a predicament, I relied on Y. Engeström's (1987) advice of 'following the object'. Up to this point, abstractions towards a new 'object' had included concepts such as 'democracy', 'co-creation' and 'mastery' (see above). As Lazarou et al. (2017) state such conceptualisations can be viewed as 'instantiations of the object' that require an adequate 'springboard' or temporary model to map out a new object of activity. Given participants' prior insights and task commentary which stipulated that an expanded learning resource/ tools pool could allow for a more democratic classroom environment (see above), I felt that the Task Model (Taylor et al., 2006) would prove a useful heuristic enabling teachers to envision how technological and semiotic resources could work together (see Chapter 2). However, in order to ensure the Task Model's 'neutrality' (Sannino, 2015), the exact makeup of how this would work would be entirely up to teacher-participants.

Additionally, I also believed that given the 'multivoicedness' of teacher-participants' insights which highlighted both the potentials and pitfalls of technology for learning also needed to be taken into account. I felt this negotiation of how technology could work for language learning could be furthered, firstly through the use of reviewing classroom learning experiences that showed approximations towards the 'democratic' or 'co-creation' language learning teachers had proposed, as a 'springboard' can only be useful for envisioning new practices when it is based on past experiences (Y. Engeström, 1987). With that in mind, I combed through mirror data and found two insightful episodes: one drawn from Marjorie's lessons where she and two students reviewed vocabulary together on the whiteboard, and the second, where Ned had used mobile devices to engage students in producing passive questions and answers about their country and South Africa.

To add to this, I also felt that the use of an 'Expert' that had facilitated the use of technology and classroom resources to engage in genuine, long-form tasks would also be valuable to participants. The fears many participants had noted with technology had been about the placement of the teacher, the lack of technical expertise, and the worry that technology in the language classroom would always result in 'short-form' work. To give participants insight into this, I asked a teacher, who had recently won a teaching award based on their long-term

learning project (using both classroom and technology resources), to share their insights and answer participants questions. Furthermore, I asked if she would provide permission for teacher-participants to access the award-winning learning project online. The reason for this was twofold. The project could allow teachers to 'see' and 'explore' whether technology is always 'short-form' and gain insight into what role the teacher plays in long-form production tasks that draw on both technological and physical resources.

With the 'Expert' teacher's approval, I shared the links to the *Google Site*, which contained the award-winning project resources and learning video evidence, with the teacher-participants after Session 6.1. I also gave participants a link where they could submit their questions for the 'Expert' teacher before the start of the session, as the Q&A would be done over video conferencing (see Figure 82 below).

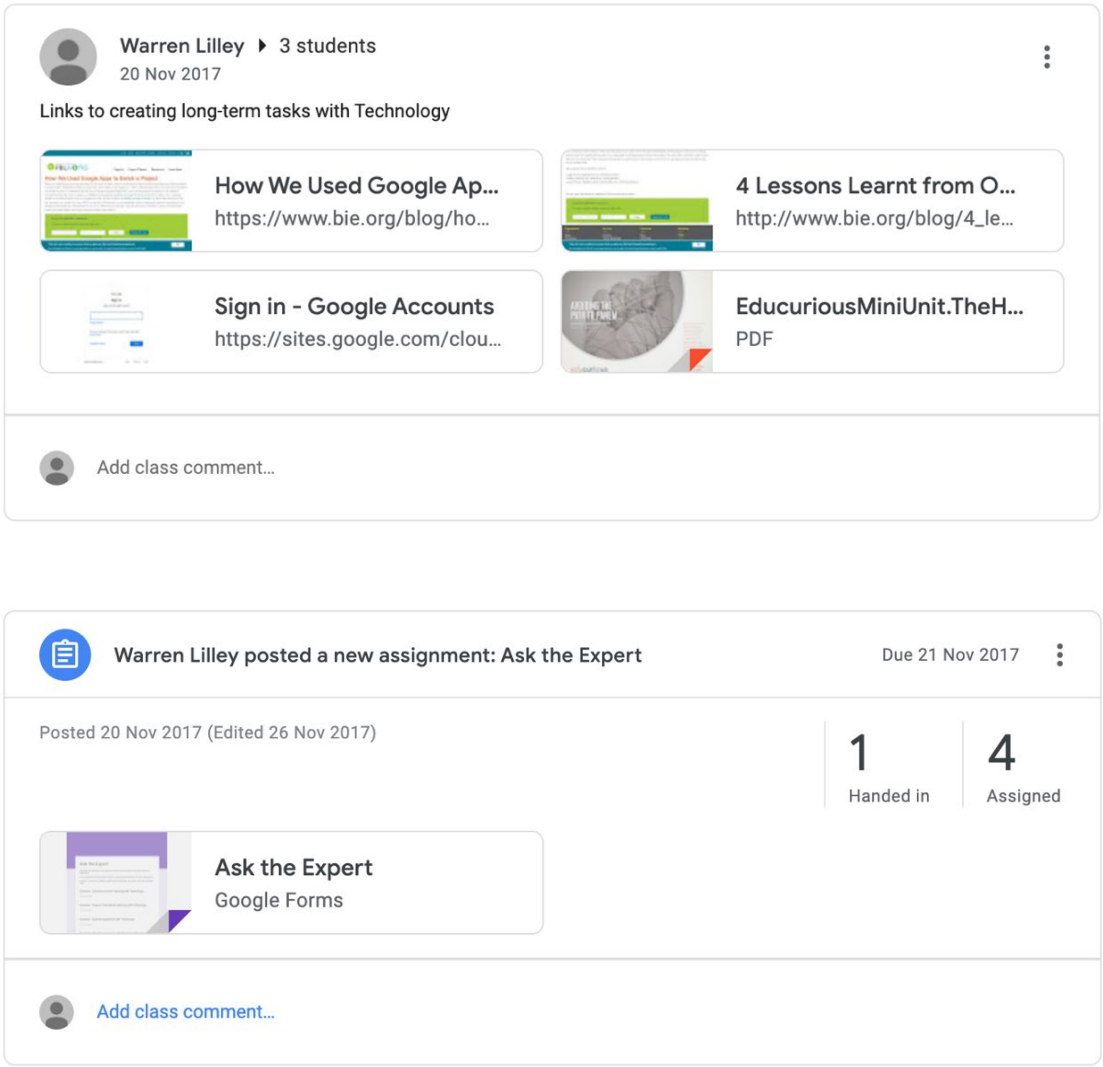


Figure 82: Virtual CL Tasks for Ask the Expert

7.3.3 Discussion: Developing Language Teaching as Co-creation

7.3.3.1 Session 6.1: Initial ideas for a new language teaching model

The session began with a brief overview of the management meeting and our mandate for our sessions going forward. I also referred to participants' responses on the online tasks to prompt their responses for their future activity's development. My reference to their responses led to reiterations of the need for co-creation and longer tasks in the classroom (Ned, Session 6.1), as well as the need to give more authority to students (Marjorie, Session 6.1). To begin focussing participants' work towards the model's development, I firstly presented how the Task Model elaborates upon CHAT in the way it views technological and semiotic resources operating in the classroom. I then invited participants' ideas: "How would you like our new system to look like?" (Session 6.1)

Participants immediately responded with the need to "combine sort of multiple sources… you want to use multiple sources simultaneously" (Ned, Session 6.1). At the same time, participants restated the need for the coursebook: "I don't see how I am going to use mobile technology without the coursebook… mobile technology is going to be an assistant" (Marjorie, 6.1). However, the assistance afforded by mobile technology was differently envisioned to that of the coursebook as it was seen as a way to "co-create and manage together… anything that promotes production from students" (John, Session 6.1).

Stating the need for both to work together, led to participants' negotiating the issue of students' goals. However, promoting students' production led to a conflict surrounding the language aims drawn when giving students' authority to direct their language learning experience as they "don't know what they want… it's kind of ambiguous for them" (John, Session 6.1). To overcome this, participants highlighted how students could be directed through "conversation topics… so you've kind of ringfenced it [language learning] into a specific area" (Ned, Session 6.1). In doing this, the language learning of the classroom could become "negotiated" (John, Session 6.1), whereby setting an area for language development students could come to the classroom with their experiences outside of the centre and work on language that was important for them (Marjorie Session 6.1).

The use of technology was seen as making this possible, as the teacher could give them a topic, and students "do their little bit of research in it, post something… some kind of shared thing. Everybody reads as many of the posts" (John, Session 6.1). To enact this, teachers could give

online readings for students to comment on (John, Session 6.1) or teachers could give specific tasks of "take photos of signs that have incorrect grammar" (Marjorie, Session 6.1). In bringing up these possibilities, teacher-participants stressed the need that they would have to be "really on it all the time to be able to do that" in terms of recognising language students wished to pursue (Ned, Session 6.1). However, again they saw the possibilities for technology to enable this practice, as by getting students to post or comment on an online medium between classes meant that teachers would be able to see it "hours earlier" (Ned, Session 6.1).

What we see in the above is by using the Task Model as a secondary stimulus, teacher-participants are envisioning ways to overcome and realise the potential of drawing upon multiple learning resources in the classroom. Instead of circling around the contradictions, as seen in previous sessions (see Chapter 5 and 6), teachers are instead, by working on a new model of activity, reacting differently to their past experiences of disruption in the Advanced language classroom. For instance, rather than regulate the issue of students having no motive to attend language classes, teacher-participants are instead turning this upon its head by promoting a language teaching which incorporates students' everyday experiences of being a second language speaker into the foci of future language lessons.

A similar move was seen when teachers imagined the problematic onus of keeping a language classroom both in-class and virtually busy "24/7 around the clock" upon their ‘time’ as teachers (John, Session 6.1). Time has been an important source of the primary contradiction teachers expressed throughout the intervention (see Chapter 5 and 6). Interestingly, they re-orientated this issue of time as a way to enact ‘co-creation’ in the classroom. Initiated by Marjorie's past experiences of presentation projects, she posited an idea whereby students collaborating could reduce a teacher's monitoring ‘time’. For example, students could be given a task to do, such as to take pictures of spelling errors, and then swap this material with another student who would then have to present "what the spelling error is, and what the correction is". Activities such as these would "bring it back to the student" (Marjorie, Session 6.1) and not necessarily the teacher. Her idea provoked other activities that could foster more ‘collaboration’ in the classroom, for example, where a theme of ‘investigative journalism’ could open up an inquiry into journalism language (Ned, Session 6.1). In this mode, students would go through a "long-form of [language presentation]" where they would use online resources to find standards and variations of journalism writing and then "build an outline and go into production" (Ned, Session 6.1).

These experiences and ideas were added to with suggestions of using 'geo-tagging' and 'treasure hunts' that would prompt students to go outside the language classroom to find specific sites in Cape Town and on the university campus for language input (Marjorie, Session 6.1). Additional examples included the creation of videos demonstrating aspects of students' culture. For instance, do-it-yourself videos where students teach their peers about aspects of their own cultures in English (John, Session 6.1) or students writing about issues they face such as visa extensions (Marjorie, Session 6.1). In all of these cases, we see an expansion around the possibilities of language teaching and what could be produced. Most importantly, however, is how the production work is tied to students working together and the teacher's role changing from ensuring that production to facilitating it, both inside and outside the classroom. In these ideations, teacher-participants are imagining changing the division of labour more towards the students. In turn, they are envisioning examples of a pedagogy that can overcome the potential disruption of the onus being on the teacher to handle all the division of labour within the classroom. Their first drafting of this model based on these discussions can be seen below.

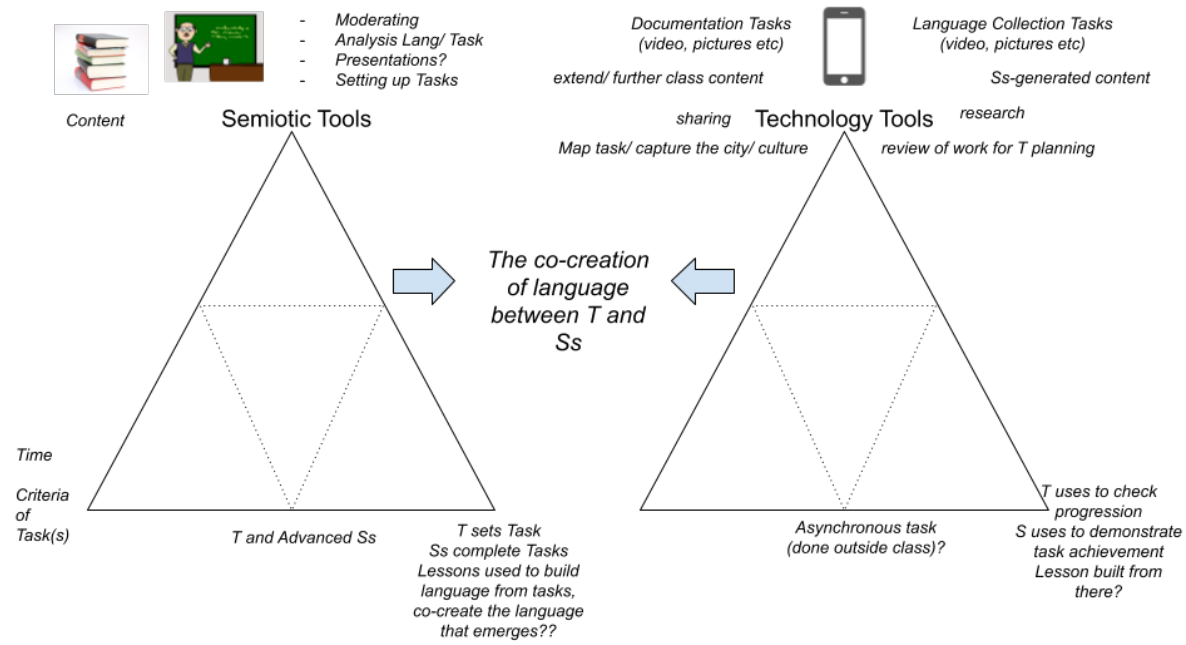


Figure 83: Initial Modelling of Future Activity

This may be why, Ned, towards the end of the session remarked: "I'm starting to see that the collaboration aspect could be, it does have depth of possibility" (Session 6.1). However, he added that "I still don't know how it would work in practice" (Ned, Session 6.1). To this, the second part of the session would form an integral part of teachers' further concretisation of the

temporary model for experimentation, where they would look towards an 'Expert' and their own past practices to help them further their model's development.

7.3.3.2 Session 6.2 – 6.3: Towards consolidating an experimental model

As stated earlier, before the start of Session 6.2, teachers were given access to an award-winning learning project that had used both technological and physical classroom resources. Teacher-participants also had had the opportunity to ask one of the teachers who created this learning project questions (see above). The session itself was handled in a meeting room at the ALC, where teachers used their mobile devices to join the online video conference with the 'Expert' teacher (see below).

In the hour-long session itself, I made a point of giving teacher-participants the space to ask any questions that come to mind, which proved very beneficial. Teacher-participants opened up about their concerns about: the extent to which teachers and students could both be involved in the classroom (Marjorie, Session 6.2), the viability of students researching on their own (John, Session 6.2), whether technology can only produce short-form tasks (Ned, Session 6.2), as well as how task sequencing would work inside and outside the classroom (John, Session 6.2) to name a few notable questions.

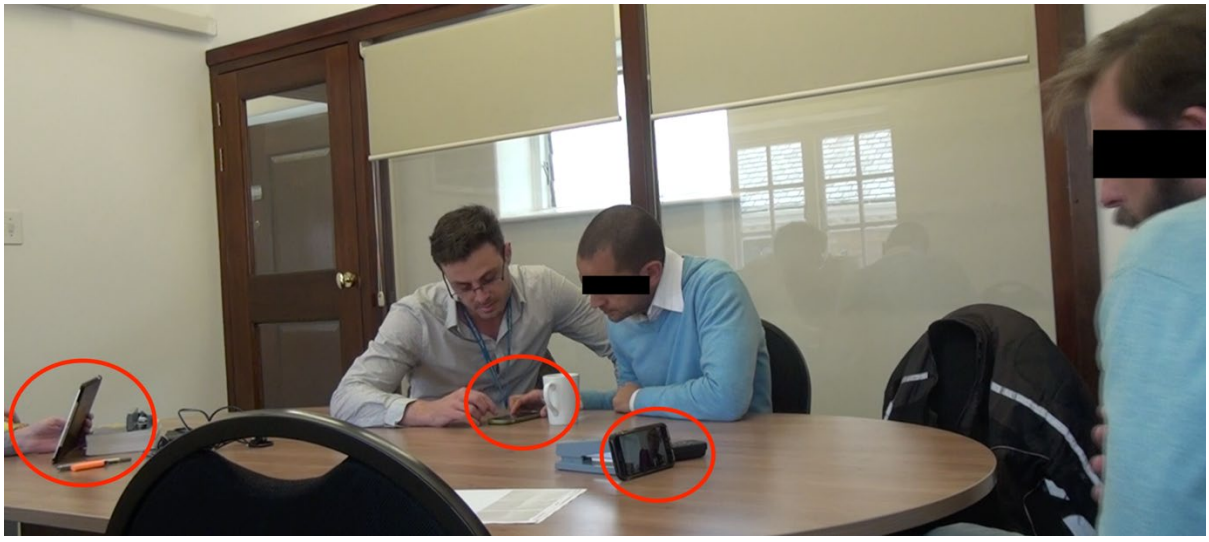


Figure 84: Teacher-participants using Google Hangouts on their mobile devices to talk to 'Expert' teacher

Following the end of the session with the 'Expert' teacher, I invited teachers to reflect on their experience. Marjorie noted that she felt the session had put her at ease in the knowledge that, as a teacher, she did not have to know exactly how all technology worked. She summarised her feelings as follows: "if we open up the outcomes and just see what happens, sometimes that

can be a better option" (Session 6.3). The other participants agreed, but noted that they wanted more insight into how to sequence lessons (John, Session 6.3) or the ability to 'mimic' a lesson (Ned, Session 6.3). To this, Marjorie responded how "trial and error" (Session 6.3) is always beneficial. The others agreed, noting that their feelings were similar to teaching any new lesson for the first time (John, Session 6.3), and how they would love to see what they could do with technology (Ned, Session 6.3). Nevertheless, at the same time, participants noted that everything was "very abstract at the moment" (Ned, Session 6.3).

In both John's and Ned's reflections above, we see evidence of the teachers themselves not having the necessary confidence and their worries concerning their current model's abstraction. I had foreseen this issue arising. So, to show teachers their own approximations towards this, I displayed two excerpts of Marjorie's and Ned's practice that I had felt embodied the 'co-creation' and 'democratic' teaching they were aiming for (see Figure 85 below). Of particular interest to this discussion is teacher's responses to Ned's lessons where he engaged his Advanced students in using their phones to construct passive questions and answers based on information they had found on the internet.



Figure 85: Video extracts of Teacher-Participants lessons showcasing collaboration, co-creation & democratic teaching

Reflecting on Ned's video extract, teacher-participants noted how "there is co-creation of language… it's student-generated content" (John, Session 6.3). Ned responded that this was only possible as "the requirement for the language was really tight" (Ned, Session 6.3). His insight led to possible ways to extend what Ned had done, such as extending the information search to Cape Town (Marjorie, Session 6.3) or making it a "fact-finding mission" (John, Session 6.3).

Seeing teacher-participants making efforts to concretise similar practices towards the model (see Figure 83 above), I displayed it on the whiteboard and orientated teachers towards how their ideas could fill in or clarify spaces of the model such as 'Presentations?'. Teachers immediately wondered if this querying meant the 'presentation' of language or an approach to 'presentation'. The teachers felt that instead, the 'rules' would need to be 'task-based' in the semiotic plan of the model, so that students could get two opportunities to rehearse the language before presenting it (Ned, Session 6.3). From that, the teacher could engage students in an inductive presentation based on students' language, so that the teacher would be able to mediate "problems as and when they come up" (John, Session 6.3).

Following this, teachers began to question from where the language focus in class would originate, i.e. would it come from the topic or language function that had been set it in the task or even the task itself? Instead, teachers advocated that all three would work together "like a triangle" (Ned, Session 6.3) as the language functions would set the task and the topic, as the "the language is already embedded… that's more what's going to steer the selection of text". Their discussion around this culminated in a new model for how language would work in a classroom (see Figure 86 below).

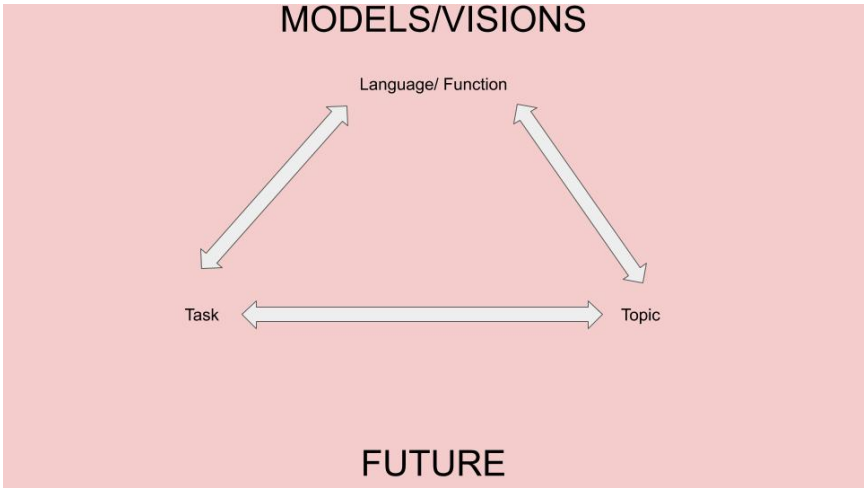


Figure 86: Model for interaction between topic, task and language function for Language as 'co-creation' model

Ned explained how this model would work for their 'co-creation' model in the setting of tasks within the classroom:

> so first of all, you'd have like a function… [emulating asking students] where are the examples that's you find that [function] being used… and it would give you [the teacher] a list of those things. Then you negotiate two or three examples… and then they [students] go out and find that, and example of that, and that becomes your [the class'] selection of the text, and then you pull the function out of the text… (Session 6.3)

Marjorie provided an additional example of how recent political speeches by Cape Town officials who extensively use passive voice to discuss the 2017 water crisis, would be useful (Session 6.3). Teachers could focus on a specific aspect of how politicians would use the passive and then task students with writing their own articles or interviews using the passive to fulfil a similar function, or even perhaps inverting it (Session 6.3). John added how this triangle and the focus on function could aid the selection of materials for targeted language work in what they decide for the classroom (Session 6.3).

What we see above is an example of participants' working towards enacting their auxiliary motive of 'co-creation' with their new teaching model. They faced a problem of what would drive their lessons language focus. Would it be the task? Content? Or Function? They then seem to have drawn upon their past experiences – in this case, Ned's tight language structure that prompted students' passive production – to form an entirely new model for how function, topic and language task would work together in a language classroom. In fact, one could say that language function, topic and language task are co-creating each other.

Subsequently, our discussion culminated in concretising how teachers expected technology to work in the classroom regarding synchronous (with the teacher) and asynchronous (on students' time) activities. By the end of the session, participants had developed their second draft of language teaching based on 'co-creation' (see Figure 87 below) and had outlined possible technologies to learn about, in order to experiment with the model in their lessons.

In the teacher-participants' model emphasising 'co-creation', we see some similarities to 'co-configuration'. Co-configuration is seen as an integrated work practice that adapts to the customer through the service providers and client continually mutually configuring each other's practices (Daniels et al., 2007; Y. Engeström, 2004). We see this mutual configuration in the lesson model below, where expanding traditional classroom resources to include technologies

provides new mobility for the teacher and the student in the classroom, resulting in a language learning pedagogy that draws on the student as much as it does on the teacher. A language learning where the teacher guides the language focus, but it is ultimately the onus of the student and the direction they take with this task that sets the language that will be focused on in each lesson.

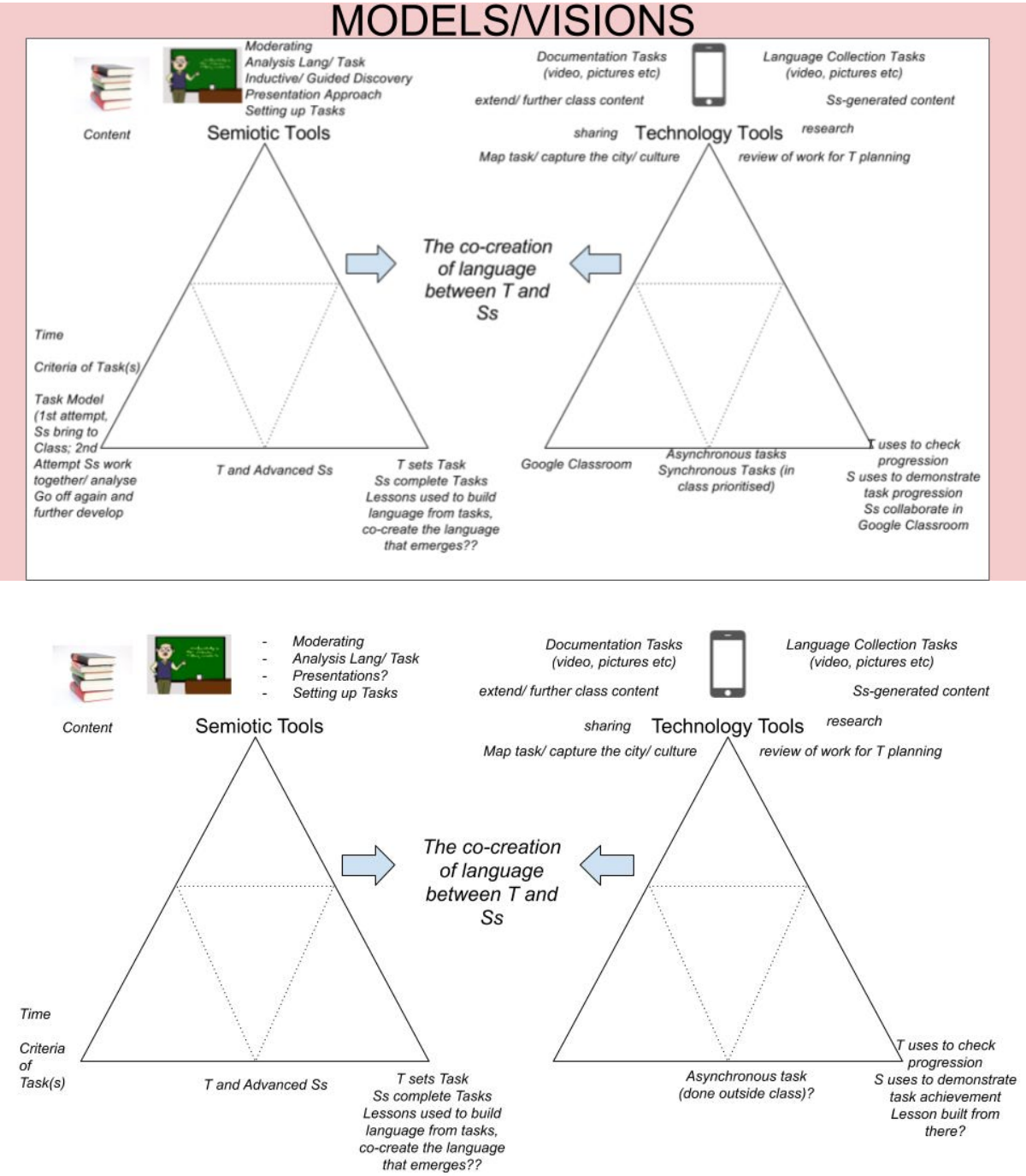


Figure 87: Language as 'co-creation' model

7.4 Summary: Towards a New Model of Language Teaching

This chapter provides a recount of how teacher-participants further modelled systemic contradictions between the object, tool, division of labour and rule to create an entirely new model of language pedagogy for Advanced EFL students. Through this recount, this chapter provides additional insight into RQ1.2, exemplifying how modelling tasks can be enhanced through a 'blended' CL method.

Moreover, this chapter provides the concluding insights into RQ 1.1. and 1.3 in how intricately systemic contradictions are tied to developing new models. It was through 'further modelling' that teacher-participants clarified the contradiction emanating from the ability of a singular mediator (the coursebook) to meet the diverse needs of contemporary language students. Consequently, this meant reaching a model which could meet their needs for expanding both the resources and 'collectiveness' of the classroom. In the next chapter, I discuss teacher-participants' experimental lessons with this model and the after-effects of this research-intervention at the ALC.

Chapter 8: Conclusion

Widening the Change Laboratory Toolkit

"The Change Laboratory is a living toolkit… a creative endeavour that requires grasping the local circumstances and specific potentials of the activity systems involved"

(Virkkunen & Newnham, 2013, p. xvii)

8.1 Introduction

In this chapter, I offer a review of the key findings of this research-intervention, discussing its contribution to both the ALC's development and change interventions in South Africa. I follow this with a discussion of this study's limitations, as well as areas for possible future research.

8.2 Key Findings

This study grew out of necessity for change and innovation in English Language education within postcolonial territories. South African higher education faces a *glocal* tension between its 'local' need to decolonise language and other access barriers to tertiary education (Spaull, 2013a, 2013b) and its 'global' need to internationalise its student body to obtain elevated funds and rankings (Altbach & Knight, 2007; Kishun, 2007; J. J. Lee & Sehoole, 2015). Emerging technologies, such as mobile phones, have been positioned as key to overcoming these conflicts (Isaacs, 2012a, 2012b; Kukulska-Hulme, 2010c). To this end, this research sought to identify novel pedagogical pathways where mobile technology and language education could be harnessed to respond to the needs of South African universities and their idealised future student body.

However, as in many other educational spheres (Gundy & Berger, 2016), numerous attempts at meaningfully integrating emerging technologies and English language teaching have often fallen short (Kukulska-Hulme & Shield, 2008). This difficulty has been traced to the lack of emic perspectives (Oliver, 2011; Salaberry, 2001; Yang, 2013) which could fully account for the uniqueness of local contexts (Hyland & Wong, 2013) and their encompassing greater variables (Duman et al., 2015), such as relations of power (Lilley & Hardman, 2017). It was argued that the use of Y. Engeström's (1987) third-generation development of CHAT and its encompassing dialectical theory of Expansive Learning could overcome these limitations through its understanding of development being intrinsically tied to harnessing the latent

contradictions found within each organisation's distinctive context (Bligh & Flood, 2015). With this in mind, this research study utilised a critical, cultural-historical approach and participatory, formative-interventionist methodology to answer:

How can a Change Laboratory research-intervention develop a meaningful integration of mobile technologies and English language teaching, in the context of a South African higher education language centre?

From this driving research question, three sub-research questions were derived. Their findings are respectively reviewed in each sub-section below to show how each was answered in this research-intervention study.

8.2.1 What potential contradictions are evident in the use of mobile phones as artefacts in the activity of language learning at the ALC?

My preliminary ethnographic study demonstrated potential contradictions in the rules and division of labour in mobile use within the activity of language learning at the ALC. These potential contradictions were seen in both teachers' lessons where, on the one hand, Marjorie's lessons that used both the coursebook and student use of Google classroom on mobile devices mirrored each other. In this lesson, both artefacts circumscribed to coursebook coverage, resulting in further constriction of communication and prioritisation of the teacher's role in the classroom rather than the learners' role.

On the other hand, mobile device use in Ned's lessons illustrated a reaction against the rules for coursebook coverage and teacher-centricity. For instance, in his first lesson, Ned's mobile use was instigated to move away from the ‘arbitrariness’ of the coursebook, to align closer with students' language learning needs. His use of his mobile device allowed him to access more knowledge on multi-word verbs and expand his language work with students. In a second lesson, mobile device use by both him and his Advanced students resulted in collective language production of the passive, where the traditional division of labour was shown to shift to a more learner-centred one.

Contradictions have the potential to either constrict or expand participants' actions (Y. Engeström, 1987). In the lessons above, mobile device use was seen to potentially contradict the rules and traditional division of labour in the classroom. In Marjorie's case, their use

resulted in further constriction and in Ned's where they offered expansion in these sites of language learning activity.

In mapping both the vertical and horizontal dimensions of ALC work practices, I located these potential contradictions emanating from a possible deeper contradiction within the centre's object. The ALC's placement within a higher education institution showed signs of conflict between its profit motive of income generation for the Humanities department versus the ALC's linguistic/ educational motive of equipping foreign language students to 'communicate' in English. This conflict potentially resulted in the need to satisfy two parties: the university through 'standardisation' of all its procedures, assessments and materials; and students through language learning at the centre meeting their 'communicative' needs. In an effort to address both, the ALC demonstrated a compromise in the use of 'standardised' global TEFL coursebooks that act as both mediator and syllabus as the centre, as well as the use of an openly defined 'communicative' language pedagogy that could be anything "as long as [teachers'] students are happy" (Dani Interview).

Taking all this into account, I would argue that the ALC's placement within a higher institution and its encompassing need to demonstrate a communicative language pedagogy "that works" resulted in the constriction of object, mediator, division of labour and rules. This constriction results in mobile use in the classroom potentially contradicting the 'communicative' division of labour and rules of the classroom, as seen in Marjorie and Ned's lessons above.

8.2.2 To what extent can the Change Laboratory method be adapted to suit the current local context of the research-intervention site and still facilitate Expansive Learning Actions towards meaningful MALL integration?

The research-intervention site offered a unique problematic regarding time and space. At the time, recent student disruptions over access to tertiary institutions in the form of *#FeesMustFall* were becoming violent. These disruptions meant that the ALC classes would need to be displaced to safer sections around the Cape Town CBD. This displacement of teachers' classes and the part-time nature of their work resulted in the need for an adapted research-intervention methodology that could be mobilised to wherever the teachers were primarily located. This need resulted in an adaption of the Change Laboratory toolkit through the use of *G Suite for Edu* applications that emphasised mobility for teachers to access a digital *3x3 Expansive Learning Frame*, resources and reflections.

Y. Engeström et al. (2014) note that in order to show the viability of any formative intervention necessitates that the Expansive Learning process, through double-simulation, must be systematically and historically traced. This research-intervention demonstrated viability through a three-part, interpretive-discursive analysis of participants' discourse. Firstly, a preliminary linguistic-cue analysis of participants' turns evidencing Expansive Learning actions was done which drew upon Y. Engeström & Sannino's (2011) four types of discursive manifestations of contradictions framework. From this, a discursive analysis was undertaken to identify specific turns which showed evidence of each type of discursive manifestation of the contradiction. This can be seen in Figure 88 and Table 15 below. It is important to note when looking at these illustrations that each turn itself does not identify the actual discursive manifestation of contradictions, but participants' attempts to articulate them (Y. Engeström & Sannino, 2011).

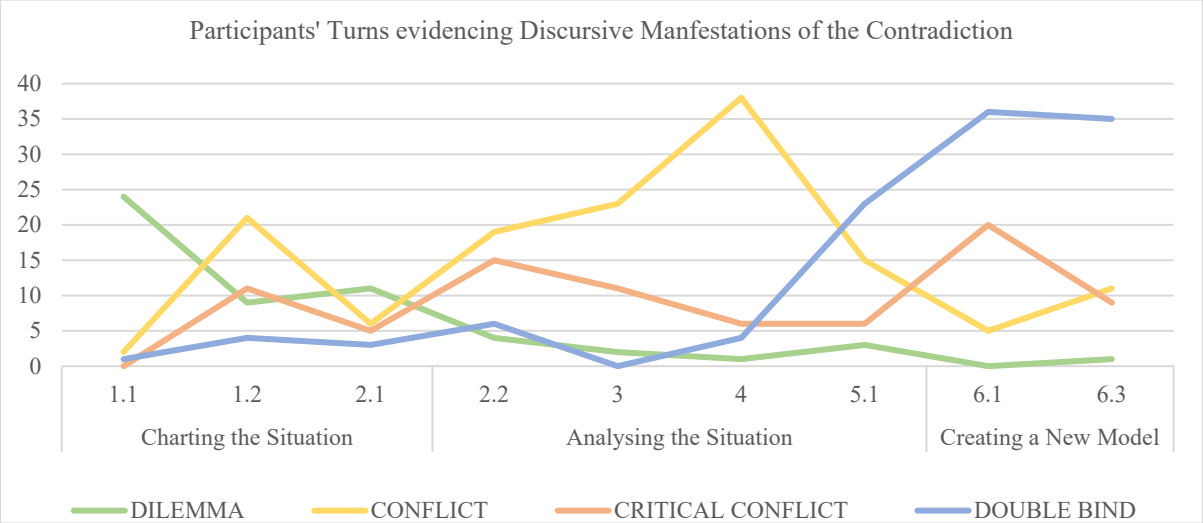


Figure 88: Graph demonstrating longitudinal progression of participants' turns articulating discursive manifestations of the contradiction

Table 15: Numerical data of participants turns articulating discursive manifestations of the contradiction

	Charting the Situation			**Analysing the Situation**			**Creating a New Model**		
	1.1	1.2	2.1	2.2	3	4	5.1	6.1	6.3
DILEMMA	24	9	11	4	2	1	3	0	1
CONFLICT	2	21	6	19	23	38	15	5	11
CRITICAL CONFLICT	0	11	5	15	11	6	6	20	9
DOUBLE BIND	1	4	3	6	0	4	23	36	35

The above illustrations are particularly useful against the final interpretive analysis provided in previous chapters, which historically traced how these manifestations evolved along with the double-stimulation principle of *from the abstract to the concrete*. For example, the initial abstracted *dilemmas* and *conflicts* in participants' *questioning* actions from Session 1.1 around language teaching at the ALC transformed into full-blown *conflicts,* and *critical conflicts* as participants unpacked the 'why' and 'where' their initial *questioning* stemmed from (seen in *Analysing the Situation*). This trend is seen above, where the gradual decline of *dilemmas* in participants' turns coincides with a significant increase in *conflict* and *critical conflict* manifestations of the contradiction.

Central to explaining this shift is how *conflicts* and *critical conflicts* manifest when participants articulate feeling negatively affected and facing contradictory motives, respectively (Y. Engeström & Sannino, 2011). In the actual empirical- and historical-analysis during Sessions 2.2 – 5.1, participants' initial *dilemmatic questioning actions* around the problematic primacy of the coursebook (mediator) and teacher-centricity (division of labour) were linked to the time and CLT principles (rules) of the ALC. Moreover, this unpacking resulted in participants' clearer identification of the conflict of motives they were experiencing between meeting the changing needs of Advanced language students, as well as the demanding financial motives of the ALC.

Following this recognition of conflicting motives, a turning point in seen in Session 5.1, as participants move towards a new model. Expansive learning theory notes that it is when participants recognise a conflict of motives and the ensuing *double bind* they face that learning actions which prioritise practically transforming their activity towards a new 'object' result (Y. Engeström, 2011a; Sannino, 2015). This new object specifically overcame two areas participants identified as seminal to the conflict of motives: the need for greater democracy in the classroom and an expansion of mediational tools. As can be seen above, there is a sharp decline from Session 5.1 to 6.2 in *conflict* and a noticeable increase in participants' turns which express *double binds*. During these sessions, participants focused on creating a new pedagogical activity system that centred on a language teaching object for Advanced students at the ALC as 'co-creation'.

In sum, this study shows that an adapted 'blended' Change Laboratory method which emphasises both physical and digital mobility still can facilitate expansive learning in formative-intervention sessions.

8.2.3 What potential changes in the use of MALL occur when these contradictions are used with participants in a Change Laboratory?

Following the development of a new pedagogical activity system for language instruction as 'co-creation', teacher-participants conducted their initial teaching experiments using their new model. The model emphasised how teachers and students could make use of semiotic and technological resources, inside as well as outside the classroom, to co-create the language focus of a lesson.

In actual practice, teachers' experimental pedagogy showed approximations towards enacting their new pedagogical activity. In their planning sessions together, teachers had decided upon a theme of 'Sustainable Cities' throughout one day's lessons for their initial attempts. In the first lesson, Ned and Marjorie would co-teach a reading and speaking lesson using the *NearPod* application based on an article from the Guardian (Balch, 2015). Following that lesson, Marjorie and Ned would send John a *GoogleDoc* of the language and ideas students had presented in their lesson, which would inform his speaking lesson where students would discuss the problem of modern-day cities using the *Popplet* application. I briefly review each below.

For Marjorie and Ned's lesson, they had planned to make use of an introductory *YouTube* video to set the theme and language function of the lesson. Their lesson was to be followed with students working in groups on their mobile phones with the *Nearpod* lesson teacher-participants had created (see Figure 89). During this part of the lesson, students would use mobile phones to answer three questions (Figure 89, slide 2) about five images (Figure 89, slides 4-8) on the possible ways in which cities could be made more sustainable. Following that, students were expected to read five small excerpts of the texts which corresponded to the images (Figure 89, slide 10-14) and then vote (Figure 89, slide 15) on which way would be the most valuable to a city.

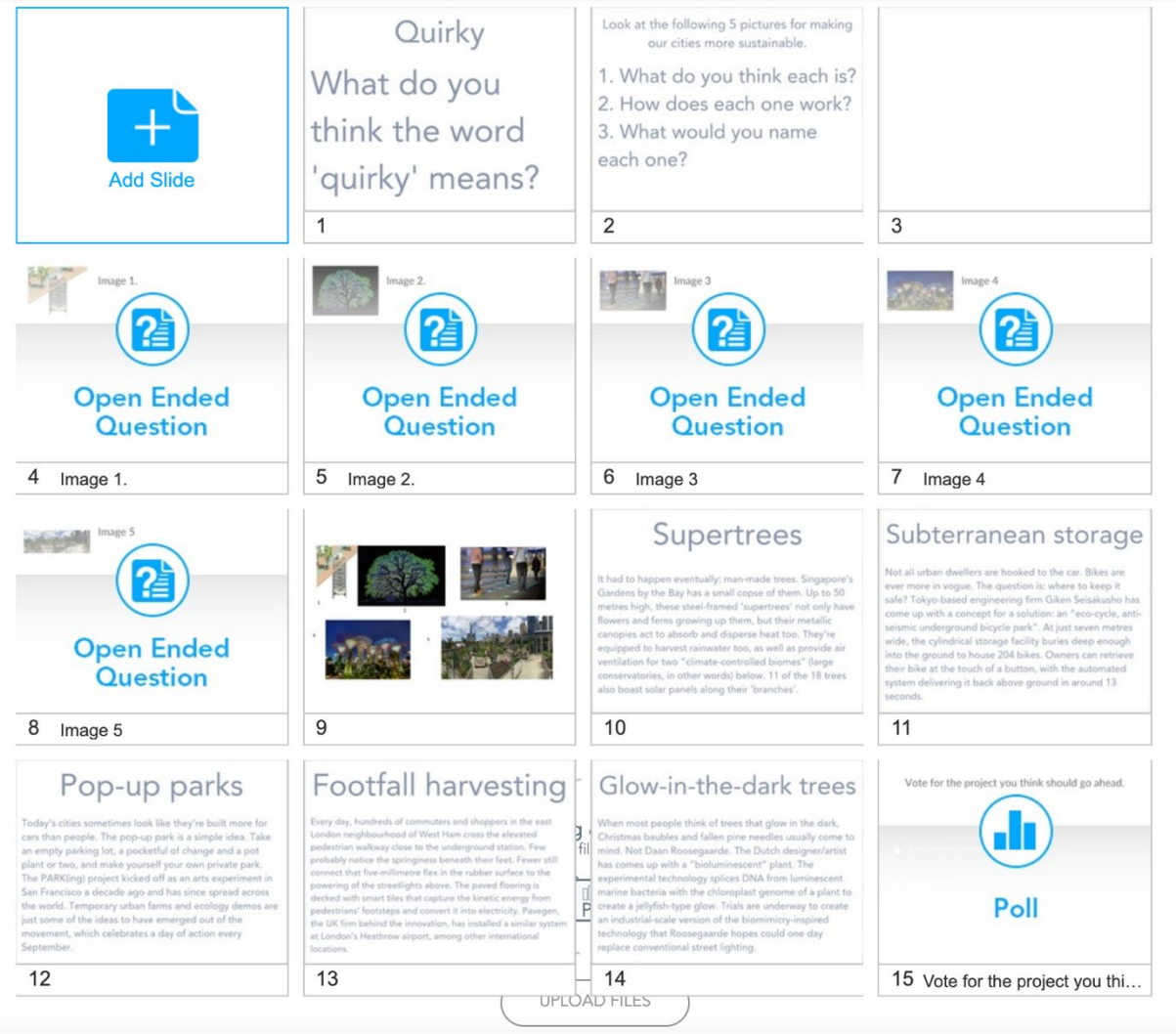
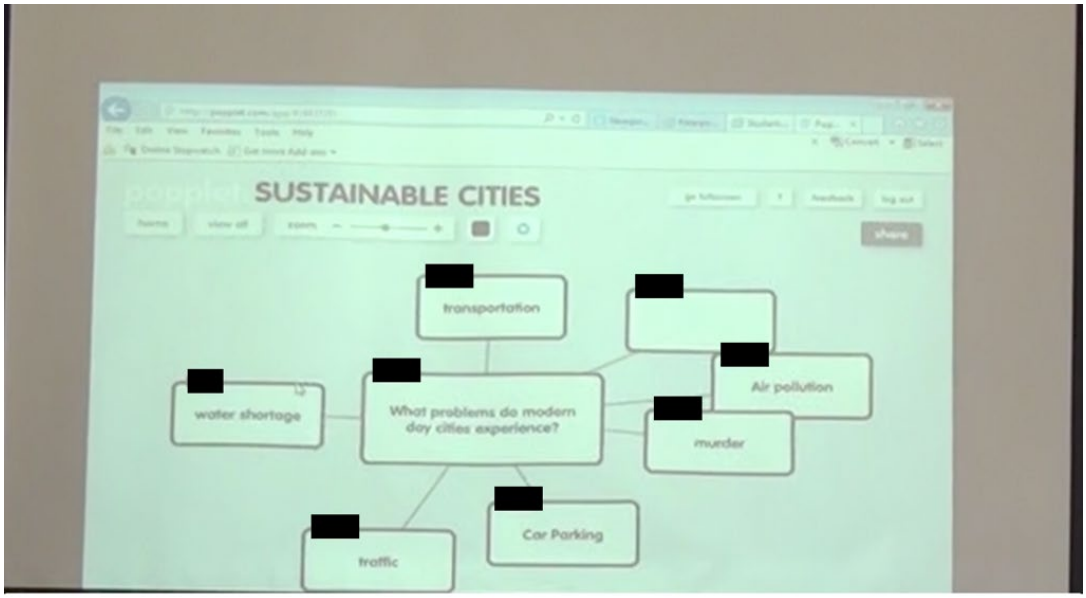


Figure 89: Virtually Interactive Slides of Ned and Marjorie's NearPod Lesson

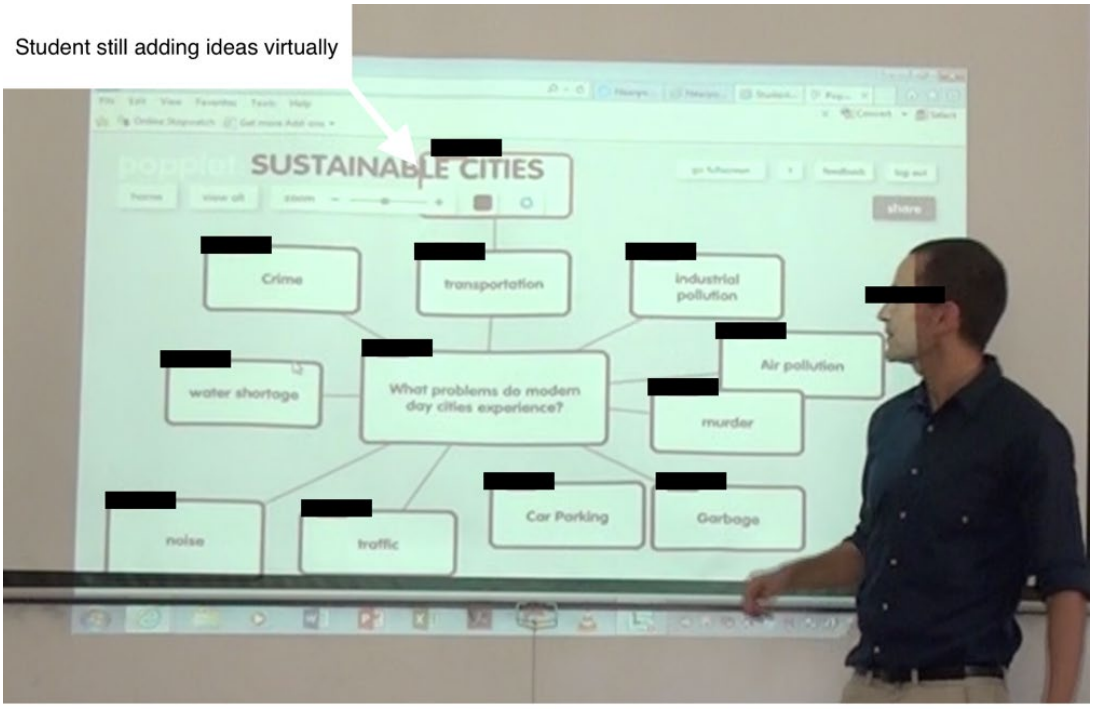
Following this, the plan was for students to negotiate which sustainable city project should be used going forward, and the language students used to discuss this would form the basis for John's following lesson. However, in actual practice Marjorie and Ned had difficulties providing students access to the *Nearpod* lesson, resulting in them leaving it at the last minute and moving the lesson to strictly pen and paper (Ned, Session 7.2). In order to assuage the impact this change would have on John lessons, Marjorie shared a *Google Doc* of students' language and initials ideas of sustainable city projects with John to inform his lesson, which was to follow theirs (John, Session 7.1).

In John's lesson, there were noticeably fewer difficulties. Owing to the earlier confusion, he decided to start the lesson with students anew (Session 7.1). He used *Popplet* to invite students to collaborate to discuss issues of modern-day cities. The lesson encompassed several vital steps (which can be viewed in Figure 90 below). The first involved eliciting students' initial

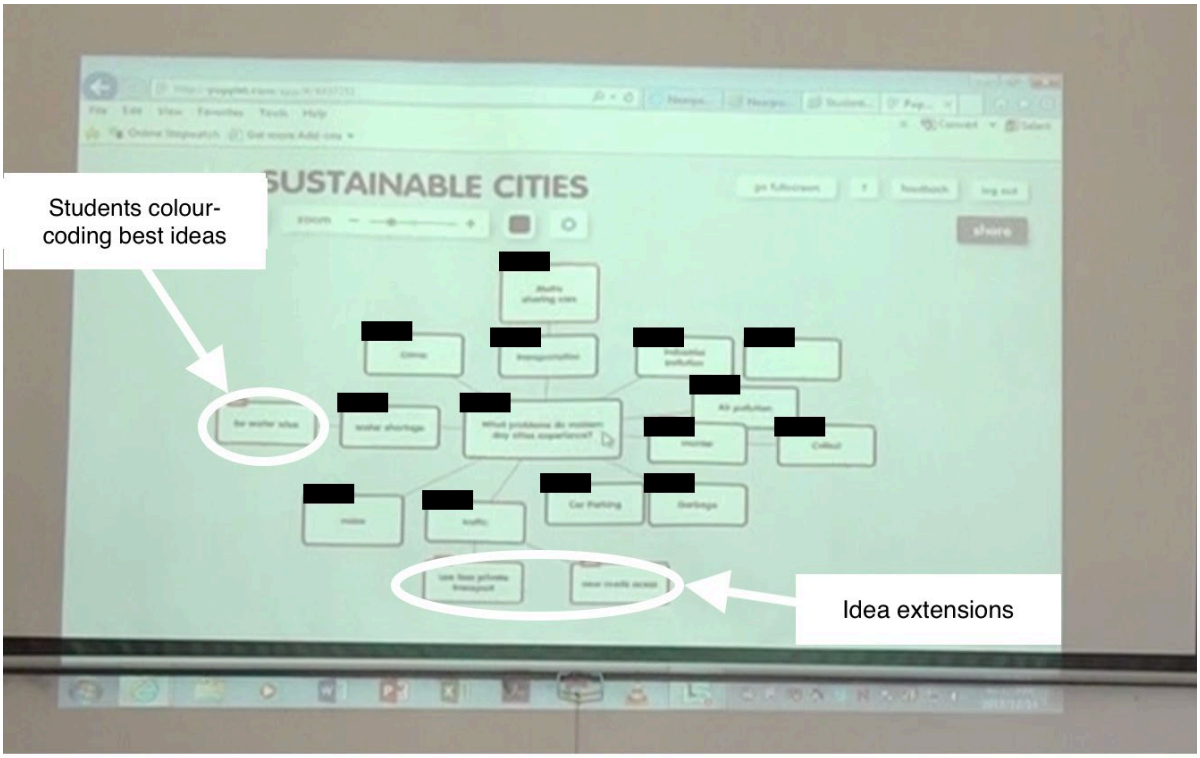
ideas of what the main problems were. Then, following a brief review of ideas with students, he then asked them to colour code which ideas they thought would best answer the discussion question and add possible idea extensions and vocabulary that they thought would be helpful. Significant to this lesson was the collaboration among the students co-creating the language for the lesson based on the topic provided by John (Session 7.1)



Students virtually collaborating to produce ideas for discussion question "What problems do modern day cities experience?"



Teacher reviewing students initial ideas for discussion question



Start of students collaboratively colour coding the 'best ideas' for the discussion question. Students also virtually add possible idea extensions and vocabulary they think would be useful

Figure 90: Key stages of John's Lesson using the Popplet application

Upon reflection, he noted how the new model informed his use of *Popplet,* facilitated a lesson that was "completely up to [students]" as well as language work which provided students: "another opportunity to kind of like reformulate and correct language as well… [as] they're picking ideas up; same ideas in different ways. So, obviously, there's again, more vocabulary" (John, Session 7.1). Moreover, he noted that the digital form could be easily used again for future lessons (John, Session 7.1).

In reviewing their initial experimental lessons using the model with management, several changes in the teacher-participants' approach to technology in the classroom became evident. Firstly, there was a distinct change in their view of mobile technology as viable for the language classroom. Teacher-participants explicitly mentioned the ability for the use of *MALL* and technology to "stay far closer to the actual, the expectations and the needs of your students" (Ned, Session 7.2) in their ability to extend the language from the coursebooks to get closer to students' language learning needs. This point is particularly noteworthy as the difficulty of meeting students' needs was seminal to the contradiction teacher-participants articulated throughout the CL.

A further facet of this contradiction was the teacher-centricity of lessons, where teachers felt they needed to keep the communication going. In John's review of his lesson, he felt that his use of *Popplet* had demonstrated to him how learners could take the lead as he could "just sit back and suddenly all these ideas start popping up" (Session 7.2), was a positive experience. He specifically lauded his use of *Popplet* as having heightened student responsiveness and engagement, while not compromising the language goals (John, Session 7.1; 7.2).

Furthermore, an unexpected change was in how teachers saw the use of MALL *and* technology as useful aids for planning and further lesson development. For example, teachers indicated in their planning that their experimental model could facilitate the use of more digitally authentic resources, like Marjorie and Ned's use of the Guardian article for their lesson. They found that in an era where more and more information is captured digitally, it made planning for the use of authentic resources in lessons more accessible (Ned; John Session 7.2).

Moreover, teacher-participants further expressed the possibility of how technology could assist their teaching, such as the ability to hold a digital record of students' language "feeds back in the whole time" (Ned, Session 7.2) into future lessons: "All of that info is then saved fully… so I have a record now of all of their input, their writing, if I want to use that for any subsequent language work" (John, Session 7.2)

John specifically added that by using mobile applications anything he created could "be logged into by anybody and added to my future lessons" (Session 7.2). He further stipulated that in the process of creating the above lessons with his colleagues, which were all based on previous paper lessons, he was "very surprised how quickly we were able to save a paper-based lesson and just transfer it" (Session 7.2). Moreover, his experience also showed management's concerns over the time to 'learn' how to use these applications were unfounded: "my students were able to learn how to use *Popplet* and *Nearpod* and complete the lesson in a single elective class" (Session 7.2).

In light of this, there are two main takeaways. The first is the unexpected emphasis on teachers not only citing mobile technology, but the use of any ICT technologies to aid planning and further language development, thereby suggesting an expansion in the mediational means for teaching Advanced language students. Secondly, teacher-participants reflections following their first experimental use of integrating *MALL* in their lessons showed a positive attitudinal change towards the viability of technology to be effectively used in the classroom. John's lesson

exemplifies how the new system which is based on 'co-creation' can potentially facilitate language lessons which move the lesson away from a strict teacher focus, enabling student participation, collaboration and communication in the language classroom.

8.3 Limitations of Research Intervention

In respect to the findings above, there are several limitations of this research-intervention's method and design that must be taken into context.

One of the main limitations is regarding the nature of this intervention's emergence. Most often CLs emanate from an organisation that wishes for a formative-intervention to be done. This was not the case in this research. As an insider-practitioner, I had noticed there were issues regarding the use of mobile technology at the ALC and had deemed it valuable for further inquiry. From this, management approval was sought and obtained. However, from the outset, there were noticeable issues with the Principal of the ALC who, following our initial discussion, had understandable reservations about the research, including the effect this research would have on participating teachers' and managers' time.

From: [redacted]
Sent: [redacted]
To: [redacted]
Cc: [redacted]
Subject: [redacted] participation in research project

Dear Warren,

I'd like to meet to discuss some concerns that I have regarding [redacted] participation in your research project. Specifically:

- I'd like to have clarity on what exactly it is that you are researching, i.e. the research question itself. As far as I know this has not been communicated in a clear and unambiguous way, which I find surprising.
- What the methodology for the research is in as far as it impacts on the Centre. I know that you have talked about 'Change Labs' but it is not clear to me what this actually means. Other terminology such as 'Disruption Diary', etc. have also not been adequately explained.
- What the estimated additional workload in terms of project participation will be on my staff members, and how that is best managed so as to minimise the impact on the Centre's operations.
- What the perceived benefit to [redacted] is in participating in the project.

I'd also like to formalise the channels of communication so that requests come through me, as the Centre's Director, or [redacted], as the teachers' line manager.

Thanks,
[redacted]

Figure 91: Principal email to Researcher-Interventionist

Following the Principal's email, attempts at increased transparency, as well as greater clarity were made. I endeavoured to keep the Principal part of the process, providing him with regular updates on how the research was progressing, as well as communicating the anticipated time demands involved. However, this initial reservation by the Principal, acting as my line manager, made me very cautious about the intervention and as seen in my researcher's diary (see Appendix 8), insecure about my placement at the centre and the ability to continue this

study. This insider researcher-interventionist status layered several conflicting tensions in my practice which impact its generalisability. However, my status does provide insight into the difficulties insider researcher-interventionists may face in conducting CLs within their own workplace.

Following on from this, was the further issue of direction from management in the intervention. Again, as the research-intervention was not condoned by management, it meant that particularly interesting directions that did not follow technology-use were not taken up. For instance, Ned's wish to delve into the time, payment, ownership, and organisational hierarchy tapped into the contradiction participants were facing with technology. However, management's motives and ideas for the organisation's future direction were not open to this line of development, which I do feel could have yielded further exciting developments.

An additional complication arose concerning the design of the Blended CL which always encourages virtual collaboration outside of sessions, as throughout the intervention, John did not have access to the internet, which impacted his ability to complete some tasks.

Data collected over the course of the CL in its virtual and actual sessions with participants was significant. As a lone researcher, there were noticeable difficulties in handling all my responsibilities: planning each session, setting up each task, conducting preliminary analyses and transcribing all data collected. These all-embracing responsibilities meant that I might not have been able to entirely do justice to the research-intervention or all the unique insights my participants provided.

While these findings and research limitations are important, the success of any CL is premised on what it generates (Sannino, Engeström, & Lemos, 2016; Virkkunen & Newnham, 2013). I now move to discuss the contributions this research generated, moving first to the intervention site (local generativity) and then how this research-intervention can contribute to domains of English language teaching and educational change (domain and method appropriation) below.

8.4 Intervention's Contribution to the ALC: Local Generativity

CLs are premised on their ability to contribute towards the novel development of the work practices in the sites they are located (Y. Engeström, 1987; Virkkunen & Newnham, 2013). Following the completion of the CL, several contributions were facilitated through this formative-intervention.

Seminal to acknowledging this study's contribution is that "all our designs have unintended consequences and drift in unexpected ways" (Virkkunen & Newnham, 2013, p. xv). Similarly, following this formative-intervention research, several indirect, unexpected consequences of the CL can be outlined. The first of these was the rethinking of the CPD program at the ALC. Upon presenting teacher-participants' ideas for future development to management in Session 5.2, one of these was the development of a CPD program which was more structured and facilitated feedback for teachers' training. The development of this process began in 2018 and culminated in a fully-fledged *Professional Development Plan* program (see Figure 92) for permanent staff members in 2019, with tentative plans to roll-out the program for all staff in 2020.

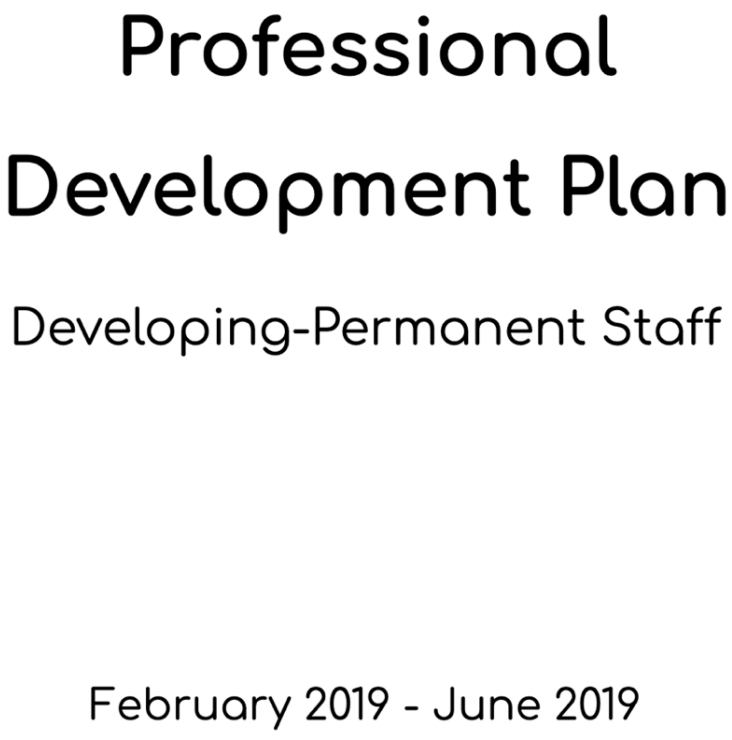
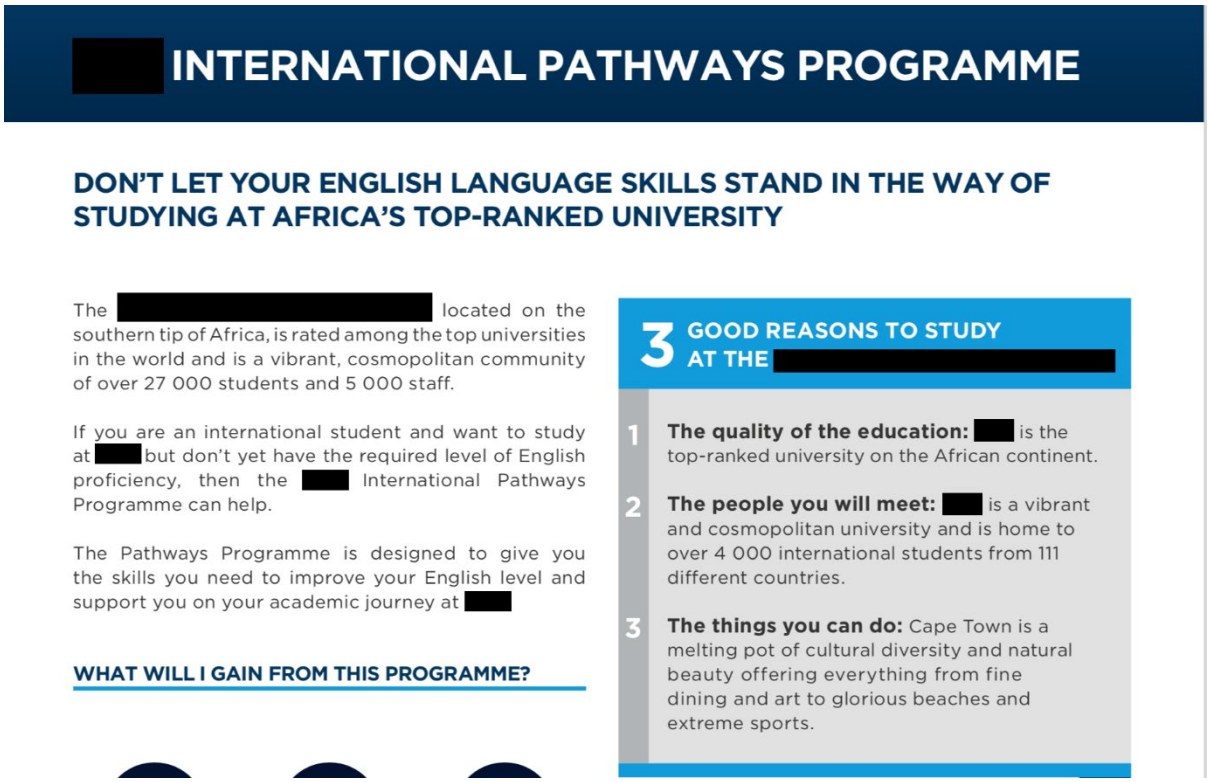


Figure 92: Front page of Professional Development Plan for developing new permanent teaching staff (ALC, 2019) (see Appendix 9.2.7)

Secondly, during the CL process, a fundamental element of the contradiction teacher-participants experienced was the extent to which the General English program met students' motives for entering into the university where the ALC is placed. The ability to meet students' expectations was a site of joint aggravation for both students in interviews and one in which teacher-participants attempted to reconcile during the intervention.

Following the intervention, a plan to create a Pathways program which would provide a means for students at the ALC to enter the university was initiated. At the end of 2018, the program was approved, and in 2019 its development began with the offering available in 2020. The program itself makes elevated use of the technology and a standardised language coursebook from which this study's 'language as co-creation' pedagogical activity system model is being used to plan the course's instruction.


[redacted] INTERNATIONAL PATHWAYS PROGRAMME

DON'T LET YOUR ENGLISH LANGUAGE SKILLS STAND IN THE WAY OF STUDYING AT AFRICA'S TOP-RANKED UNIVERSITY

The [redacted] located on the southern tip of Africa, is rated among the top universities in the world and is a vibrant, cosmopolitan community of over 27 000 students and 5 000 staff.

If you are an international student and want to study at [redacted] but don't yet have the required level of English proficiency, then the [redacted] International Pathways Programme can help.

The Pathways Programme is designed to give you the skills you need to improve your English level and support you on your academic journey at [redacted]

WHAT WILL I GAIN FROM THIS PROGRAMME?

3 GOOD REASONS TO STUDY AT THE [redacted]

1 **The quality of the education:** [redacted] is the top-ranked university on the African continent.

2 **The people you will meet:** [redacted] is a vibrant and cosmopolitan university and is home to over 4 000 international students from 111 different countries.

3 **The things you can do:** Cape Town is a melting pot of cultural diversity and natural beauty offering everything from fine dining and art to glorious beaches and extreme sports.

Figure 93: Brochure for ALC Pathways Program for the university (ALC, 2019)

There are further development steps that this intervention can stipulate it generated directly. Following the CL's completion, there has been a noticeable focus on the use of technology at the ALC. Towards the end of 2018, management took direct steps to enable all teachers and students at the ALC to gain access to the university's technological resources, specifically *G Suite for Edu*, which formed the core base of technology used over this research-intervention.

Moreover, this year, the centre is trialling the use of several devices to give students access to technology in the classroom. One of these being the *Chromebooks*, affordable laptops that are designed specifically for the use of the online resources, mobility and virtual collaboration in the classroom (see https://edu.google.com/products/chromebooks). This move has also

included a transition to more CPD sessions focusing on teachers making better use of technology for their classroom instruction.

8.5 Research's Contribution: New Knowledge for Domain and Method Appropriation

This section briefly outlines how the research aspect of this intervention contributes novel knowledge to the domains of English Language Teaching, educational change and method of Developmental Work research, respectively.

8.5.1. Language as co-creation: A 'grey' model of activity for integrating technologies in ELT

This development of a new model for the pedagogical activity of teaching Advanced language students has been seminal to this research. As stated above, it has specifically responded to the call for the need for meaningful integration of emerging technologies for English language teaching in postcolonial territories, like South Africa. The findings of this research-intervention (see Section 8.2.2-8.2.3 above) suggest that such a model has viability for teaching Advanced language students.

The importance of this model lies in how it generated meaningful integration. One of the fundamental issues in modern teaching is the disruptive impact of emerging technologies which are seen as a catalyst for change (Oliver, 2011). What is often not taken into account is how these disruptive technologies provoke deeper contradictions of power, ownership and accessibility to knowledge and whom they serve (Y. Engeström & Sannino, 2010), especially in local sites of use. This model's generation demonstrates that meaningful integration of any technology for instruction depends on systematically dealing with these deeper contradictions with local users if any significant movement towards meaningful integration is to be made.

At the same time, the novelty of this model does not only lie in its generation from Expansive Learning, but rather how it practically demonstrates how meaningful integration of technology for language learning can occur. Major pedagogical models for using emerging technology in education like SAMR (see Hamilton, Rosenberg, & Akcaoglu, 2016) and TPACK (see Graham, 2011) showcase how to incorporate technology. However, these models do not show how to implement it meaningfully within local contexts and the specific institutional demands of educators. For instance, the coursebook is still an integral part of teacher-participants' activity, but its primacy in this new model has been mitigated to a supportive role alongside technological aids in teachers' endeavours to 'co-create language' with students. This change

is vital as coursebook adaption has been a prevailing difficulty for language teachers (Hadley, 2014). This model of activity provides a pathway of how to envision meaningful adaption of the coursebook for language teaching.

With that in mind, there are still some elements of this model that require further investigation. As noted by teacher-participants, there are still issues with access (Ned, Session 7.2) and how to conceptualise language feedback (John, Session 7.1). Moreover, it is still not clear whether this model truly subverts or transforms the communicative approach in language teaching. To this end, I would argue that the 'language as co-creation' model, at this time is still a model in development that requires further intervention work (Sannino & Engeström, 2017). It can be likened, at this point, as a transitional 'grey' model (Hasu & Engeström, 2000) which requires language teachers using it and further augmenting it to fully concretise how 'co-creation' may be facilitated in the classroom.

8.5.2 Lilley's Analytical Frame: Evaluating Power Relations for Educational Change

The 'language as co-creation' model of pedagogical activity is informed by an underlying motive for greater democracy in the classroom. As teacher-participants articulated throughout this intervention, how can a communicative language classroom be truly 'communicative' if only the teacher's communication is prioritised? To balance this, the new pedagogical model makes use of mobile technologies to allow Advanced students more avenues to communicate their own experiences in the language classroom. Consequently, allowing students a greater ability to direct the language focus of their lessons in line with their own language goals.

This democratisation of the classroom and the model's emphasis on 'co-creation' aligns within the fundamental need to understand power relations to pursue educational change (Y.-J. Lee, 2011). An ancillary effect of this research endeavour was the creation of Lilley's (2019) adaption of Frohberg et al.'s (2009) evaluative framework, a language of description which could allow an avenue in which to evaluate the relations of power in classrooms which use technology following CHAT tenants.

The adapted framework yielded profound insights for teacher-participants in their evaluation of their teaching using technology. Its use prompted teacher-participants to reflect on the 'restrictiveness' of their classroom spaces such as treating students as novices, as well as efforts to move away from asymmetrical instructional practices promoting 'comprehension'. These

movements add further credence towards the fundamental role that power relations play in navigating educational change, especially with the integration of technologies for learning.

8.5.3 Blended Change Laboratory: Contribution to DWR methodology

The second contribution this study makes is in its adaption of the Change Laboratory to make use of digital resources to encourage virtual collaboration and documentation. The move towards the use of digital resources was not planned but was used as a way to follow teacher-participants' own displacement due to the violent protests of *#FeesMustFall*. Moreover, as the study was situated in a 'developing' country where the lack classroom space is a pertinent issue for all educational spheres (Modisaotsile, 2012), the use of virtual resources was deemed the only way of continuing the study within its allocated time frame. To that end, this research-intervention has shown that a CL that 'blends' the use of face-to-face and digital collaboration can still facilitate Expansive Learning.

This is valuable for several reasons. Firstly, it lays further credence to how each iteration of a CL is unique and must circumscribe itself to the local contexts in which it is deployed. The use of *G Suite for Edu* tools this study employed allowed the Change Laboratory process to continue even though participants were displaced. This method, then, is useful for CLs within similar postcolonial contexts (Y. Engeström et al., 2014) as it facilitates a way to continue the Expansive Learning process which can still account for greater disruptions in the problematic activity participants may be experiencing.

This flexibility of this blended Change Laboratory is also significant regarding trends of modern workplace practices. Most of the teacher-participants in this study were flexible-part time workers, which parallels contemporary and future work practices. If CLs need to meet the demands of the workplace practices, then this study provides a method for formative interventions to match them.

8.6 Future Research and Conclusion

Taking the above contributions into account, I believe several directions for future research can be made. The first is future research into using this model for English language teaching for Advanced students. While experimental lessons with this model have proved to be fruitful, there is still greater scope for future development (see above).

This study also offers further research opportunities as CLs are notable in the extensive data and opportunities for analysis they proffer (Virkkunen & Newnham, 2013). One of these potential forms of analysis would be to review this study's data in terms of cyclicity of learning levels (see Y. Engeström, Rantavuori, & Kerosuo, 2013). Results could deepen understandings of learning actions, as well as offer insight into the design of CLs.

Moreover, the ability for the 'blended' Change Laboratory to overcome the difficulties of classroom space and involve participants in a disruptive period clearly has potential for other sites. These sites need not only include organisations in developing contexts, as increasingly other work organisations are moving to more flexible work practices. The blended Change Laboratory can be mobilised in these instances, allowing other avenues for Developmental Work Research to be explored within the contemporary workspace.

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Appendix 1: Lilley's (2019) adaption of Frohberg, Göth, & Schwabe's (2009) Scale of Issues (Draft Manuscript)

In this Appendix, I provide the reader a more detailed account for my adapation of Frohberg et al.'s (2009) model.

Abstract:

Mobile language learning has been poised to facilitate new millennium literacies and potentially bridge the disparate gaps found within language classrooms. However, many mobile language learning studies have fallen short of these possibilities by not accounting for the deeper intricacies of context, such as power relations.

This paper presents an application of a language of description using Cultural-Historical Activity Theory's understanding of contradictions to uncover how mobile device use impacts relations of power in language classrooms. The author argues that by surfacing sites of power, a possible reimagining of the potential for mobile devices in language education can be realized.

Introduction:

Building Bridges Through Mobile Learning

The ubiquitous proliferation of mobile devices has been seen to foreshadow a major turning point for education (Sevillano-Garcia & Vazquez-Cano, 2015). Presently, the estimated global penetration of mobile phones stands at 63% and is predicted to be 72% by the year 2020 (GMS Association, 2016) with Africa and other developing economies primed as showing the greatest future growth in terms of users and access (Poushter, 2016). The high impact and utilisation of mobile phones within Africa has led to calls for greater initiatives aimed at furthering mobile device access for education on the continent (Isaacs, 2012). In South Africa, the incremental ownership and use of mobile devices have been poised as availing the long-standing challenges of learning resource allocation, inadequate teacher support/ knowledge and learner preparedness for higher education in terms of 'new literacies' and language proficiency (Ng'ambi, Brown, Bozalek, Gachago, & Wood, 2016).

This is due in large part in how using mobile devices for learning (ML) are radically altering our understanding of what it 'means to learn' and 'how learning is / can be facilitated'. When we think of education, we imagine a formal classroom setting with learners and a teacher situated in a specific teaching space, learning in an allotted classroom period, where time and space are fixed and learning must be synchronous. ML, on the other hand, "has the *potential* to transcend these spatial and temporal restrictions" (Kearney, Schuck, Burden, & Aubusson, 2012, p. 4, emphasis mine) of the classroom environment. In essence, learning becomes 'mobilised' (Sharples, 2000) allowing a revolutionary 'opening up' around traditional boundaries in education due to limited access of learning resources or spaces (Taylor, Sharples, O'Malley, Vavoula, & Waycott, 2006).

For example, learning in a low-resourced school need not be hampered by its lack of physical or out-of-date textbooks. Through access to virtual mobile content or activities, learning can remain up-to-date and can be pushed through to all learners' mobile devices, supporting both teachers and learners, no matter their context. In the case of higher/ adult education learners, ML facilitates the possibility of bridging learners in remote settings with the same access to lecturers and information as learners in more centralised locations. It this prospective ability for ML to overcome the problematic traditional limitations of access in education which has also translated into research and pedagogy around using mobile phones for learning

language(s) (Jantjies & Joy, 2012) while simultaneously challenging understandings of language literacies (Kukulska-Hulme, 2009).

Yet it is this potential of mobile learning that remains at the crux of supporting learners. The delineation of mobile phones as an 'emergent technology' denotes this critical feature of mobile phones for education, as much of its capacity for learning is still being uncovered (Ng'ambi, et al. 2016). While the potential for mobile learning has been increasingly underscored and evidenced in many areas of language development (Kukulska-Hulme, 2009; Kukulska-Hulme & Shields, 2008) ML and other emergent technology directives have been criticised as not adequately evoking these highlighted potentials (Bozalek, Ng'ambi, Wood, Herrington, Hardman, & Amory, 2015).

This paper seeks to redress these concerns by applying a language of description based on cultural-historical understandings of contradictions as both restrictive and expansive of mobile devices in which to support ML's trajectory for language education.

Background/ Theoretical Underpinnings:

The Challenge of Language Education in the Mobile Age

Being able to learn anywhere, at any time is not the only radical possibility for language education that mobile phones have provided. Increasingly, with the advent of technology in the last 40 years, mobile education and other emergent technologies have challenged our understanding of communication and literacy (Parsons, 2014). These technological changes have subsequently challenged one of the main concerns of language learning – what it means to be able to 'competently' communicate found within the Teaching of English as a Foreign Language's (TEFL) main pedagogical approach, Communicative Language Teaching (CLT) (Thompson, 1996).

Prior to the widespread proliferation of mobile devices, and interconnection enabled through them, 'communicative competence' in a language was deemed as being facilitated in the process of effective/ appropriate communication through writing and speaking to another speaker of the foreign language (Richards & Rodgers, 1999). Yet, communication has changed - it is not strictly face-to-face, traversed in a single mode, medium or locally fixated. The development of Web 2.0 and mobile technologies that interweave multimodal representations of information and facilitate novel traversals through hypermedia (Greenhow, Robelia, &

Hughes, 2009) has meant the adage of communication that can occur "anytime, anywhere" (Stockwell, 2008, p. 254) encapsulates an entirely new understanding of human interaction through language, and in effect what language learning means.

A primary challenge of language education in the mobile age is then, how best to utilise these modified understandings of communication alongside with the 'new millennium literacies' of the Information age (Guarda, 2012) to enhance learners' language acquisition potential. Mobile-Assisted Language Learning (MALL) as an approach attempts to capture this in its understanding of the use of "personal, portable devices that enable new ways of learning [while] emphasizing continuity or spontaneity of access and interaction across different contexts of use" (Kukulska-Hulme, 2009, p. 162). Uptakes of these understandings have taken the form of novel device use for learning strategies that draw upon the power of mobile devices to blur the boundaries of time and space which have been used to increasingly place the learner at the centre of the learning experience (see Jeng, Wu, Huang, Tan, & Yang, 2010). For instance, university students' use of portable MP3 devices to record and practice their language learning outside of class enabled the transfer and application of these experiences into the classroom space, promoting greater self-reflection and confidence in their second language (Sole, Calic, & Neijman, 2010). Similarly, in Wong & Looi's (2010) the pedagogical design of primary language learners applying mobile devices to create a photographic story of prepositions outside the classroom and then using these stories inside class for further instruction led to teachers witnessing increased student creativity, collaboration and understanding. In turn MALL is demonstrating the potential for a much more individualised, personal, collaborative and constructive experience in the language learning process (Cresecente & Lee, 2011).

Theoretically underpinning many of these breakthroughs within MALL for language education are behaviourist, cognitivist and constructivist understandings of language learning (Burston, 2014). However, these perspectives lean towards providing an etic view of the language learning process, stressing the affordances of the mobile device while neglecting the greater sociocultural variables that impact on how these affordances are taken up by the learners and teachers (Duman, Orhon, & Gedik, 2015). Salaberry (2001) and Oliver (2011) have further warned of the danger of an 'affordance' discourse conflating our learning interactions with technology as natural that deny the underlying motives, values and other external factors that are deeply inscribed when a device is deployed for learning.

Take for instance a language learning class where young students are instructed to use a mobile phone application to review and test their vocabulary inside and outside class. While the application may have been proven to aid vocabulary development, a wider number of contextual factors surrounding learning with the application need to be understood in order for learners to truly reap the benefits. Firstly, are there sufficiently built-in mechanisms in the application and the classroom to support learners' continued motivation to use it? Secondly, are learners adequately bolstered outside and inside the classroom in terms of access (offline & online), parental consent and school management support? These questions around power relations such as rules of use and / or institutional policies and so on, underlying the mobile device application in its learning setting need to be accounted for in MALL.

This then leads to a second challenge surrounding mobile devices in language learning: how can we align our understandings of the etic capabilities of mobile devices for learning with the deeper, emic, sociocultural impacts such as power relations in mobile device use for education?

Bridging Time & Space Theoretically – The Power of CHAT & Its Contradictions

As discussed above, ML as 'learning on the move' (Sharples, 2000) challenges traditional notions of the synchronously bounded classroom with the blurring of space and time propagated through the use of mobile devices as a learning tool. It could be argued that these challenges surrounding mobile devices hinge upon acknowledging the complexities of time and space in learning. One analytical lens that has been advocated to account for this complex interplay mobile devices evoke in education is Cultural-Historical Activity Theory (CHAT) (Oliver, 2011; Pimmer, Pachler, & Attwell, 2010).

Central to CHAT is the understanding that all human activity is shaped by tools which have been historically shaped by time and the sociocultural elements of the spaces they are located / used within (Engeström, 1987). This is based firstly from Vygotsky's (1997) concept of mediation which placed artefact use as seminal in the development of higher-order concepts as it was the interaction between the individual and tool-use that facilitated learning. These concepts were subsequently expanded upon by Leont'ev (1981) and then Engeström's (1987) which further established and operationalised how individual actions in the mediation process were located in wider, historical social activity.

To be more explicit, take for example an EFL classroom: in its understanding of learning, CHAT centres the acquisition of higher-order concepts around the concept of an 'object'

(Engeström, 1987). This could be considered a language concept the teacher has prioritised, such as accurate use of a grammatical tense in the foreign language. In this way, the 'object' can be understood as a problem space or socially shared motive that an individual or group (a 'subject'/ student) act towards to achieve an outcome for their activity (Kaptelinin & Nardi, 2006). In this activity, the student will be drawing on a tool to aid their understanding of the grammatical concept, such as mobile phone application, which would be considered the 'mediator' or 'tool'. Together with the student is the greater 'community' who are involved in the activity and share the object with the subject, which would include the teacher and other students in the class.

The ways in which students conduct tasks centred towards acquiring language concept with the mobile application i.e. how their actions have been organised within the activity is described as 'division of labour'. These actions are further constrained or afforded by the 'rules' that govern the activity system that dictate how the object can be attained by the subject, such as the classroom, school or task rules (Engeström, 1987, 1999). This activity system of the EFL classroom is depicted in Figure 1 below.

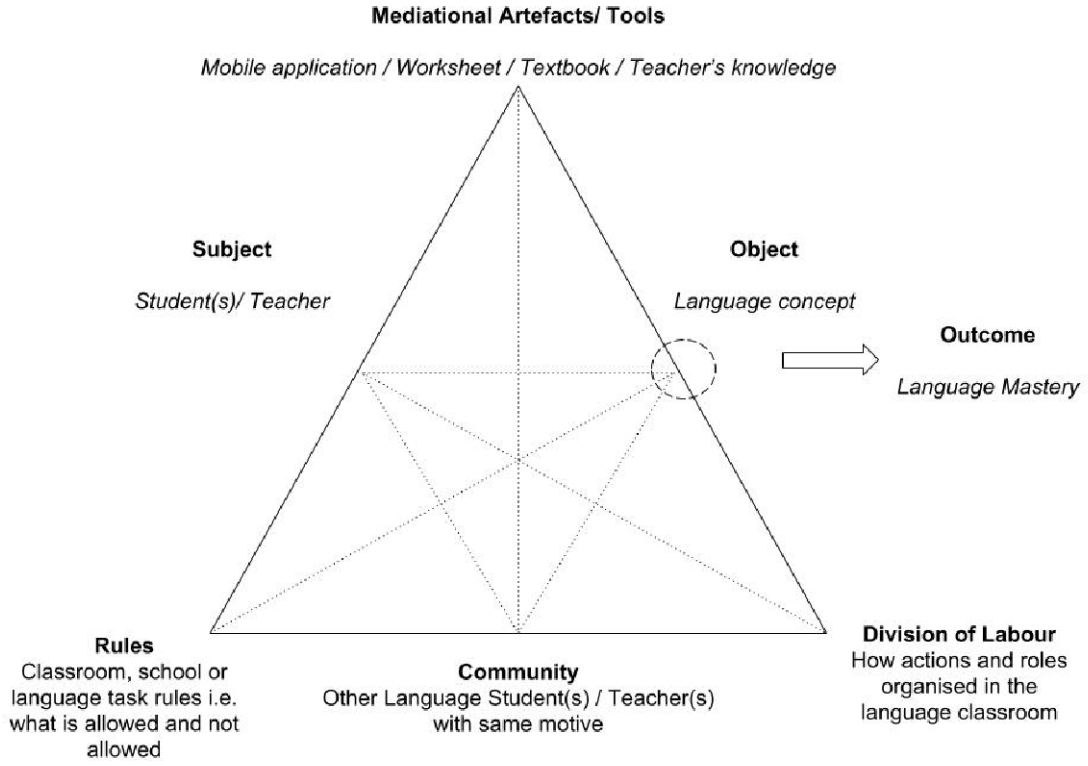


Figure 1: Engeström's (1987) Third-Generation Activity to represent the activity system of a foreign language classroom

However, the interplay of these different facets of activity are never static or unchangeable: "[t]he distinctive feature of human activity is that it is continuous *creation of new instruments* which in turn complicate and change qualitatively the very structure of activity itself" (Engeström, 1987, p. 149). This is brought about through the 'division of labour' within the activity, as how labour has been commodified and distributed in the system leads to double binds. What is meant by this is that in the division of labour and the subsequent commodification, all facets of activity simultaneously have both different values in their worth and exchange thus creating two competing messages for the subject in the activity system. These paradoxical interactions present themselves repeatedly in the system, which eventually leads towards new directions for the activity to shape itself within (Engeström, 1999; Hardman & Amory, 2015).

For instance, taking up the EFL classroom activity system with the mobile application that was earlier outlined, a primary contradiction would be considered to be evident in the teacher's decision on the best mobile application to teach the grammatical concept. In considering the most suitable mobile application, the teacher has to compare between which mobile application would be best to use with the class (use value) with the price or features each application might incur with its use (worth value). Over time, the teacher may realise that this particular application can no longer handle the difficulties of conveying the lesson's object to the students. In this sense, a secondary contradiction would occur as the tool (the mediator) eventually conflicts with the lesson's changing objective (object) – two aspects of activity are in conflict. These problems will keep arising until there is a suitable tool that can keep up with the changing nature of the lesson's object.

At the same time, the school administration may stipulate that new mobile devices and / or applications must be used in order to create a more integrated approach to lessons and planning. However, teachers may be averse to these changes evidencing a tertiary contradiction where the motive/ object of an older activity conflicts with that of a more advanced one. Eventually, teachers may choose to accept these new mobile devices and / or applications, while the students who are compelled to use them may disagree with how these devices or applications monitor their progress and use outside the classroom. This demonstrates a quaternary contradiction which manifest when the central activity clashes with its neighbouring systems (Engeström, 1999).

In this sense, CHAT's understanding of contradictions demonstrates the unique interplay between historicity of tool-use and the spaces they are deployed in can manifest themselves in both expansive and restrictive potentials (Engeström, 1987) of technology in education. These insights have been used to analyse power relations of artefact-use in activity systems. As stated earlier, relations of power are intricately inscribed in the use of mobile devices for learning. CHAT's ability to track subjects' motives and agencies in using artefacts within activity systems has demonstrated how subjects' agentive use can lead to potential expansions or reductions of participants' actions in activity systems (Russell & Schneiderheinze, 2005). Bartlett's (2008) studies further note that in CHAT's understanding in the agentive use of artefacts and the mediations these artefacts embody conceptualise artefacts as being imbued with social meaning as well as being deeply embedded in relations of power.

CHAT allows a detailed understanding of this complex interplay between how the mediation of artefacts is contained within relations of power between students and teachers, and the subsequent effects this has on the activity of language learning as a whole. It thus provides a unique lens through which to account for the complex interplay of both space and time in shaping the sociocultural influences technology, such as mobile phones can evoke in learning (McAndrew, Taylor, & Clow, 2010; Pimmer, Pachler, & Attwell, 2010).

The Uniqueness of Analysing Mobile Technology – Applying The Task Model to CHAT

However, while CHAT is able to account for the social complexity surrounding technology in activity, Taylor et al. (2006) argue that the uniqueness of mobile technology in learning leads to several other concerns that CHAT does not adequately account for.

The first revolve around CHAT's difficulty in accounting for the structure of discourse and tools within activity (Daniels, 2001). Dialogue and interaction is at the heart of any learning setting, as the use of successive discourse exchanges between teachers and learners is needed in order to achieve any lesson's object (Engeström, 1995). Added to this is the use of increasingly interactive tools for learning, such as mobile phones that are also deeply inscribed into many learning settings. While CHAT can uncover the interplay of interaction between teacher, student and learning tool towards the object, it "does not discuss the production and structure of the tool itself" (Taylor, et al. 2006, p. 145). In EFL/ MALL settings, structure of discourse is also seminal to developing a coherent understanding of the learning process (Boag-Munroe, 2004) as language plays three roles: a) as object in the language that needs to be produced; b) as mediator in communication between teacher and student; c) as mediator in the interaction between the participants and their mobile devices for learning. Further criticisms have been drawn to CHAT as a research perspective. These criticisms revolve around the difficulty in operationalising CHAT's constructs to fit within complex technology-in-education phenomena (Pimmer, Pachler, & Attwell, 2010).

To this end, Taylor et al.'s (2006) *Task Model*, adapted CHAT's original constructs to create a model more suited to technology-in-education, supplementing an additional and merged activity layer onto CHAT's original activity constructs, and renaming them in accordance so to aid ICT designers and developers (McAndrew, Taylor, & Clow, 2010; see Figure 2 below).

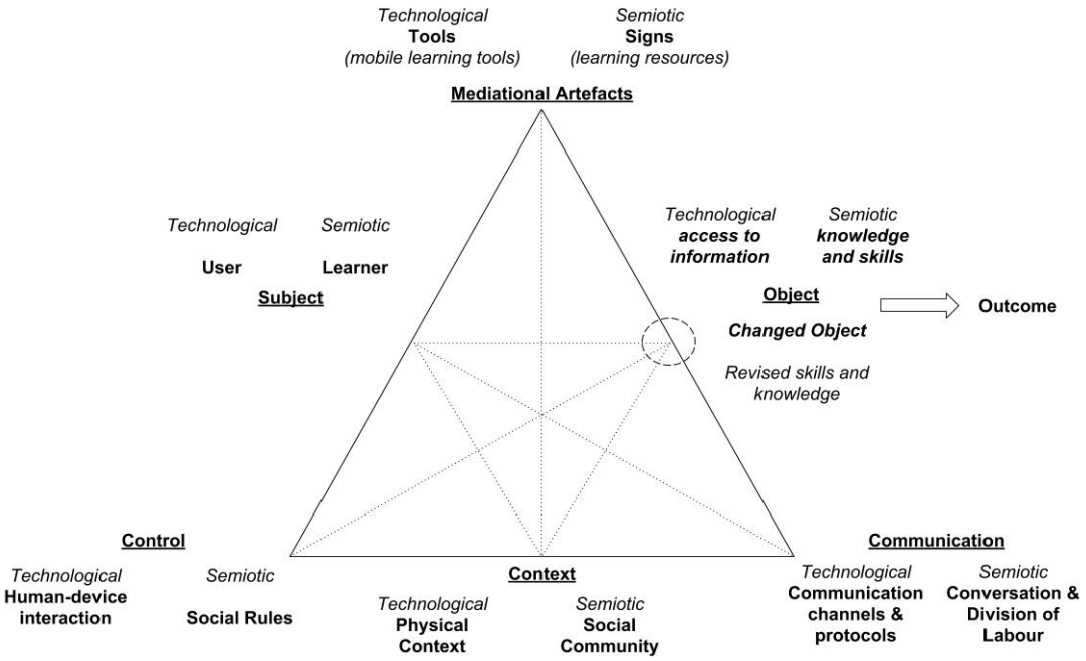


Figure 2: A Task Model for mobile learning (Taylor, et al. 2006)

The Task Model implicates two parallel triangles of emerging activity: a technological one and semiotic one (Taylor, et al. 2006). In doing so, the authors wish to capture in activities where learning with technology occurs, how technical activity is underpinned and reflected in semiotic activity (Pimmer, Pachler, & Attwell, 2010). While constructs of 'object', 'subject' and 'tool/ mediator' remain unchanged it is observed that they operate on both a semantic and technological levels of activity. In order to clarify this in other constructs, specific labelling of CHAT nodes changed, such as the change of 'community' in CHAT to 'context'. This was done to emphasise both the physicality of technology (its location, connectivity and virtual environment it creates) and the semiotic nature of human learning (i.e. the classroom / learning space). It relates to how a system may include a wider range of functions (technological) or the broad range of users' learners may implicate in their use (Frohberg, Goth, & Schwabe, 2009).

While 'context' refers to how the system is orchestrated around communities and how they use it, the change of 'rules' to 'control' denotes issues in understanding the technological restrictions the system imposes as well as the limits groups of learners or communities may stipulate (McAndrew, Taylor, & Clow, 2010). Furthermore, 'division of labour' is transformed

into 'communication' to emphasize the dialectical nature of the interaction between technological and semantic aspects of activity – how technical systems facilitate communication enables particular shifts in the communication between users (Taylor, et al. 2006). Figure 3 depicts an explicated model of the Task Model's two parallel layers of activity.

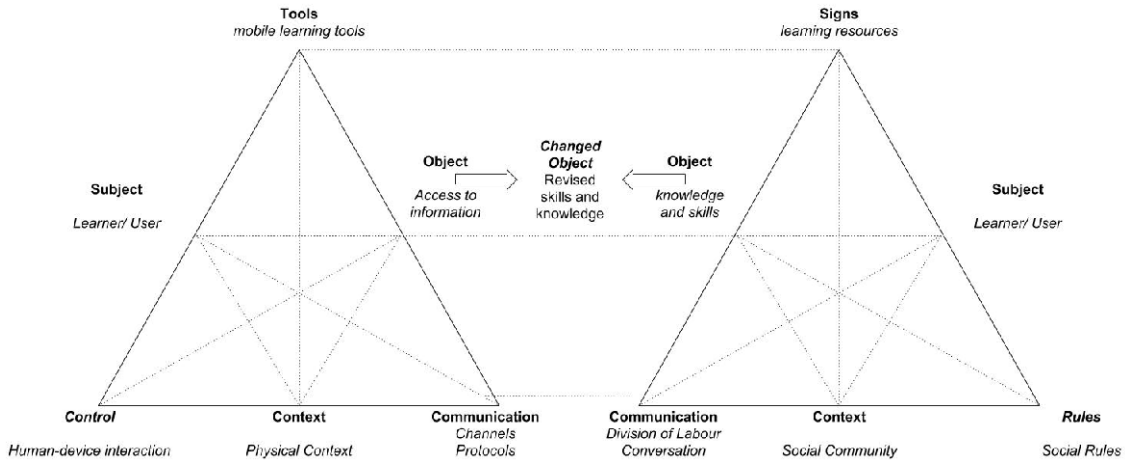


Figure 3: Author's (2017) explicated adaption of the Task Model (Taylor, et al. 2006; Vavoula, 2005).

In the creation of two activity spaces to understand learning-with-technology, the Task Model subsumes the dialectical relationship between technology and the learner (Taylor, et al. 2006). It further underscores that in any learning situation with technology, learners: "know what kinds of functionalities (resources for learning) they would like to have available to them to be effective and will seek out particular tools as and when they need them" (McAndrew, Taylor, & Clow, 2010, p. 239). This places the learner and their mobility at the centre of technology-in-education, underscoring how learners' move in and between the spaces of the technological and the semantic within their learning (Pimmer, Pachler, & Attwell, 2010).

Developing a Language of Description to Emerge Power Relations for MALL

The Problems and Possibilities of Existing Frameworks

As stated earlier, the need to address relations of power in mobile learning is paramount to pursuing a deeper understanding of the use of mobile devices in language learning (see above). Theoretically, CHAT and the Task Model have been positioned as providing the much-needed

focus on the sociocultural as well as technological aspects in understanding mobile learning as 'on the move' (Oliver, 2011; Taylor, et al., 2006). The strength of these analytical perspectives has been further evidenced in the number of evaluative frameworks for mobile learning drawn from a sociocultural perspective which emphasize the interplay between place; society, immediacy of connection and how information flows within the learning setting (see Frohberg, Goth & Schwabe, 2009; Kearney, Schuck, Burden, & Aubusson, 2012).

Central to these evaluative categoratisations is the continuum of learning possibilities made available by mobile devices (Kearney, Schuck, Burden, & Aubusson, 2012) with many emphasising a move from traditional features of learning to more modern possibilities. I specifically focus on Frohberg, Göth, & Schwabe's (2009) existing evaluative framework in providing a language of description to emerge power relations in MALL, as it provides the most detailed explication of the Task Model's central tenants in ML projects, as well as being created through an extensive review of 102 ML projects. Due to the lack of notable Task Model evaluative frameworks based on MALL study reviews, their framework presents a useful operationalisation of key categories and features of ML which can be applied to MALL.

In the framework, Frohberg, Göth, & Schwabe (2009) categorically rated ML projects along all the adapted constructs of the Task Model from 1 to 5 depending on the contextual features they outlined for each. For instance, in 'control', a 1 would denote 'high teacher control', typical of formal classrooms settings whereas a 5 would be 'high learner control', which lie in more constructivist or connectionist learning settings (Naismith, Lonsdale, Vavoula, & Sharples, 2004). An adapted overview of their evaluative framework can be seen below in Table 1.

Factor	1	2	3	4	5
Context (environment & learning issue)	Independent Context	Formalized Context	-	Physical Context	Socializing Context
Tools (pedagogic role of tools)	Content Delivery	Interaction for motivation and control	Guided Reflection	Reflective Data Collection	Content Construction
Control (Tightness of Control)	Full Teacher Control	Mainly Teacher Control	Scaffolded	Mainly Learner Control	Full Learner Control
Communication (Social Setting)	Isolated	Loose Couples	Tight Couples	Communication within Groups	Co-Operation
Subject (Previous Knowledge)	Novice	Little Previous Knowledge	Good Previous Knowledge	A lot of Previous Knowledge	Expert
Object (Level)	To Know	Comprehend	Apply	Analyse	Synthesize & Evaluate

Table 1: Adapted overview of Frohberg, Goth & Schwabe's (2009) Scales of Issues (p. 312)

Of central interest to this language of description is Frohberg, Göth, & Schwabe's (2009) categorisation of the m-learning design implementations using the constructs 'division of labour'/ 'communication', 'rules'/ 'control', and 'community/ context', drawn from CHAT and the Task Model, respectively. These constructs or nodes form the central tenants of how CHAT conceptualises the creation of power relations within them as 'dominative' (Engeström, 1987, 1999). Their framework showcases the range of different variables that can be approached in any ML project. For example, a project could make use of a physical learning context, such as a museum and make use of a mobile phone as a content delivery tool. The tool could be sufficiently scaffolded between a teacher and students working in loose couples and being understood in the system as a 'novice', allowing learners to 'know' more about the various exhibits they have visited. In this way their descriptive framework makes space for the myriads of ways ML can be constructed and implemented in various learning settings (Frohberg, Göth,

& Schwabe, 2009). This is due to their continuum of 1 – 5 stressing that the effectiveness of different ML designs requires different configurations. For instance, 'full teacher control' may be necessary with younger learners who are new to an application but may be less crucial with a design for older learners.

However, as with other MALL literature reviews, their categorisation only demonstrates the range of affordances different design choices MALL projects contain, remarking on the types of learning that such design choices facilitate. Furthermore, each construct is separately categorised and the interplay between these constructs in larger activity is not accounted for, failing to describe or analyse how these constructs work together, or through the technical and semantic spaces of the Task Model provide expansive or constrictive power relation potentials for ML projects. In this sense, Frohberg, Göth, & Schwabe's (2009)'s critical analytical review proves useful in facilitating a description of ML activities' construction but has little explanatory capacity in providing deeper analysis of how power relations form expansive or constrictive learning potentials for students.

These issues can be highlighted in some recent studies which have utilised CHAT to understand technology in learning settings. Garraway & Morkel (2015) conducted a study of architecture students where there was a disconnect between the students' individualised skilled practice of design work via ICT and the greater communal aims of their designs. They found that in the movements from a strictly hierarchical/ individualised to a more collaborative 'authentic' learning environment, architecture students were better able to utilise the knowledge they had gained, leading to greater learning potentials. Using Frohberg, Göth, & Schwabe's (2009) framework, the expansive learning potential in the movement of students between the two are strictly reduced to the contexts that they offer and not the possible contradictions between the tools and change of division of labour that occurs when students move between a strictly hierarchical activity system to a collaborative one.

Similarly, in Wong, Chen, & Jan's, (2011) *Move Idioms* study demonstrated how artefacts transform in both formal and informal learning contexts can lead to changes in the roles language learners are given access to (Wong, Chen, & Jan, 2011; Wong, Song, Chai, & Zhan, 2011). The key being the movement between different activity contexts with the mobile device had in enhancing students' language learning potentials.

Another example is Campbell's (2015) study which focuses on the use of an anonymous Q&A mobile application and student-produced video explanations of mathematical problems. They found that anonymity of the mobile application and the collaboration involved in student produced videos led to expansive learning potentials in a higher education mathematics classroom. Here it is the anonymity of learners' interaction within a formalized context and the collaboration in student videos that led to the expansive learning potential of mobile devices in the learning setting. It is this interplay of power relations between the two types of mediation (anonymity and collaboration) afforded by how mobile phones were applied that led to the expansive learning potentials (Campbell, 2015).

I would argue in the anonymity of the Q&A, learners are not strictly bound to the traditional initial, response and evaluation (IRE) typical of the classroom or lecture hall (Wells & Arauz, 2006). The anonymity provided could potentially be understood as allowing students to transcend the strict teacher control of lectures, facilitating a move towards relations of power wherein they could direct or redirect the flow of lectures. The same could be argued for the collaborative video projects of student solutions to mathematical problems. The ability for student content-production within a formalised context of tutorials facilitates a horizontal relation of power into information all students can access anytime, anywhere and in any language (Campbell, 2015) that conflicts with the traditional power relations of the academy.

These studies demonstrate the radical potentials of understanding mobile phones through CHAT and the Task-Model can develop into aiding and transforming educational practices. Moreover, they demonstrate how competing activity systems; anonymity and the deployment of mobile resources can develop a deeper appreciation of power relations in understanding MALL that are both restrictive and expansive. However, while Frohberg, Göth, & Schwabe's (2009) categorisation of the m-learning designs provides a detailed description of practices, power remains under-realised and under-described.

To this end, I contend that there is a necessity to extend how the framework described by Frohberg, Göth, & Schwabe (2009) can be applied to showcase the interplay between the constituent elements of the semiotic and technological lenses underscored in the Task Model in MALL. Further, owing to conversation being highlighted in the Task Model (Taylor, at al., 2006) to overcome the difficulty CHAT has in ascribing a structure of discourse in the production of activity (Daniels, 2001) I believe that both a 'dominative' and 'productive' understanding should also be underscored.

Frohberg, Göth, & Schwabe's (2009) describe the continuum of communication (division of labour) moving from 'isolated', where the learner only interacts with the device, to 'cooperation', where learners must work together to achieve the learning goal with the device. This is further seen in context (community) and control (rules) being expanded as 'formalized'/ 'full teacher' to 'socialising'/ 'full learner': "[c]ontrol reflects on the responsibility of the teacher or the learner for setting the right target and a meaningful process of learning" (Frohberg, Göth, & Schwabe, p. 317). While it can be assumed that this underscores a movement from strictly asymmetrical relations of power to more horizontal power structures, respectively, these have been attributed mainly to their focus on the technological aspect of the mobile projects and not the greater social/ semiotic elements of the activity itself. This greatly undermines the complexity that 'division of labour', 'rules' and 'community' play semiotically within the creation of power relations between learners, teachers and the mediator (Engeström, 1987). As discussed it is precisely the move between different organisations of power proffered by the technological and semantic aspects of the Task Model that can radically lead to constrictive or generative potentials for learning.

Applying a Language of Description for Emerging Power Relations in MALL

My application (see Table 2) emphasizes both the semiotic and technological elements of the Task Model as operationalised in CHAT. For instance, when identifying a 'formalized' *context* such as a classroom, the description would need to embrace both the technological and semiotic aspects of *context/ community*. Understood from the semiotic perspective, the classroom takes into consideration the *community* of teachers and students working towards a shared object in the classroom (Taylor, et al., 2006). Technologically, this would be the *context* in how the teachers and / or students use their mobile device(s) or application(s) to organize, share, communicate or co-ordinate the lesson's activities between themselves (Jalil, Beer, & Crowther, 2015). In this case where both aspects of the *context/ community* are limited to those in the classroom and the co-ordination of activities inside of it through mobile devices. Relations of power in the *community* remain restricted to primary contradictions inherent within *context* and *community* nodes of the activity system (Engeström, 1987) leading them to possibly remain unchanged as there is less noticeable external disparity between them.

Alternatively, where the *community* is confined to the classroom activities of the teacher and students, but they engage their mobile devices during the lesson in a 'socialising' *context*, such as interacting with an international Facebook group of language learners. In this case, primary

contradictions in power relations would potentially become more externalised, as the two engender completely different interactions within the activity system's community: the semiotic delimited to the teacher and learners' actions in the class, while actions with technology extended to a much larger audience.

Restrictive ← → Expansive

Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules*	*Technological* Full Teacher Control *Semiotic*	*Technological* Mainly Teacher Control *Semiotic*	*Technological* Scaffolded *Semiotic*	*Technological* Mainly Learner Control *Semiotic*	*Technological* Full Learner Control *Semiotic*
Communication *Division of Labour*	*Technological* Isolated *Semiotic*	*Technological* Loose Couples *Semiotic*	*Technological* Tight Couples *Semiotic*	*Technological* Communication within Groups *Semiotic*	*Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

Table 2: Author's Language of Description (2018) application of Frohberg, Goth & Schwabe's (2009) Scale of Issues

To fully situate these extensions, I turn to my (2017) study on mobile dictionary use with adult EFL learners. In a lesson where Collin, the teacher, and his advanced students were working on a cohesive device worksheet, a student, Khalid, took out his mobile dictionary to translate a word he did not understand to help complete the task. The following exchanged occurred:

Collin: [to Khalid] Why are you using your dictionary?

Khalid: I didn't understand the word

Collin: And are you using an English-to-English dictionary?

Khalid: I just look for words to be honest

Collin: That's mad Khalid. At the Advanced level you shouldn't use it. We're okay with you using the dictionary if you're using an English-to-English dictionary.

Collin: Why is it detrimental? Why is that detrimental? Why is it bad for students to use their dictionaries at this stage?

Khalid: because it's easy to just

Collin: It's easier but also… You now run the risk of learning the words incorrectly. Say for example words have many meanings… Yes and so what happens sometimes is that you look at the Arabic

Khalid: Yeah like on my phone

Collin: Yes and you struggle to match the real meaning of the word in the context than when it's used in Arabic. And actually you know what you're gonna forget that word. You're not gonna remember that word because what you do is you look up that word in Arabic and saying okay I know the word. There is only the word. With the English dictionary you read the explanation and you actually process the word. So you must change.

Extract 1: Collin and Khalid's exchange over mobile dictionary use (Author, 2017)

Above, it can be seen that mobile dictionaries while included as a mediator in the lesson's activity, the *rules* associated with their use are regulated to the teacher's semiotic concerns around translation impeding Khalid's English language acquisition (the object of the activity). Collin later further elaborates this reasoning by regulating the issue to *control* of the mobile dictionary: "this is what we tend to do with dictionaries is that I don't need anyone". Khalid's interaction with device was seen to impact upon his ability to collaborate and communicate, as his 'full' *control* of language learning through the device isolated him from the class and the teacher. This was immediately curtailed by Collin as *control/ rules* in this activity are under 'full teacher control'.

Collin's alternative was to direct Khalid to another student Heba, (using her phone to look up words at that time), "[who] has great knowledge of vocabulary" and that he should ask her the meaning. Here, Khalid's 'isolated' *communication* with the translation mobile dictionary

contradicted the 'loose couples' *division of labour* in the class in which students were to draw on each other. This falls in line with CLT pedagogy, that prioritises developing student communicative competence by students interacting with each other as learning resources (Thompson, 1996). Herein, the potential primary contradiction between being an 'autonomous' learner that should use a monolingual dictionary versus a student engaged in a 'collective, communicative' learning experience is brought to the forefront.

Later, Collin explained his reasoning behind his approach to mobile dictionary use in language lessons. Collin described that when learners use mobile dictionaries: "They just stop listening to you and they can't focus while trying to find words". Here and above, we see that in using mobile dictionaries in the mediation they afford, the *object* was seen to become potentially contradicted. Technologically, this is seen in mobile dictionaries acting as 'content delivery' *tools*, they 'distracted' the students from partaking in the semiotic mediators of teacher talk and 'interaction' of the communicative classroom. The *object* was then seen to change from students, such as Khalid, 'applying' their language acquisition by working with the teacher and class through the target language to rather relying on the technological aspect of the mobile dictionary 'to know'.

These contradictions were further entrenched in how Collin viewed his students as *subjects*: "[students] are from developing countries… for them to suddenly jump from a [deductive approach] to other approaches… they struggle… I think there is room for [mobile dictionaries]. But it is part of *controlled learning"*. Here, in terms of semiotic plane of the Task Model, students are regarded as 'novice' in that being from a developing country they are unable to cope with less teacher 'controlled' pedagogies. In turn, technologically they are also regarded as 'novice', as seen in the Extract 1, as students' such as Khalid need to be directed in how mobile dictionaries should be used. This lies in direct contrast to students' use, such as Heba, a Syrian student, who used her mobile dictionary to help her understand and pronounce the word 'massacre' to allow her to accurately express her grief over the 2013 Syrian bombings in the lesson's target language of the third conditional (see Author, 2017).

In this way, despite the mobile dictionary aiding and self-directing students' progress towards lessons object(ive), it remained either ignored or coercively changed to fit CLT methods of that classroom. This does not mean the classroom controls Collin initiated were unwarranted, teachers certainly need classroom controls. However, Collin's uptake of communicative competence in these lessons led to the potential expansive opportunities of mobile dictionaries

could enable to remain constricted (Author, 2017) as most elements of the activity remain towards the restrictive side of the language of description (see Table 3).

Restrictive ⟷ Expansive

Factor	1	2	3	4	5
Context *Community*	*Technological* Independent Context *Semiotic*	*Technological* Formalized Context *Semiotic*	-	*Technological* Physical Context *Semiotic*	*Technological* Socializing Context *Semiotic*
Tools	*Technological* Content Delivery *Semiotic*	*Technological* Interaction for motivation and control *Semiotic*	*Technological* Guided Reflection *Semiotic*	*Technological* Reflective Data Collection *Semiotic*	*Technological* Content Construction *Semiotic*
Control *Rules*	*Technological* Full Teacher Control *Semiotic*	*Technological* Mainly Teacher Control *Semiotic*	*Technological* Scaffolded *Semiotic*	*Technological* Mainly Learner Control *Semiotic*	*Technologica* Full Learner Control *Semiotic*
Communication *Division of Labour*	*Technological* Isolated *Semiotic*	*Technological* Loose Couples *Semiotic*	*Technological* Tight Couples *Semiotic*	*Technological* Communication within Groups *Semiotic*	*Technological* Co-Operation *Semiotic*
Subject	*Technological* Novice *Semiotic*	*Technological* Little Previous Knowledge *Semiotic*	*Technological* Good Previous Knowledge *Semiotic*	*Technological* A lot of Previous Knowledge *Semiotic*	*Technological* Expert *Semiotic*
Object	*Technological* To Know *Semiotic*	*Technological* Comprehend *Semiotic*	*Technological* Apply *Semiotic*	*Technological* Analyse *Semiotic*	*Technological* Synthesize & Evaluate *Semiotic*

Table 3: Application of Author's Language of Description (2018) application of Frohlberg, Goth & Schwabe's (2009) Scale of Issues to Authors (2017) case study

While the application of this analytical lens with this specific case study lends itself to the difference between teacher versus students' activity, it also shows it is precisely both their movement, interaction and how each draw on mobile devices between the technological and semantic planes of activity that can facilitate a detailed description which identifies potential primary contradiction sites related to power relations. This is principally due to the clear distinction in this case study between the students who are attempting to use mobile dictionaries

to direct their language learning with a teacher who is undoubtedly not. However, in cases where teachers make explicit use of mobile technology to inform their lessons with students, this language of description can facilitate a clearer and more descriptive analysis of power related not only to the institutional factors but the structure and interaction embodied by the mobile tool and how it is applied in the language classroom.

Conclusion

The use of mobile devices in the 21st century has become ubiquitous. However, studying the impact of these tools on teaching/learning is still a developing field. One of the hindrances of adequately studying the impact mobile devices have on language learning lies in the fact that current frameworks have not been effectively used to track the complexity of learning with these tools. To this end, the current paper presents such an application with which to analyse learning/teaching of languages with mobile devices.

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Appendix 2: Review of Expert Panel of New Horizon Reports 2005-2019

This Appendix briefly illustrates my findings of a review of New Horizon Reports published by the *New Media Consortium* and *EDUCAUSE*. The following Reports where used:

Adams Becker, S., Brown, M., Dahlstrom, E., Davis, A., DePaul, K., Diaz, V., & Pomerantz, J. (2018). NMC Horizon Report 2018: Higher Education Edition. Louisville, Colorado: EDUCAUSE. Retrieved from https://library.educause.edu/~/media/files/library/2018/8/2018horizonreport.pdf

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). NMC Horizon Report: 2017 Higher Education Edition. Austin, Texas: The New Media Consortium. Retrieved from http://cdn.nmc.org/media/2017-nmc-horizon-report-he-EN.pdf

Adams Becker, S., Freeman, A., Giesinger Hall, C., Cummins, M., & Yuhnke, B. (2016). NMC/CoSN Horizon Report: 2016 K-12 Edition. Austin, Texas: The New Media Consortium.

Alexander, B., Ashford-Rowe, K., Barajas-Murphy, N., Dobbin, G., Knott, J., McCormack, M., … Weber, N. (2019). 11 - Horizon Report 2019 Higher Education. Louisville, Colorado: EDUCAUSE. Retrieved from https://www.educause.edu/horizonreport.

Freeman, A., Adams Becker, S., Cummins, M., Davis, A., & Hall Giesinger, C. (2017). NMC/CoSN Horizon Report: 2017 K–12 Edition. Austin, Texas: The New Media Consortium.

Gonick, L., Johnson, L., & Oblinger, D. G. (2008). The horizon report: 2008 edition. Austin, Texas: New Media Consortium. Retrieved from file:///D:/My Data/My Docs/Literatuur/eLearning/Horizon Report 2008.pdf

Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Hall, C. (2016). NMC Horizon Report: 2016 Higher Education Edition. Austin, Texas: The New Media Consortium. https://doi.org/10.1016/0022-3697(93)90127-D

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In the Table below, I present a table summarising the geographical locations of each New Horizon's Expert Panel, alongside their continental placement

	Title	The Horizon Report, 2005 Edition	The Horizon Report – 2006 Edition	NMC Horizon Report 2007	The horizon report: 2008 edition	The 2009 Horizon Report	The 2010 Horizon Report	2011 Horizon report	The NMC Horizon Project: 2011 K-12 Advisory Board	NMC Horizon Report: 2012 K-12 Edition	Horizon Report > 2012 Higher Education Edition	Horizon Report > 2013 K-12 Edition	NMC Horizon Report: 2013 Higher Education Edition	NMC Horizon Report: 2014 K-12 Edition	NMC Horizon Report: 2014 Higher Education Edition	NMC Horizon Report: 2015 K-12 Edition	NMC Horizon Report: 2015 Higher Education Edition	NMC/CoSN Horizon Report: 2016 K-12 Edition	NMC Horizon Report: 2016 Higher Education Edition	NMC/CoSN Horizon Report: 2017 K–12 Edition	NMC Horizon Report: 2017 Higher Education Edition	NMC Horizon Report 2018: Higher Education Edition	Horizon Report 2019 Higher Education	TOTAL
ASIA	China		1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	1	1				21
	Hong Kong									1			1											2
	India													1	1		1		1				1	5
	Indonesia															1		1		1				3
	Israel																	1		1				2
	Japan			1	1		1	1	1	1	1	1	1		1	1	1	1		1	1	1		16
	Jordan								1										1					2
	Malaysia																1				1	1		3
	Qatar				1											1		1		1			1	5
	Singapore								4	2		2	1	1		2		2			1	1	2	18
	Taiwan															1		1			1		1	4
	UAE											1												1
AUSTRALIA	Australia			1	1	3	3	2	4	2	2	5	2	4	2	5	3	3	3	2	4	5	7	63
	New Zea.							1	1	1			1	1			1		1			1	1	9
EUROPE	Belgium								1	1		1		1		1		1		1				7
	Croatia																	1						1
	Cyprus																				1	1		2
	Denmark								1	1		1		1	1	1	1	1	1	2	1	1		13
	England									1														1
	Finland					1																		1
	France									2		2									1	1	2	8
	Germany						1	1	2		3		2		2		2		2		1	1	1	18
	Greece																		1					1
	Hungary											1		1		1								3
	Ireland									1		1		1		1		1		2	1			8

	Italy																1							1
	Norway								1	1		1		1		1		1		2				8
	Scotland																					1		1
	Serbia															1		1		1				3
	Spain				1	1	1	2			3		2		2		1		1	1	2	2	1	20
	Sweden																				1			1
	Switzerland			1									1		1		2							5
	Channel Is.						1																	1
	Netherlands								1	1		2		1			1				1			7
	Turkey																1		1		1			3
	UK			1	1	2	2	2	1	1	5	3	6	2	4		3	1	4	2	4	5	7	56
AFRICA	Egypt															1		1		1		1	1	5
	Nigeria						1	1			1													3
	South Africa								1	2		1		1		1		1		1				8
NORTH AMERICA	USA	18	19	22	26	30	30	28	18	19	28	23	27	28	31	28	28	28	32	33	39	36	64	635
	Canada		1		2	2	2		1	2			2		1		2		2	1	4	4	4	30
	Mexico											1					1				1	1	1	5
SOUTH AMERICA	Brazil					1	1	2	1	2	1	2	1	2	1	2		2	1	2	1	1		23
	Chile								1															1
	Colombia													1	1				1		1	1		5
	Guatemala													1		1								2
	Peru																				1	1		2
	Uruguay									1		1		1		1		1						5
OTHER	International																		1					1
TOTAL		18	21	27	34	41	44	41	42	43	45	50	48	50	50	52	51	52	54	56	69	66	94	1048

Table: Summary of geographical locations of each New Horizon Reports 'Expert Panel' from 2005-2019

Appendix 3: ALC Documentation

In this section, I offer the reader a collection of ALC documentation referred to in this dissertation. All identifying information has been changed in order to ensure the anonymity of the centre and my participants.

Appendix 3.1: Student Booking Form/ Profile

Booking Form/ Student Profile

Personal Details

First Name:	
Family Name:	
Date of Birth:	Select Day Select Month Select Year
Nationality:	
English Level	Please select your level
Gender:	Select gender.
Passport Number	

Contact Details

Email Address:	
Telephone:	
Address:	
City or Town:	

Country:		Postcode:	

Course Details

Course Type:	Select your course type

Please note: Exam courses are subject to availability

Lessons per week:	Select number of lessons per week
Start date:	Click here to enter a date.
Number of weeks:	Select number of weeks
End Date:	Click here to enter a date.

Please any other relevant information relating to your course

Accommodation

Accommodation type	I do not need accommodation
Room type	Not applicable

Please provide any other relevant information, such as dietary or health requirements:

Please note: Accommodation type is subject to availability

Appendix 3.2: ALC Student Handbook 2017

*this document has been changed in order to ensure participants' and the centre's anonymity. All names have been changed/ redacted, and the handbook has been digitised.

ALC

UNIVERSITY Language Centre

STUDENT HANDBOOK 2017*

Contents

1. Welcome
2. School information
3. Staff Members
4. Student Residence
5. Student Access cards
6. Wi-Fi and computer facilities
7. UNIVERSITY Libraries
8. Your first day
9. Lessons and Weekly timetable
10. Course materials
11. Classroom etiquette
12. Academic year timetable
13. Examination and Assessment
14. Tutorials and Feedback...
15. Holidays and course breaks
16. Academic progress and Differential Progression
17. Authorised and Unauthorised Absence
18. Punctuality
19. Mandated withdrawals
20. Certificates and end of course reports
21. Academic study at UNIVERSITY
22. Social Programme and class outings
23. Student clubs and societies
24. Emergency contacts
25. Complaints

1. Welcome

All the staff and teachers wish you a warm welcome to your English as a foreign language course at ALC and look forward to supporting you in achieving your language and academic goals. Please take the time to read this handbook carefully as it contains the information you will need to have an enjoyable and successful stay with us.

2. School information

ALC is the **UNIVERSITIY's** Centre for teaching English as a foreign language. The school is based in the **X Building** at UNIVERSITIY's **Y Campus** in the **Z** district of Cape Town. The Campus is shared with the Departments of XXX and XXX, and also includes the XXXXX and XXXXXXX.

Physical Address:	Postal Address:
ALC English Language Centre	XXXXXXXXXXXX
XXXXXXXXXXXX	XXXXXXXXXXXX
XXXXXXXXXXXX	XXXXXXXXXXXX
XXXXXXXXXXXX	XXXXXXXXXXXX
XXXXXXXXXXXX	XXXXXXXXXXXX

Telephone: XXXXXXXXXXXX

Email: XXXXXXXXXXXX

Some courses also take place on the UNIVERSITY's **YY** Campus in XXXXXX. If your course takes place on **YY** Campus you will be able to travel between the two campuses on the

UNIVERSITY bus service, the XXXXXXXX. This service is free if you present your student card.

3. Staff Members

The ALC staff are here to support you in any way we can.

Principal	James	Queries relating to course booking and payment should be directed to the Principal.
Director of Studies	Dani	The Director of Studies handles all academic matters and leads the teaching team.
Teachers:	Cersei John Ned Tyra Arya Edward Peter Missy TEFL-T	Your teacher should be your first point of contact for everything relating to your lessons and your learning progress.
Senior Secretary	Sansa	Reception duties

Marketing Coordinator	Catelyn	Agent and marketing enquiries

4. Student Residence

ALC provides student residence accommodation at XXXXXXXXXX, a 5-minute walk from the school. If you are staying at the residence, you will sign an accommodation agreement, and it is important that you read the agreement carefully and follow the rules and guidelines of the residence. ALC students share the building with other students from UNIVERSITY and other universities, so please be respectful of your fellow residents. All the rooms have a private bathroom, and there are shared kitchen facilities and common room areas.

5. Student Access cards

On your first day you will be given a student access card which will allow you to access the buildings and facilities on campus and use the XXXXXXXX bus service. In order to get your card you will need to provide a passport-type photograph and your passport number. If you have a digital photograph, please email it to XXXXXXXXXX.

When you receive your card you will also receive an eight digit student number, beginning with the letter XXXXXXXXXX. You will use this number to access the various network services at the UNIVERSITY.

6. Wi-Fi and computer facilities

All UNIVERSITY campuses use a secured wireless network, which is called XXXXXXX. To connect to the wireless network, please follow these instructions:

1. Select the XXXXXXX network
2. Enter the username studentnumber@XXXXXXX (e.g. XXXXXXXXXXX)
3. Enter your student number twice as your password (e.g. XXXXXXXXX)

Your student number is a temporary network password, and you will need to change it immediately.

To do this, go to XXXXXXXXXXX and follow the instructions to change your network password. You will use this password to access the various computer facilities at ALC.

ALC students may also access the postgraduate computer lab in room XXXXXXXX on Y Campus, and the Humanities Undergraduate computer lab in the Z Building on XXXXXXXX Campus. To use a computer, you will need to log in with your student number and network password.

If you are having problems with using any computer facilities at UNIVERSITY, you can get help from the XXXXX helpdesk. The XXXXXX helpdesk can be contacted in one of the following ways:

- Send an email to XXXXXXXXXXX
- Call the telephone helpline on XXXXXXXXXX
- Visit the XXXXXX Front Office. This is located in Room XXXXXXXX of the XXXXXXXXXXX building, accessible from XXXXXXXX, opposite the food court on XXXXXXXXX.

7. UNIVERSITY Libraries

You may make use of the XXXXXXXXXXX Library, on Y campus for independent study. Please make yourself aware of the library rules by visiting XXXXXXXXXXXXXXXXXXXXX and be respectful of your fellow library users. Please note that ALC students do not have library borrowing privileges.

8. Your first day

On the first morning, you will do a placement test to assess your English level and see which class you should be in. The test takes about an hour and includes sections on grammar and vocabulary, writing and a short interview. After this you will attend a short talk by the programme coordinator, and be taken on a tour of the campus. Your first class will begin at 12.00.

9. Lessons and Weekly timetable

Your timetable will depend on whether you are studying 20, 25 or 30 lessons per week, and on which afternoon options you choose. The table below show the weekly timetable.

Time	Course type	Monday	Tuesday	Wednesday	Thursday	Friday
9.00-10.40	20, 25, 30	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation
10.40-11.00		Break I	Break I	Break I	Break 1	Break I
11.00-11.50	20, 25, 30	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation	General English/ Exam Preparation
11.50-12.00		Break 2	Break 2	Break 2	Break 2	Break 2
12.00-12.50	20, 25, 30	Conversation	Conversation	Conversation	Conversation	Conversation
12.50-13.50		Lunch	Lunch	Lunch	Lunch	Lunch
13.50-15.00	25 (A or B), 30 (A and B)	Elective group A	Elective Group B	Elective group A	Elective Group B	
15.00-15.15		Break 3	Break 3	Break 3	Break 3	
15.15-16.10	25 (A or B), 30 (A and B)	Elective group A	Elective Group B	Elective group A	Elective Group B	

If you have chosen the semi-intensive (25) course you will be able to choose whether to take afternoon optional courses on Monday and Wednesday or Tuesday and Thursday. If you are on the

Intensive (30) course, you will attend afternoon classes Monday to Wednesday. Students on the

Business English Course (25 or 30) will study English for Business Communication in the afternoons.

Afternoon options vary throughout the year and are subject to demand. Examples of afternoon electives can be seen in the table below:

Level	**Electives A (Monday/Wednesday)**	**Electives B (Tuesday/Thursday)**

Elementary	*Elementary Skills*	*Elementary Skills*
Pre Intermediate Intermediate	*Grammar and Writing* *Listening and Pronunciation*	*Vocabulary and Reading Spoken Fluency*
Upper Intermediate / Advanced	*Grammar and Writing* *Pronunciation/ Spoken Fluency*	*Vocabulary and Reading* *English for Academic Purposes*

Usually you will have the same class teacher for the duration of the term, but from time to time, it may be necessary to change a class teacher in the middle of a term. All students have some teachers they prefer to others, but unfortunately it is not possible to request a particular teacher for your class.

Class lists and room numbers are displayed on the noticeboard in ELC reception. If your course is based on XXXXXXXXX Campus, your class list will be displayed on the noticeboard in the foyer of the XXXXXXXXXX.

10. Course materials

All morning classes follow a course book, which you will be provided with free of charge. In your first week your teacher may give you photocopies rather than a coursebook. This is because we want to make sure you are in the right level before we give you a coursebook.

Conversation classes and afternoon electives do not use a course book and you may be given photocopies by your teacher. It is important for your learning that you keep these in a well organised folder so you can review and refer to them later. You should also bring a pen or pencil and writing notebook to all your classes so you can take notes and do exercises. If you keep your study materials neat and tidy, you will make better progress with your English.

11. Classroom etiquette

In order to create a positive learning atmosphere, it is important to behave in a way that is respectful to your teacher and fellow students. Therefore, there are a few basic rules we ask students to follow when in class.

- Arrive in class on time. It is disrespectful to your teacher and the other students to arrive late. If you arrive more than 15 minutes late you will be marked absent and your teacher has the right not to allow you to join the class. This also applies when you are returning to class after breake.
- Please do not use your phones in class except when related to the lesson. If you are expecting a phone call, tell your teacher before the lesson and quietly leave the room to take the call.

Phones should be on silent at all times.

- Please do not use your language to speak to other students who speak the same language. This excludes other class members and has a negative impact on your learning.

- Make sure you allow other students the opportunity to speak and do not speak over other students or your teacher.
- Pay attention when your teacher is explaining new language to the class and giving instructions.
- Arrive prepared for class with your books and any material you need. • Do your homework on time and to the best of your ability.

Above all, be aware and respectful of all other ALC staff and students, and other members of the University, at all times.

12. Academic year timetable

ALC courses run of a cycle of 12-week terms. We expect that 12 weeks is the length of time it takes for a student to move from one level to the next, so most students will progress from one level to the next at the end of term, depending on the result of the end-of-term exam and weekly in-class assessments. For each new term, you will use a new coursebook and have a different teacher. The term dates for the 2016 academic sessions are:

	Term 1	Term 2	Term 3	Term 4
Start date	08-Feb-16	02-May-16	25-Jul-16	17-Oct-16
End Date	29-Apr-16	22-July-16	14-0ct-16	06-Jan-17

13. Examination and Assessment

You will have assessments every Friday, which will be based on one of the skills of reading, writing, listening or speaking, or the systems of grammar and vocabulary. These are formal assessments and your grade will be counted towards your overall course grade. Assessments may take the form of a presentation, seminar discussion, essay, research project, or a short examination.

At the end of the term, you will take an exam which will assess what you have learnt over the course. It is important that you prepare carefully so you are able to get the best grade that you deserve. In some cases, you may have joined the class in the middle or towards the end of term

so the exam will cover some language points that you have not studied. In this case, your teacher will take this into account when assessing your overall performance.

14. Tutorials and Feedback

In weeks 4 and 8 of the term, you will have an individual tutorial session, where your teacher will review your work over the previous few weeks and suggest areas to focus on and techniques to help you improve more quickly. This is also an opportunity for you to give feedback to your teacher about the course and which aspects of it you have found more or less beneficial to your progress, and what you would like the class to focus on going forward. Please note that your teacher must prepare the lessons with the whole class in mind, and for this reason not all your suggestions may be taken up.

Only students who have been in the class for a minimum of two weeks will be given an individual tutorial session.

15. Holidays and course breaks

If you are studying with us for a long time you may wish to take a course break at some point. You may take a maximum of one week's holiday for every 6 weeks of study, and can extend your course to compensate for your holiday. If you do decide to take a holiday, it must be in one week blocks from Monday to Friday and you must inform the school by email to XXXXXXXXXXX no less than ten days before you intend to take the holiday. The school will confirm your holiday and your new course end date by return of email.

The school is closed all South African public holidays and courses will not be extended to compensate for days lost to closure on public holidays. In addition, the Centre will close at lunchtime on the 24th and 31st of December. The list of public holidays is available in the Fees and Dates document on the ALC website. Please note that the Public Holidays Act determines whenever any public holiday falls on a Sunday, the Monday following it shall be a public holiday.

16. Academic progress and Differential Progression

Students make progress at different rates for a variety of reasons. While the average student takes 12 weeks to move from one level to the next, some will take longer and some will progress more quickly. It is also important to note that language ability is made up of four skills

and four systems, so while a student's speaking, listening and pronunciation may be strong for their class, their writing, reading and grammar may be weaker. It may also be that a student is able to communicate with a good level of fluency and confidence compared to their classmates, but continues to make common errors in grammar and vocabulary, or does not use a sufficient range of higher level language.

Your teachers will continually assess whether you are in the appropriate class level for your language ability through observing your performance in class, and your grades in your assessments and homework. If they feel that you would benefit from a change of level, they will discuss this with you and may recommend a change of class.

If you feel that you are in the wrong class level, you may also apply for Differential Progression. You should first discuss with your General English/ Exam Preparation teacher whether it is appropriate to go to a higher or lower level class. Your teacher will provide you with a Differential Progression form, which you must complete and submit to the Director of Studies. The teacher will formally review your in-class performance, assessment and homework grades, attendance and punctuality. They will then discuss your progress with your other teachers, and make a recommendation. You may also be asked you to do an additional assessment to help them make a decision, such as a taking a placement test. As the person who is responsible for your language learning, the decision on Differential Progression will be based on the recommendation of your General English/ Exam Preparation, and you should not approach the Director of Studies or the Principal directly. You will be advised of the decision in writing within one week of application, and all decisions are final. No further application for Differential Progression will be considered until three weeks after the decision.

Please note that due to the nature of the termly academic cycle, no students will be considered for a change of class level or Differential Progression in weeks 10, 11 or 12 of the term.

17. Authorised and Unauthorised Absence

Please try to attend every class. In line with UNIVERSITY, a student must attend 85% of classes in order to receive a certificate. If you do not attend 85% of classes you will not receive a certificate. Furthermore, if you are in South Africa on a study visa, ALC is obligated to inform the Department of Home Affairs of attendance below 85%, and this may have consequences for your visa status.

If you are sick or unable to attend class for good reason, please let us know as soon as possible by sending an email to XXXXXXXXXXX. If you know that you will be unable to attend a class, please inform your teacher in advance. In these cases, and within reason, non-attendance will be considered to be an Authorised Absence and you will not be penalised against your overall attendance mark. Otherwise, non-attendance will be considered Unauthorised Absence and will have a negative impact on your overall attendance.

If you are sick for three days in a row, please ask a doctor for a note to authorise your absence.

18. Punctuality

It is important that you arrive on time for your classes, and return to class promptly after break times. Lateness is disruptive to the rest of the class and will have a negative effect on your learning progress. Cases where a student is persistently up to 15 minutes late will be referred to the Director of Studies. If a student is more than 15 minutes late, the student will be marked absent and the teacher has the right to exclude the student from the class.

19. Mandated withdrawal

ALC reserves the right to mandate the withdrawal of a student due to non-attendance, disruptive or abusive behaviour, illegal activity or any other behaviour in breach of the UNIVERSITY General Rules and Policies. There will be no refund of course fees or tuition fees in event of mandated withdrawal.

20. Certificates and end of course reports

At the end of your course, you will receive a UCT certificate stating your exit level, course type, and period of study. You will also receive a report from your teacher assessing your language ability. Please note that if your attendance is below 85%, you will not receive a certificate.

21. Academic study at UNIVERSITY

Many of our students go on to study undergraduate and postgraduate degrees at UNIVERSITY after they have finished their course. If you want to apply for an academic programme, please speak to the ALC Principal who will advise you on the application process. To be considered

for degree study you will require an IELTS score of 7.0, a score of 88 in TOELF iBt, or successful completion of the ALC presessional course.

22. Social Programme and class outings

ALC runs a Social Programme with our partners at Cape Town Students, with daily outings and weekend trips. Each week's outings are advertised on the noticeboard in reception and outings usually include a small cost for transport and sundry items. Outings are not exclusive to ALC students, so this is also an opportunity for you to meet other language students in Cape Town. If you want to join an outing or weekend trip, please make payment to the Director of Studies or the Principal, who will inform the our partners that you wish to attend. Collection by bus is in front of XXXXXXXXX Library, between 13.00 and 13.30.

Occasionally, your class will go on a class trip during the lesson. These trips are not part of the social programme and are there to support your language learning. Therefore there will be a language aim, and language exercises to do before, during or after the trip. Sometimes there may be a small expense for bus fare or similar items. These trips are not mandatory, so if you do not want to go, please inform your teacher and alternative arrangements will be made.

23. Student clubs and societies

As a UNIVERSITY student you are eligible for membership of a range of clubs and student societies, where you can pursue your personal interests and meet other students studying at the University. To join a club please contact the club by email. A full list of clubs and societies and their contact emails is available at http:(/www.uct.ac.za/students/recreation/societies/. Most clubs charge a small subscription fee to fund their activities.

Please note that many clubs and societies do not operate in the University vacation between November and February.

24. Emergency contacts

In case of emergency, please contact the following numbers:

- ALC during working hours: XXXXXXXXXXXXXXX
- ALC outside working hours: XXXXXXXXXXXXXXX
- Emergency services (Police, Fire, Ambulance): 107 (Landline) or 112 (Cell phone)

25. Complaints

We hope that you do not have cause for complaint in your time at ALC, but if you do, you should tell your teacher as soon as possible. If your teacher cannot resolve your issue, you should approach the Director of Studies, who may choose to refer the issue to the Principal. In this case, you will be invited to discuss the issue with Principal, who will determine a way forward.

If a complaint cannot be resolved internally by ALC, students have the right to refer the matter to the UNIVERSITY Office of the XXXXXXX, who will take it forward in a confidential, impartial manner. For more information please visit the XXXXXXX website at XXXXXXXXXXXXXXX.

Appendix 4: Research Study Information & Consent

In this section, I offer to the reader to review all research documentation, in obtaining participants' consent as well as any additional information I made available to the ALC.

Appendix 4.1: Research Ethics Clearance

SCHOOL OF EDUCATION

Dr Carolyn McKinney
Associate Professor

University of Cape Town, Private Bag X3, Rondebosch, 7701
Physical address: Neville Alexander Building, University Ave South, Upper Campus
Tel: +27 (0) 21 650 2757 / 2772 Fax: +27 (0) 21 650 3489
E-mail: carolyn.mckinney@uct.ac.za Internet: www.education.uct.ac.za

9 January 2017

Mr Warren Lilley
PhD Programme
University of Cape Town

Dear Mr Lilley,

RE: Ethical Clearance for Research Project

I am pleased to inform you that ethical clearance has been granted by the School of Education Ethics Review Committee of the Faculty of Humanities for your PhD research project entitled: 'Emerging Power within Emerging Technologies'.

I wish you all the best with your study.

Yours sincerely,



Associate Professor Carolyn McKinney
Chair, School of Education Research Ethics Committee

Appendix 4.2: Letter of Consent

Letter of Consent to Conduct Research

Dear Mr. X and Mrs. Y,

I am conducting research on Mobile-Assisted Language Learning (MALL) in Teaching English as a Foreign Language (TEFL) for my PhD in Education under the supervision of Associate Professor Joanne Hardman at the University of Cape Town. I would like to invite your institution to consider taking part in my research study.

Aims of the Research

This research study aims to provide deeper awareness into the potential powerful role mobile devices play within the South African EFL classroom. I understand mobile devices and other similar technologies as 'sense-making' tools that teachers and students use in developing their understanding of language and/or language skills such as reading or speaking.

The study aims to further understand the ways learners' and teachers' use mobile technology in an EFL classroom. It investigates if these understandings contradict each other and looks at ways to use these understandings to develop innovative approaches for understanding mobile technology in the classroom. Thus, the study wishes to add to the need to facilitate critical understanding of technology in TEFL.

Significance of the Research Project

The research provides knowledge about how adult learners and teachers are using mobile devices within EFL classrooms and if these ways of using mobile devices can be developed upon in language teaching. This will provide EFL institutions and MALL developers with greater knowledge into ways to engage learners more deeply in language lessons as well as improve upon teacher practices with mobile devices.

Research Plan and Method

- I would like to visit your premises over an agreed period, to develop a deep understanding of the uniqueness of your language institution with how teachers, managers and learners are using technology.

- I plan to sit in on and record at least four lessons of Upper Intermediate or Advanced classes: detailing the classroom set up, their use of technology in the classroom and learner and teacher interaction
- Two short ten to fifteen minute interviews will be conducted with two students from the observed classes, the teachers observed and a management team member to clarify my findings over the agreed period
- After the agreed period, your teachers will be invited to participate in a Change Laboratory where they will engage in discussion and tasks to rethink how mobile devices can be used in language learning in SA
- Prior to the study permission will be sought from students and teachers. Only those who consent will participate
- All data during the research study will be treated in the strictest confidence.
- The institution nor individual students or teachers will be identifiable in any reports that are written, as pseudonyms will be chosen or created.
- The option to withdraw from the study at any time is available to the school and all participants.

Further information

If you require any further information of the study, please feel free to contact me at 0736521623 or email me at Warren.Lilley@alumni.uct.ac.za or Assoc. Prof. Joanne Hardman at joanne.hardman@uct.ac.za. Attached for your information are copies of the *Participant Information Statement* and *Consent Form*.

Invitation to Participate

If you would like your school to participate in this research, please complete and return the attached form. Thank you for taking the time to read this information.

_____

Warren Lilley
Researcher, PhD Student in Education,
University of Cape Town

Emerging Power within Emergent Technologies: Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning

Institution Consent to Conduct Research

I give consent for you to approach students and teachers from an Upper Intermediate or Advanced class as well as members of our management team to participate in the *Emerging Power within Emergent Technologies: Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning*.

I have read the 'Letter of Consent to Conduct Research' including the Project Information Statement explaining the purpose of the research project and understand that:

- The role of the school is voluntary
- I may decide to withdraw the school's participation at any time
- Students and teachers from an Upper Intermediate or Advanced as well as members of your management team will be invited to participate and that permission will be sought from them.
- Only students and teachers and members of management who consent will participate in the project
- All information obtained will be treated in the strictest confidence.
- The participants' names will not be used and will not be identifiable in any written reports about the study.
- The school will not be identifiable in any written reports about the study.
- Participants may withdraw from the study at any time without penalty.
- I may seek further information on the study from Warren Lilley on 07632689738 or Warren.Lilley@alumni.uct.ac.za or Assoc. Prof. Joanne Hardman at joanne.hardman@uct.ac.za.

I understand that in regard to the school, the researcher will:

- arrange a meeting to decide on an approved classroom to conduct my research in
- arrange for informed consent presentation for the class that informs participants of the research aims, the researcher's educational background and the method of data collection
- arrange an agreed upon time with my institution for data collection to take place
- obtain informed consent from participants

_____ _____

Centre Director Signature

_____ _____

Director of Studies Signature

Appendix 4.3: Preliminary study: Participant Information Sheet

PROJECT INFORMATION STATEMENT

Emerging Power within Emergent Technologies:

Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning

You are asked to join in a research study by **Warren Lilley** from the School of Education at the University of Cape Town as part of his PhD in Education qualification. Joining this study is voluntary and you may choose to leave at any time. Please read the information below and ask questions about anything you do not understand, before deciding if you want to join.

PURPOSE OF THE STUDY

This research study investigates how mobile phones and other technology is being used in a South African English as a Foreign Language (EFL) classroom and how students and teachers use and feel about them.

The researcher in this study will watch EFL classrooms for a maximum of four lessons that use technology, like mobile devices in their language teaching. During his visit, you may be asked to do 1 or 2 short interviews to give the researcher a better understanding of how mobile devices and/ or other technology were used as well as your ideas about certain classroom interactions that interest the researcher.

Following, the observation. Participants may be requested to participate in a series of 21 workshops that focus on developing how teachers and students use mobile devices in language learning.

POTENTIAL RISKS

This research study will not effect your education in any way, or create any physical or emotional discomfort. If you feel the study makes you feel negative physically, psychologically or emotionally you can choose not to participate at any time.

PERMISSION TO USE POTENTIAL DATA RECORDINGS

Data from interviews, observations and recordings collected will be used to create transcripts or images which may be used in future publications. The researcher will ensure that your

identity will remain confidential through the use of pseudonyms in the transcripts and obscuring any identifiable features in the use of images/ recordings. You will also be contacted for your consent if your obscured image is requested to be used in any future publication by the researcher.

CONFIDENTIALITY

Any information will remain confidential and will be revealed only with your permission or by law.

PARTICIPATION AND WITHDRAWAL

You can choose to participate in this study. If you volunteer to be in this study, you can leave at any time without any consequences. You can refuse to answer any questions you do not want to answer.

IDENTIFICATION OF RESEARCHER

If you have any questions or worries about this research, please contact the researcher:

Name: Warren Lilley

Email: Warren.Lilley@alumni.uct.ac.za

RIGHTS OF RESEARCH SUBJECTS

The University of Cape Town has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact the researcher or the University of Cape Town.

I understand the information described above and the procedures described. My questions have all been answered, and I agree to participate in this study. I have been given a copy of this form.

Appendix 4.4: Preliminary Study: Consent Form

CONSENT FORM

Emerging Power within Emergent Technologies:

Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning

I, _____, agree to the following procedures:

	YES	NO
Take part in a maximum of four classroom observations with the researcher present.		
Take part in two, ten to fifteen-minute interviews about mobile devices and technology in teaching and learning language. As well as perceptions of classroom interaction that the researcher finds interesting. This will be used to create a transcript.		
Be filmed/ recorded in the classroom observations with the researcher present. This will be used to create a transcript.		
Be filmed/ recorded during interview(s). This will be used to create a transcript.		
Having lesson plans, worksheets, recordings, images or interactions collected being used in later workshop sessions, analysis and presentations. I understand that the researcher will make every effort to ensure my anonymity in utilizing these data, which I can see if I ask the researcher.		
Have a transcript made of observations and interviews, which I can see if I ask the researcher.		
My identity being concealed through the use of pseudonym and having any images used obscuring any identifiable features of my face		
Be asked to participate in the later sessions looking at developing how mobile devices can be/ are used in language learning		

Printed Name of Subject Pseudonym chosen

_____ _____

Signature of Subject Date

_____ _____

Signature of Witness Date

Appendix 4.5: Change Laboratory: Participant Information Sheet

PROJECT OUTLINE

Emerging Power within Emergent Technologies:

Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning - Change Laboratory

You are asked to join in a research study by **Warren Lilley** from the School of Education at the University of Cape Town as part of his PhD in Education qualification. Joining this study is voluntary and you may choose to leave at any time. Please read the information below and ask questions about anything you do not understand, before deciding if you want to join.

PURPOSE OF THE CHANGE LABORATORY

This research study investigates how mobile phones and other technology is being used in a South African English as a Foreign Language (EFL) classroom and how students and teachers use and feel about them.

The researcher in this study will watch EFL classrooms for a maximum of four lessons that use technology, like mobile devices in their language teaching. During his visit, you may be asked to do 1 or 2 short interviews to give the researcher a better understanding of how mobile devices and/ or other technology were used as well as your ideas about certain classroom interactions that interest the researcher.

Following, the observation. Participants may be requested to participate in a series of 7 workshops that focus on developing how teachers and students use mobile devices in language learning.

POTENTIAL RISKS

This research study will not effect your education in any way, or create any physical or emotional discomfort. If you feel the study makes you feel negative physically, psychologically or emotionally you can choose not to participate at any time.

PERMISSION TO USE POTENTIAL DATA RECORDINGS

Data from interviews, observations and recordings collected will be used to create transcripts or images which may be used in future publications. The researcher will ensure that your identity will remain confidential through the use of pseudonyms in the transcripts and obscuring any identifiable features in the use of images/ recordings. You will also be contacted for your consent if your obscured image is requested to be used in any future publication by the researcher.

CONFIDENTIALITY

Any information will remain confidential and will be revealed only with your permission or by law.

PARTICIPATION AND WITHDRAWAL

You can choose to participate in this study. If you volunteer to be in this study, you can leave at any time without any consequences. You can refuse to answer any questions you do not want to answer.

IDENTIFICATION OF RESEARCHER

If you have any questions or worries about this research, please contact the researcher:

Name: Warren Lilley

Email: Warren.Lilley@alumni.uct.ac.za

RIGHTS OF RESEARCH SUBJECTS

The University of Cape Town has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact the researcher or the University of Cape Town.

I understand the information described above and the procedures described. My questions have all been answered, and I agree to participate in this study. I have been given a copy of this form.

Appendix 4.6: Change Laboratory: Consent Form

CONSENT FORM

Emerging Power within Emergent Technologies:

Developing a 'Power'ful CHAT Lens in Mobile-Assisted Language Learning

Change Laboratory Research

I, _____, agree to the following procedures:

	YES	NO
Take part in 7, 2 hour Change Laboratory sessions and follow up sessions that I have been requested to participate in.		
Be filmed/ recorded in Change Laboratory sessions. These recordings will be used to create transcripts and possibly used for subsequent research and sessions. I can view transcripts created if I ask the researcher.		
Be filmed/ recorded in further classroom observations with the researcher present. This will be used to create a transcript and possibly used for subsequent research. I can view transcripts created if I ask the researcher.		
Having lesson plans, worksheets, recordings, images or interactions , (digital/ virtual) artefacts, emails, reflections or tasks created and/ or collected in sessions being used in later workshop sessions, analysis, research and presentations. I understand that the researcher will make every effort to ensure my anonymity in utilizing these data, which I can see if I ask the researcher.		
My identity being concealed through the use of pseudonym and having any images used obscuring any identifiable features of my face.		
Understand my participation is voluntary and that I may withdraw at any point in time. I am free to withdraw without explanation.		

Printed Name of Subject

_____

Signature of Subject

Appendix 5: Semi-Structured Interview Protocol

In this section, I offer readers the ability to review the semi-structured interview protocol I used with all participants.

Semi-Structured Interview Questions Sample

This study makes use of semi-structured interviews to develop deeper insight and clarification on activity and mobile device use of interactions that interest me. The interview questions below provide a sample of the questions I wish to discuss with my participants.

1. Student Participant Interviews:

Classroom/ Institution Dynamics

- What can you do and cannot do in your classroom and/or school?
- Do you think any of these rules should change? If so, why?
- What kinds of tasks do you do in class? What kinds of tasks does the teacher do?
- What should a 'good' teacher do for you and other language learners?

Teaching

- How would you describe your teacher's or teachers' teaching?
- Do you think you are improving? How have you improved?
- What kinds of activities does the teacher do with you?
- Do you use a lot of books, or CDs in your teaching?
- Does the teacher want you to be more accurate or fluent in speaking?
- What kinds of activities or tasks would you like to do?
- I saw you reacted to a text/ task/ activity in a positive/ negative way? I was wondering could you describe to me what you were thinking then?

Mobile Device/ Technology Use

- Do you ever use your mobile phone or other technology in class?
- How do you use technology in your life?
- Do you use mobile phone or other technology to help you learn English? If so, how do you use it?
- What do you do with your mobile phone in class?
- Do you think mobile phones are helpful?
- If you use it to look up information, what information do you look for? How was this information related what you do/ were doing in class?
- If you use it to look up words, what words do you look for? Why?
- What do you think your teacher thinks about using mobile phones in class?
- I saw you using your mobile phone in class, I do not want to know what you were doing specifically, but could you describe what who you were doing? And why you were using it in that way
- When you are searching for information do you look up the information in English or your home language?

2. Teacher Interviews:

Classroom/ Institution Dynamics

- What are the rules of your classroom and school?
- What are the types of tools learners should bring with them to the classroom?
- What are the rules surrounding technology?
- Do you think any of the rules should change?
- In what ways is technology being used in your classroom, and school?
- In your opinion, who has the greatest impact in how you conduct yourself, choose your tools, lessons etc.? Is it you, the school, or your students?
- What kinds of tasks do you do in class with students? What kinds of tasks do you do and the students do?
- What should a 'good' student/ teacher be able to do?

Teaching

- How would you describe your teaching? Do you follow a certain approach like Communicative Language Teaching etc.?
- What aspects are you really focused on in your teaching?
- What is your goal to develop with students in the language/ Advanced classroom?
- What kinds of problems/ issues do you see most often in the language/ Advanced classroom?
- How well do you think your classroom meets the needs of your students/ language school/ your own?
- Have there been any important changes that have been made in teaching/ how the school facilitates your teaching?
- Where do you think your students need the most work?
- What kinds of activities and resources do you use? i.e. Do you use a lot of books, or CDs in your teaching?
- Do you focus more on accuracy or fluency? If so, how?
- What kinds of activities or tasks would you like to do more of?
- I saw you reacted to a student's activity in a positive/ negative way? I was wondering could you describe to me what you were thinking then?

Mobile Device/ Technology Use

- Are students allowed to use mobile phones in your classroom? If so why? If not, why?
- What do students in your class use mobile phones do?
- How should learners use mobile phones in your class? Why?
- How do you react when students use mobile phones for texting?
- When do you use mobile phones or technology in lessons or when do you think it is appropriate?
- How do you think mobile devices impact teaching?
- Do you think mobile phone or other technology can help students learn English? If so, how do you think they should use it or are using is?
- What do you do with your mobile phone in class?
- If you use it to look up information, what information do you look for? How was this information related what you do/ were doing with the class?
- What is your position on mobile dictionaries? How should students use it? Why?

- What do you do when students are using their mobile phones in class?
- I saw your reaction to students using their mobile phone in class. Could you describe that more for me?

3. Director of Studies/ Management member Interview:

- What are the rules of schools and classrooms?
- What are the types of tools learners and teachers being used in the classroom?
- What are the rules surrounding technology?
- Do you think any of the rules should change?
- In what ways is technology being used in your classroom, and school?
- Does the school support new technologies like mobile phones or electronic dictionaries in the classroom? Do you think this is important, why?
- Are teachers instructed to use a certain teaching approach? Which one(s)?
- Do you think technology can impact upon these approaches? How so?
- What learning resources should they be bringing into class? What types of tects
- In your opinion, who has the greatest impact in how you conduct yourself, choice of tools, lessons etc.? Is it the teachers, the school, or your students?
- What kinds of tasks should teachers be doing in class with students? What kinds of tasks do you think they should do and the students should do?
- What should a ‘good’ student/ teacher be able to do?
- Language objectives
- Changes over the last
- Meeting needs
- Future directions
- Problems

Appendix 6: Change Laboratory Documentation

In this section, I offer to the reader to review all Change Laboratory documentation that was shared with participants over the course of this intervention.

Included in this section, is the meeting agenda for the meeting with ALC management.

Appendix 6.1: Original Plan of Change Laboratory Sessions

Tentative Plan of Change Laboratory Sessions

ACADEMIC LANGUAGE CENTRE

October - December 2017

Below, is the outlined plan* for the Change Laboratory process to be carried out at ACADEMIC LANGUAGE CENTRE from October - December 2017. This document serves only to provide a tentative plan for how the Change Laboratory procedure will be conducted over the following 7 weeks so that selected participants can arrange their time accordingly so as to keep this a continuous and uninterrupted process as will be further clarified and discussed in the Project Outline meeting.

It is important to remember that this document serves only as a planned intention of how the Change Laboratory will be carried out as Change Laboratories and their procedure are predicted to be unpredictable in their development and process, and are dependent upon the level of participants' own engagement, exploration and development over its course.

Important features to remember:

1. I have listed the dates of the Change Laboratory sessions in a weekly form as specific dates and times have as yet to be decided upon.
2. Participants listed for specific sessions must be present for that session. Lack of attendance can have impacts on outcomes.
3. ALL tasks assigned should be completed
4. Some sessions may overlap/ be reworked as needed in their facilitation

Session	Week	Hour	Content	Participants	After Session Task
1	16 -20 October	1	Introduction to: - Change Laboratories, - Theory - Ways of working in the MALL CL (Google Classroom, Google Suite, Disruption Diary)	Teachers, Management	Disruption Diary, Review Google Classroom
		2	Questioning: - Current Practices & Thinking - Teachers joys, worries, disruptions,	Teachers	Disruption Diary, Concrete examples
2	22 - 27 October	1	Questioning: - Current Practices & Thinking - Student & Management Perspectives - Power Relations with Mobile Phones and other artefacts Central Challenges: - Lesson Observations - Interviews	Teachers	Disruption Diary
		2	Central Challenges: - Continued from above Collecting data on changes in activity	Teachers	Historical Data Collection
3	29 - 3 November	1	Historical Analysis: - Analyzing the development of the Activity System - Developing & outlining central contradictions	Teachers	Further Analysis
		2	Modelling: - Central contradictions - Power Relations	Teachers	Disruption Diary

4	5 - 10 November	1	New Activity System: - Tentative Model - Ideal model - Exploration of Mobile applications? (Nearpod etc.)	Teachers	Exploration of Uses, Ideas Questioning own Practice
		2	Overcoming contradictions - Proposed ideas	Teachers	Disruption Diary
5	12 - 17 November	1	Discussion and elaboration of change ideas	Teachers	Exploration of Uses, Ideas
		2	Discussion with wider school community and Management - Presentation of ideas - Anticipating problems, obstacles and support	Teachers, Management	Creating concrete Model
6	19 - 24 November	1	Model: - New Activity System - Concretizing new practices for experimentation	Teachers	Preparing Presentation
		2	Discussion of the proposed experiments with management	Teachers, Management	Further exploration & development of model
7	26 - 1 December	1	Planning: - Carrying out of proposed changes in Advanced level - Experimentation procedure	Teachers	Disruption Diary
		2	Planning: - Realization - Evaluation of experimental changes Certificates of Attendance given	Teachers, Management	Specific Goals/ Roadmap to Change?
FOLLOW UP SESSIONS WILL BE PLANNED MORE CONCRETELY AT A LATER DATE					

After	To be planned	Implementation of new model - Teachers - Management Researcher Data Collection	Teachers, Management	Disruption Diary
Follow up	To be planned	Evaluation and Further Development - Looking at issues - Creating solutions	Teachers, Management	Disruption Diary
Follow up	To be planned	Evaluation and Further Development - Looking at issues - Creating solutions	Teachers, Management	Disruption Diary

*The following preliminary plan is based upon Virkunnen & Newham's (2013) case study of the Change Laboratory at Molefi School in Botswana (p. 129).

Appendix 6.2: Final Plan of Change Laboratory Sessions

Final Plan of Change Laboratory Sessions

ACADEMIC LANGUAGE CENTRE

October - December 2017

Below, is the outlined plan* for the Change Laboratory process to be carried out at Academic Language Centre from October - December 2017. This document serves only to provide a tentative plan for how the Change Laboratory procedure will be conducted over the following 7 weeks so that selected participants can arrange their time accordingly so as to keep this a continuous and uninterrupted process as will be further clarified and discussed in the Project Outline meeting.

It is important to remember that this document serves only as a planned intention of how the Change Laboratory will be carried out as Change Laboratories and their procedure are predicted to be unpredictable in their development and process, and are dependent upon the level of participants' own engagement, exploration and development over its course.

Important features to remember:

1. I have listed the dates of the Change Laboratory sessions in a weekly form as specific dates and times have as yet to be decided upon.
2. Participants listed for specific sessions must be present for that session. Lack of attendance can have impacts on outcomes.
3. ALL tasks assigned should be completed
4. Some sessions may overlap/ be reworked as needed in their facilitation

Session	Date	Hour	Content	Participants	After Session Task
1	16 October	1	Introduction to: - Change Laboratories, - Theory - Ways of working in the MALL CL (Google Classroom, Google Suite, Disruption Diary)	Teachers, Management	Disruption Diary, Review Google Classroom
	20 October	1	Questioning: - Current Practices & Thinking - Teachers joys, worries, disruptions,	Teachers	Disruption Diary, Concrete examples
2	23 October	1	Questioning: - Current Practices & Thinking - Student & Management Perspectives - Power Relations with Mobile Phones and other artefacts Central Challenges: - Lesson Observations - Interviews	Teachers	Disruption Diary
	26 October	1	Central Challenges: - Continued from above Collecting data on changes in activity	Teachers	Historical Data Collection
3	1 November	1.5	Historical Analysis: - Analyzing the development of the Activity System - Developing & outlining central contradictions	Teachers	Further Analysis
4	6 November	1.5	Modelling: - Central contradictions - Power Relations	Teachers	Disruption Diary
5	8 November	1.5	Modelling: - Central contradictions	Teachers	Disruption Diary

			New Activity System: - Tentative Model - Proposed Ideas Overcoming contradictions - Proposed ideas		Teacher Presentation Preparation Review of Process and Comments on 3x3 Frame
	17 November	1	Discussion with wider school community and Management - Presentation of ideas - Anticipating problems, obstacles and support	Researcher Management	Creating concrete Model
6	20 - 27 November	1	20 November Model: - New Activity System - Concretizing new practices for experimentation	Teachers	Preparing Presentation
		1	22 November - Ask the Expert	Teachers	
		1	27 November - Model Concretization	Teachers	
Implementation	29 - 14 December	Demo	29 November - New Practices: Mobile Learning Technologies	Teachers	Lesson
		LP 1	4 December: - Lesson Planning Session 1	Teachers	Lesson Plan 1
		LP 2	6 December: - Lesson Planning Session 2	Teachers	Lesson Plan 1, 2
		LP 3	11 December: - Lesson Planning Session 3	Teachers	Lesson Plan 2
		Lesson	14 December:	Teachers	Conduct

			- Lesson Implementation in Convo (Shannon & Liam) & EAP (Alex)		
7	18 - 20 December	1	Planning: - Carrying out of proposed changes in Advanced level - Experimentation procedure	Teachers	Disruption Diary
		1	Planning: - Realization - Evaluation of experimental changes Certificates of Attendance given	Teachers, Management	Specific Goals/ Roadmap to Change?
FOLLOW UP SESSIONS WILL BE PLANNED MORE CONCRETELY AT A LATER DATE					
After	To be planned	Implementation of new model - Teachers - Management Researcher Data Collection		Teachers, Management	Disruption Diary
Follow up	To be planned	Evaluation and Further Development - Looking at issues - Creating solutions		Teachers, Management	Disruption Diary
Follow up	To be planned	Evaluation and Further Development - Looking at issues - Creating solutions		Teachers, Management	Disruption Diary

*The following preliminary plan is based upon Virkunnen & Newham's (2013) case study of the Change Laboratory at Molefi School in Botswana (p. 129).

Appendix 6.3: Session Planning Template for Change Laboratory Sessions

Change Laboratory

Session Planning Sheet

Change Laboratory Session	1	2	3	4	5	6	7
To do list				Completed?			
What is the Main Purpose of the Session in the cycle of Expansive Learning?							

Time	Min	Themes	Tools, Mirror, 2 Stimuli	Purpose

Participant's Task for next session
For Moderator's Attention

Appendix 6.4: Detailed Session Planning Template for Change Laboratory Sessions

Change Laboratory

Detailed Session Planning Sheet

Time	Themes	Procedure	Purpose	Tools, Mirror, 2 Stimuli	What if? Alternatives?

Appendix 6.5: Meeting Minutes with Management 19th October 2017

Attendees: James (Principal) Time: 11:00 - 11:45

Briana (Programme Coordinator) Place: Director Office

Joanne Hardman

Warren Lilley

Agenda	Points	Actions To be taken
Greater clarity on what the exact nature of the research was? What specifically was being explored in a clearer, less theoretical way.	- Research question with Change Labs summed up as "ways to enhance mobile learning at ALC" - Theoretical ambiguity linked to Warren's use of Activity Theory to create surface understanding for management and staff to help understanding in further sessions	Warren to create brief that explains in unambiguous way the research and the process
Clearer understanding of the Change Laboratory methodology	- Joanne explained the methodology highlighting the design that teachers will create their own model for using mobile learning - Warren highlighted how the mobile use in the research design was related to overcoming the need for a dedicated physical classroom space, as sessions could be carried out in the classrooms when free and all discussions etc., could be stored virtually - Disruption Diary explained as well as time limits of work restricted to max 30 minutes for teachers	
Perceived benefit	- Emphasis on creating a unique model that could work for ALC - Need for models from developing countries highlighted	
Warren's UNIVERSITY email	- Warren's UNIVERSITY email not working	Warren to forward James the ICT helpdesk issue number

Appendix 6.6: Revised Project Brief/ Outline

Project Brief

This brief is intended to give a clearer understanding of what you will be undertaking in the Change Laboratory Sessions over the course of the next 6/7 weeks.

What are you looking for? What are you trying to research?

In doing an in-depth look at ACADEMIC LANGUAGE CENTRE over this year I have found that while there is interest seeing the potential and/ or experimenting with mobile language learning, up to this point it remains relatively unexplored.

This part of my research looks specifically at ways you can potentially enhance mobile learning at ACADEMIC LANGUAGE CENTRE through the Change Laboratory process.

What will we be doing?

Over the course of the next few weeks in the Change Laboratory I will be taking you through an exploration of your current teaching practices and understanding of them. Through this exploration, you will find places you think mobile learning can enhance language learning in your Advanced classrooms. Pivotal to this, is that I the researcher will not be taking you through what *I* think the 'best' practice to use mobile phones in your classroom is. Rather, as the teachers and experts in your own classroom, *you* will be creating your own model of how mobile language learning can work for *your* Advanced classes.

This exploration and modelling occurs in the following:

1. Questioning and Analysing your current classroom
2. Creating a possible model of how mobile phones could work for your teaching
3. Implementing and experimenting with this model in your lessons
4. Consolidating how we will use mobile phones at ALC

How much work?

As a teacher myself I know how busy and full our lives are. To that end, I have recommended that we split our 2 hour sessions into 2, 1 hour sessions that take place on a Monday and Friday afternoon. I have also created reflection tasks after sessions that should take you no longer than 30 minutes to complete after each session

Appendix 7: Hardman's (2008) Activity Checklist Analysis of ALC's lessons

In this section, I offer to the reader to review the analysis facilitated through Hardman's (2008) Checklist.

TEACHER		**Ned**				**Marjorie**			**John**	
LESSON		Lesson 1: General Preparation	Lesson 2: General Preparation	Lesson 3: General Preparation	Lesson 4: General Preparation	Lesson 1: General Preparation	Lesson 2: General Preparation	Lesson 3: General Preparation	Lesson 1: Conversation	Lesson 2: Conversation
OUTCOMES	What is produced in the episode?	Comprehension of a reading and listening Text on Wikileaks/ Online journalism	Completed practice in multi-word verbs	Comprehension of an online article on weather and its effects	Passive language general knowledge questions	Review of students completion/ production of inversion questions	Review of Unit test from the previous week	Review of fashion vocabulary from coursebook	Hypothetical responses of what would happen if stranded on a deserted island	Listen for details on the rules of a gameshow
		Class discussion on issues of journalism emphasizing the use of specific discourse markers: 1) to make a point and 2) manage a conversation	Word-transformation in gap-fill text, similar to CAE exam	Exposure to pronunciation and use of weather word-collocations in English		A discussion of the fashion industry and a listening comprehension of the future of the fashion industry	Reading an academic article and writing a short paragraph on the relationship between youth culture and mainstream fashion in my country	Creation of a flowchart summary of an article in the coursebook	Evaluation of effectiveness of hypothetical responses	Presentation of own gameshow idea
MEDIATING ARTEFACTS	What tool(s) are being used?	Primary: *Advanced SpeakOut* coursebook Unit 5.3 and whiteboard for answers	Primary: *Advanced SpeakOut* coursebook Unit 5.2, Text and whiteboard for answers	Primary: Printed online worksheet resource from *British Council* on the weather; whiteboard for language demonstration	Primary: *Advanced SpeakOut* coursebook Unit 5 extra resources	Primary: *New Language Leader Advanced* coursebook Unit 5 (exercises)/ Google Classroom (questions and materials)/ Video of listening from coursebook online resources	Primary: *New Language Leader Advanced* coursebook Unit 5 (exercises)/ Google Classroom (questions and materials)/ Video of listening from coursebook online resources	Primary: Whiteboard for reviewing vocabulary; *New Language Leader Advanced* coursebook for summary exercises	Primary: *TeachThis Island Adventure* teacher's notes; PowerPoint of worksheet tasks for students; deserted island scenario cards; whiteboard	Primary: Photocopy of *SpeakOut Upper Intermediate* on gameshows; YouTube video of gameshows; audio clip from textbook on gameshows; whiteboard
		Secondary: Mobile phones to look	Secondary: Mobile phones to	Secondary: Mobile phones to look	Secondary: Mobile phones to	Secondary: mobile phone to access	Secondary: mobile phone to access	Secondary: Mobile phones to	Secondary: minimal use of mobile	Secondary: Mobile phones to

		up words and definitions (student)/ mobile phone to check language and time (teacher	look up words and definitions (student)/ mobile phone to check language and time (teacher	up words and definitions (student)/ mobile phone to check language and time (teacher	looks up information to inform question constructio n; look up words and definitions	Google Classroom/ to look up new words or language	Google Classroom/ Google Docs to submit paragraph/ to look up new words or language	look up words and definitions (student)/ mobile phone to check language and time (teacher	phones to look up words and definitions (student)	look up words and definitions (student)
OBJECT	What is the object/ focus of the episode?	Develop students abilities to use journalism vocabulary in a discussion	Develop students abilities to form multi-word verbs	Develop students abilities to respond to detail and gist questions of an academic text on weather	Develop students abilities to identify and use passive language to construct general knowledge questions	Develop students abilities understanding and use of inversion	Revise students' language errors and provide corrections from Unit test	Review students understandin g, use and pronunciatio n of fashion vocabulary	Speaking practice of using hypothetical language to describe	Speaking practice of presenting their ideas
		Develop students abilities to have a discussion using the target discourse markers in Unit 5.2	Develop students abilities to transform words appropriately in a text [based on English for Academic Purposes Exam]	Develop students abilities to use weather-collocations accurately and appropriately in discussing the weather		Develop students abilities to listen for detail/ infer detail from a video discussion on the future of fashion	Develop students abilities to read an academic article for detail and respond to a writing promot	Develop students abilities to read for understandin g, write effective summaries for university	Develop students abilities to listen for detail and respond to others ideas	Develop students abilities to listen and infer from a video and audio source on gameshows
	What is the purpose of the activity for the subject?	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language proficiency	Develop Advanced student English language speaking proficiency	Develop Advanced student English language speaking proficiency
	What is the teacher working on?	Presenting coursebook material, ensuring students understand	Presenting coursebook material, ensuring students understand	Presenting worksheet material, ensuring students understand	Presenting extra resources material, reviewing student	Presenting coursebook material, ensuring students understand	Presenting coursebook material, ensuring students understand	Presenting coursebook material, ensuring students understand	Presenting worksheet activity to students; ensuring students	Presenting coursebook activity to students; ensuring students

		exercise instructions, managing audio text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	exercise instructions, managing text, reading text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	exercise instructions, checking students pronuciation and language usage, managing text, reading text, checking and evaluating student understanding of text or satisfactory student completion of coursebook exercises	abilities to produce passive questions/ statements, evaluating student production of passive questions; enforcing rules of activity	exercise instructions, managing coursebook/ Google classroom use/ listening text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	exercise instructions, managing coursebook/ Google classroom task setup/ reading text, checking and evaluating student language production or satisfactory student completion of coursebook exercises	exercise instructions, managing coursebook; checking and evaluating student language production or satisfactory student completion of coursebook exercises	understanding task instructions; noting down students language; ensuring statisfactory completion of worksheet activities	understanding task instructions; playing video and audio appropriately; noting down students language; ensuring statisfactory completion of coursbook activities
	What is the student working on?	Completing exercises in coursebook as instructed, participating in class discussion, demonstrating correct language use in accordance with teacher's evaluation	Completing exercises in coursebook as instructed, participating in class discussion, listening for text, attempting word transformation as instructed	Completing exercises on worksheet as instructed, participating in class discussion, reading text for meaning, completing comprehension, attempts at using language accurately	Participating in passive question and answer activity; creating passive questions; correcting their passive language constructions in line with teacher's feedback	Completing exercises in coursebook as instructed, participating in class discussion on Google Classroom, listening for meaning, completing comprehension, attempts at using language accurately	Completing exercises in coursebook as instructed, participating in class discussion on Google Classroom, reading for meaning, completing comprehension, writing of short paragraph	Completing exercises in coursebook as instructed, participating in class discussion , attempts at using language accurately	Completing worksheet activities as instructed, participating in pair and class discussion, attempts at using language accurately	Completing activitiess in coursebook as instructed, listening and watching for detail; participating in class discussion around game shows; working with their partner on gameshow idea
	Why is he/she working on it?	Teacher: Developing English Language skills in accordance	Teacher: Developing students vocabulary and speaking skills in	Teacher: Developing students vocabulary and speaking skills in	Teacher: Developing students grammatical skills in accordance	Teacher: Developing students vocabulary and listening skills in	Teacher: Develop students vocabulary and reading, writing skills	Teacher: Develop students vocabulary and reading, writing skills	Teacher: Develop students speaking proficiency and use of	Teacher: Develop students listening for detail and speaking

		with syllabus and student language aims	accordance with syllabus and student language aims	accordance with syllabus and student language aims	with syllabus and student language aims	accordance with syllabus and student language aims	in accordance with syllabus and student language aims	in accordance with syllabus and student language aims	hypothetical language structures	proficiency in presenting their ideas
		Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills	Student: Developing English accuracy and speaking skills
DIVISION OF LABOUR	Who does what in this episode?	Teacher: Presents coursebook exercises and material	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ selects text for word transformation exercise/ reads out text	Teacher: Presents worksheet exercises and material	Teacher: Present and participating in language activity and student passive construction	Teacher: Presents coursebook exercises and material/ sets up tasks on Google Classroom sets up feedback from tasks/ presents learning materials	Teacher: Presents coursebook exercises and material/ sets up tasks on Google Classroom sets up feedback from tasks/ presents learning materials	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ evaluates students flow charts and reading	Teacher: Presents worksheet activities through PowerPoint/ monitors students language and completion of activities	Teacher: Presents coursebook exercises and material/ sets up tasks for feedback/ evaluates students flow charts and reading
		Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for all activities before class feedback	Student: Completes coursebook exercises and material/ participates in language tasks set by teacher. Work collaboratively in multiword task during feedback phase; work individually	Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for all activities before class feedback	Student: Participating in passive language activity	Student: Completes coursebook exercises; watches video; participates in Google Classroom tasks on their mobile phone;	Student: Completes coursebook exercises; watches video; participates in Google Classroom tasks on their mobile phone;	Student: Completes coursebook exercises and material. Exercises very often individual. Pair Check for most activities or discussion	Students: Work in pairs to come up with hypothetical responses; students as class evaluate their ideas	Students: Listen for detail of audio; Work in pairs to come up with hypothetical responses; students as class evaluate their ideas

			in word transformation. Pair check for all activities before class feedback with teacher							
	Who determines what is meaningful?	Teacher	Teacher	Teacher	Teacher; Students in their passive question constructions	Teacher	Teacher	Teacher	Teacher and Students	Teacher
COMMUNITY	What community/communities are involved in this episode?	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom	Teacher and Students in the classroom
	What group of people work together on the object?	Students and teacher work together on the object	Students and teacher work together on the object.	Students and teacher work together on the object.	Students and teacher work together on the object.	Students and teacher work together on the object.	Students and teacher work together on the object.	Students and teacher work together on the object.	Students and teacher work together on the object. Emphasis on student-student/ student-students in this episode	Students and teacher work together on the object. Emphasis on student-student production of gameshow towards the end
RULES	What kinds of instructional rules: evaluative rules and pacing rules?	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace, extreme focus on timing	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace	Teacher evaluates and sets pace

	What kinds of social order rules: disciplinary rules and communicative interaction rules?	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident except for those as set out by the activity which the teacher has reinterprete d	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Disciplinary rules evident in how students should use Google Classroom in the completion of tasks	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Disciplinary rules evident in how students should use Google Classroom in the completion of tasks	Teacher initiates, students respond, teacher evaluates OR teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident	Teacher intiates task, students complete, teacher evaluates. Very little disciplinary rules evident

Appendix 8: Researcher-Interventionist's Diary

This section contains the researcher-interventionist diary I kept over the course of the Change Laboratory intervention

Preface:

Through this process of conducting a Change Laboratory, I feel the need to record my own experience of conducting a Change Laboratory within an organisation I work for. This is meant as a reflective tool, one in which I can record and perhaps help myself come to terms with this interventionist methodology. Secondly, I hope that it can allow me track historically the own contradictions I may face in conducting these sessions as my peers, management as I should all in fact be approaching a shared object during these sessions.

12th October 2017: Final Planning & Prep Project Information Session

Partly due to the fact that I feel completely overwhelmed by the amount of research and work I am undertaking I feel worried about presenting this Project Information Session. I still have yet to complete the Project Brief I have intended to write, but I hope this session will at least satisfy and help them understand what we are trying to achieve, while I find the time too. There's just so much to make clear and so little time to really get down to the nitty-gritty. I am trying to explicit about everything but the unpredictable nature of the Change Laboratory is a little bit unsettling as it is hard to tell them what to prepare for as I myself am unsure.

I am sitting with a whole lot of preparation to do in terms of the 1st Change Laboratory. But will postpone much of this for the weekend. This needs to get done first.

13th October 2017: Project Information Session

The project information session did not go as well as I had planned. Specifically with the questionnaire data that I hoped would be of interest to them. However the sample was too small for them. I could immediately feel James's resistance to the figures and instead of sparking discussion into the apparent contradictions or sites of contestation I had hoped, instead I received advice of how to do the questionnaires and that the results may be reliable or unreliable. Maybe this is a site of tension in the school? I am concerned I have done this all wrong.

I was also keenly aware that James and Dani handled most of the session. I did discuss everything but I feel I have failed at creating that all too important 'buy-in' that they need as an organisation. I am wondering if that is even possible as it has been me that has seen the need

to do my study here. Feel extremely depressed and worried about this research. I think once again my inexperience with Change Labs is showing. Are they feasible when you just come in?

16th October 2017: Change Lab Session 1.1.

The first Change Lab session went very well. I think? I spent most of the weekend planning and I think the teachers really enjoyed it. However, James during the session stated while using his mobile device that "I don't need this, I can just look at the screen". Which is completely true. He left before the end of the session when I tried to discuss with the participants as that we don't have a dedicated physical space for what we collect, discuss and analyse the virtual one on our mobile devices and Google Classroom will operate as one. The rest of the team seemed to get it that I need to make them comfortable with using these devices, and the reflection I have got from Dani and Marjorie so far are really great. The use of the mobile devices has interested them, and they were all mostly able to keep up with all we did. I need to get the Scribe to do more noting for the next session. I think Marjorie has just kept her notes, so I will try and ensure we get a working process for this on Friday.

In terms of the contradictions the role of teachers is certainly coming into play. The idea of expertise was also mentioned and this was linked to the using the Teacher's course book. In the session I endeavoured my best to try and get teacher's questioning but I am not sure this was best I could do. I think more open questions will help.

Perhaps most importantly was working with CHAT with the participants. I was hoping that by developing a kind of understanding of it and that this could at least help with what I was trying to achieve. They definitely understood it, at least superficially. The CL studies in Higher Ed have stated that it is often difficult for teachers to come to understand it, and I thought by getting that across early on would at least help teachers see what we are trying to achieve. But perhaps I should have stuck to the plan. I think for the next session I should see the extent to which teachers can analyse or incorporate the CHAT discourse in their understanding or analysis of things.

17th October 2017: Planning

Did not sleep well last night. Feeling very uncomfortable with the first session and wondering what to do. I am busy trying to finish lesson transcriptions and everything. This does not feel like a 1 man job at all. I feel very very overwhelmed and wondering how to best go about it.

This afternoon received an email from James requesting a meeting to go over the research. Feel so despondent. Know I should have incorporated a different strategy in doing this. However the mobile device in use within this Change Labs is seminal. In his interviews, he, himself has noted his own criticisms and scepticisms of MALL. He has linked this to CALL and he may be thinking I want to change everything. I have completely failed at getting the buy-in I needed and now stand the chance of completely losing all my research over this year. Luckily Jo has decided to help out and attend the meeting with me. Extremely worried about what is happening and my own lack of skill.

19th October: 2017: Management Meeting & Planning

The meeting went even better than expected. Jo and I had prepared for the worst, however it appears that the main concern was the theory and Change Lab process. I think I may have gotten too obscure in my explanations and they may have been wondering what was going on. Thank goodness! They definitely want to continue and they seemed eager to support which is great! I have been tasked with writing a brief that is very clear and easy to understand, which I am almost done with.

Interestingly, in the meeting James did seem more at ease when I stated the use of the mobile/ Google Classroom design of the Change Lab. This made me feel much better as he had left the Change lab session before I was able to explain my use of it.

Planning is going alright. I am stuck between deciding how to do this best. I have gotten interview mirror data that gets to the heart of the problem and then I have 2 teachers lesson prepared. I think the lesson's make it much more apparent where the issues are so I think I may go for that. I do not however think that giving the entire lesson is necessary so I have taken the liberty of choosing some key moments that interested me in my analysis and letting those go up in the sessions. Ned has noted in his reflection that he felt uncomfortable watching himself and I can imagine only how Marjorie might feel. I must make it explicit again tomorrow about the lack of value judgements of teaching in watching the mirror data. I think the CHAT side

that I explained last session might help towards that.
What I have discovered in doing this is that it is very difficult to set up these sessions. I am basing most of this on 1 book, and other studies that have all taken place in a different parts of the world and in very different circumstances. Choosing what comes next is difficult especially since I am really letting the teachers dictate where we go and designing tasks around that, selecting the mirrors that would best suit that exploration is getting harder and harder. I created 3 different lesson excerpt videos and I am wondering about my capacity and expertise of CHAT. I love this theory but am I really getting where I need my teachers to be. I am hoping I am doing this right?

20th October 2017: Change Lab Session 1.2

The Change Lab 1 Session 2 went well I think to a certain extent especially at the beginning. I am getting Ts used to the ways of working within them. I have now gotten 2 of the frames we need up in 3x3 on the Projector. This should be fine in the digital Change Laboratory as our mobile devices will be the place we put and interact with our Mirror Data. So I feel like I have made progress there. They problems or tensions seen here were reframed quite nicely in the sentence: "We need to justify our (teacher) existence". This flows into quote nicely, I think, the ideas surrounding creating students aware of the teacher's value and the need to be perceived. The question I have is how to make Teachers more aware of that, when I still need to move them towards looking at technology more.

The coursebook began to be problematised especially when I showed the different perspectives of management versus teachers views. These questions went from firstly Ned's acknowledgement of the contradiction between teacher, student and management's contradictory views of the course material. It was summed up in "they expect us to be different but this brand ('THE UNIVERSITY') is the devil on our back". Marjorie explored this further by mentioning that she has witnessed a lot of similar problems at school with the expectations of students versus the teacher's expectations. The ideas for managing this was to instill a greater amount of organisation around a Needs Analysis being set up right after testing and attempting to "socialising" the students to what teachers "expect".

Eventually this all led to a discussion on creating 'THE UNIVERSITY' material. This was problematised in terms of copyright, payment and who 'owns' it. I tried to reframe this by asking them the cyclical nature of this issue. We are going to correct this problem of a resource

by making a similar resource? This led to ideas surrounding contextualisation is what we do as EFL teachers, and that is no longer working. Ideas came around about not presenting things in a similar way and doing things differently. However, the discussion was brought to a close on the idea that we still need a coursebook, which is great I think. I need to get those ideas of that we need to contextualise things differently, and perhaps this should be my question surrounding Marjorie's lesson?

I had the idea of setting a reflection task focusing on T's interaction with the coursebook. However, I think this will be better used in the next session when we watch Marjorie's lesson, as the teacher and the primacy of the coursebook should take the lead. I am wondering however, if I am getting them to see the contradictions. I need more of this coming up onto the 3x3 frame, however so I need to organise time to do that within the session. I think I will attempt to get them to highlight the key areas on Monday and then go on to Marjorie's lesson. I think John's conversation lesson will also be good for them to view, especially in regard to the difference in interaction. The primacy of the object here is seminal. I need to get this out as well. Wondering how best to do this. Feel lost but endeavouring my best :S So will keep attempting to get them closer. As always I feel quite overwhelmed by the magnitude of handling this all. There is so much to do in such a little time!

21st & 22nd October 2017: Analysis and Planning for Change Lab 2 Session 1

The planning for this session is pivotal as I need to show Teachers the model by the next session if we are to make this all in the time that has been set out. I am still wondering how far we have progressed. I definitely have found some aspects that they are getting into. Number 1 the way in which the course book is used is coming up and their ideas of creating a new one are interesting.

I think I will get Teachers to do some more work on the lessons. Let them see Marjorie's and see what comes out from that. I had a quick meeting with Jo, and she surprised me by saying that they are already searching for a new tool i.e. a new coursebook! I need to stay very much aware that I can't direct this cycle and it is getting difficult as I keep trying to see the contradictions. Jo was very helpful in helping me see this! I need to make myself more open to what teachers are saying and let them steer this process. This is something I am aiming to accomplish in tomorrow's session. Excited and nervous but am more than ready for what comes up!

23rd October 2017: Change Lab 2 Session 1

The session went extremely well. The teachers definitely took up the opportunity of looking at the lessons and we got some great insight into questioning the current place of the coursebook. I think this really fell into place by firstly watching Marjorie & John's lessons, and then getting them to plot it on the TCF, my 4 Field Model I am using.

Really excited for Friday's session where I will be putting in the students views on everything. This should prove useful in getting more of the tensions about and I will be preparing the Researcher's Draft of the model. I hope my first session pays off with getting the teachers to do this. Excited for the next one!

24 - 26th October 2017: Preparing Change Lab Session 2

Things are heating up at 'THE UNIVERSITY'. The SRC has kept sending information about potential protests and I am worried. The news came this morning that campus will be shut down and that the ALC will be moving to a temporary premises away from the university. However, by the sounds of the whatsapp group things are getting very hectic and crazy for my participants.

I am wondering if I should move the session to allow them some more time. They haven't completed any of the tasks I have set them and I think this may be the cause. I also sent an email to the Directors this morning asking for permission to do the research at the temporary site. I have yet to hear from them and it is already the afternoon. They are paying for the one site on an hourly basis so I don't want them to incur any extra costs on behalf of me! Further, I have decided that in an effort to get the session up to speed I have given participants the chance to access and read their specific student interviews I have assigned. Giving them a few minutes in the session can take a lot away from them actually delving deeper into what is being said. So I think giving them access to this, then in the session giving them a chance to review what they have read will help the session along. The modelling I am expecting to take quite a significant amount of time, so this should help us get there.

It's 6pm and I have only heard back from Briana, who has said James should make the call. I have taken the decision to move the session to Monday as I do not want another uncertain thing on my participants' minds. I have heard the protests have become violent and they blocked off roads. This is certainly a dilemma we face in RSA, and I think my Blended Change Lab really

counters this. In a place where space is problematic and the safety of that space is uncertain having a mobile Change Laboratory can certainly help. All our resources, findings and thoughts are available at the ready. This is definitely helping out!

Just heard back from James (7pm). He has said I can conduct the sessions in the other temporary site for the meantime. Sadly, I have already postponed with the teachers, and I think going back and forth is only going to be a detriment to the study. He has also questioned the time on Friday in regard to payment the teachers are receiving while doing the Change Labs. This is funny as I specifically asked them what times would work for the teachers and management in the information session. The time was decided together as a group. However, I do understand his point and I think perhaps this could actually help the sessions in the long run. Once again, coming in to do the Change Labs, rather than management asking for it is coming into question regarding feasibility. I am however super appreciative of their ability to accommodate me. I am being supported well. And Jo yet again is such a source of encouragement. I however can't help but wonder if buy-in has really been created with management. Things keep going back and forth with them. I don't think they want this. However the teachers are definitely seeing a need for change. I am wondering if I am doing this correctly with management or if I should have done a boundary-crossing Change Laboratory. Hmmm. This is really difficult to weigh up but my focus is on the teaching of Advanced students. This is where the core changes need to occur.

30th October 2017: Change Lab Session 2.2

The Change Lab sessions have moved to Monday and Wednesday now after James's request. The session at the new venue worked quite well, having the digital laboratory worked here, as we were able to access all our resources. The participants are enjoying the process and I am hoping I am taking it well without putting myself in. In drawing the activity system and the model and confronting the participants with the student's' mirror data, I think worked well. The range of questions surrounding technology, how it should be used and the issue of trust were great! I feel like real progress was made here and I tried to stay out of it and let them lead, which I think I am slowly but surely getting better at.

The difficulties of the space and the change of venue really I feel the support the use of a digital change lab for the participants. Everything was accessible and the use of student interviews which they had time to read previously and then again access worked well. I am a little worried

about the historical analysis. The wi-fi connection at the hotel is not great and I need them to do some actual work of researching and finding things. I think I may need a backup.

Things that really showed progress today is the highlighting of the interrelation between CB, communicative approach and DOL, including the object. I think we actually began mapping the potential secondary contradictions within the Activity System, or at the very least began identifying the primary ones. I feel like real headway was made today!

31st of October: Preparing Change Lab Session 3

In preparing and reviewing the video of the last session I am a little worried about doing the historical analysis. The assignments I have given participants to do online has not always been done timeously and the 1 day difference between sessions really has not made enough time for them to collect. Setting the current challenges task a week ago has helped as I think it has gotten to the heart of what they want to focus on. The current challenges is still being built upon! Which is extremely exciting as it means they are going back and still adding to it *out of their own volition*! I am going to include it's current form as a starting point for the discussion tomorrow! So excited!

I do think I am going to need an alternative about the historical analysis. I think a historical recounting may work the best as the teachers and the wifi on the premises may not be up to the task. This could at least work in getting us to identify the key challenges and set them on a starting point of what they want to locate. I could then set the change matrix as a task they can do over the next few days before the next session and perhaps extend the next session. Just an idea but it would work.

I am feeling more excited about this process and in doing the research about the historical development of EFL/ CALL, etc. I am finding more and more very little evidence of a complete historical trace of TEFL. This is something I feel is desperately needed! So let's hope what I find helps out the situation! Will update you tomorrow dear journal.

1st November: Change Lab Session 3

The session did not go as well as I had planned and I had to rely extensively on my Detailed planning 'what if' frame in order to make the session work as I needed it to. The lack of wifi/ difficulty of connecting to it has meant that the teachers could not access the 3x3 frame, nor

could they work on the change matrix as I had wanted them to. However, I did plan for such occurrences and I think I made the best of my ability.

I also think some key factors influencing how work has been previously organised has really come into view in this session. Mainly centering on how the school has been trying to establish itself and the difficulty of disruptions such as the students riots have on not having a stable place of work. Teachers here rely on an unstable salary, unstable place of work, and in turn have an unstable access to resources. This I certainly see impacting. The flexibility of technology to account for this may be in fact the way in which to go forward which I think they see. However they are soon to make it apparent that the technology must work for them and I am so very keen to facilitate this.

Having to remove myself proves difficult often. I want to include my own experiences but I do struggle to make this delineation between Warren, the research-interventionist' and Warren 'the EFL teacher'. However on the other hand, I am also finding that I am quite removed from the setting in that the experiences that they have are not the ones I have had at the language school itself due to my very part-time work at the centre. I am realising more and more than this Change Lab process is one in which is a really organic one, one in which I am feeling more and more a part of their journey. I thought I would be leading, but I find them more and more taking control. This is exciting for me and leaving me feeling much more free to see where they go!

On the other hand, they are not completing their tasks. This is proving problematic for me as I need to collect these tasks to see their development. This was especially the case for the Historical Analysis and I am fearing that they do not actually do any of the task I have assigned them! Which will certainly hamper us in terms of moving to the new activity!

2nd to 4th November: Planning Change Lab Session 3.2/ 4?

I am unsure of what to call this session. I have been working very hard to find papers that account for EFL's history. I am also struggling to see that the teachers have done any of the tasks I have set for them. While I do deeply understand the difficulties they are facing, having the Change Matrix completed would have gone a long way to helping me plan the next session. I may have to make this a part of the next session and help them to complete it! I am certainly wondering how well this going to go as I realise the need that we have to move on. This is making me extremely anxious and I wonder about how best to do this. The Change Lab

methodology book is not offering me much of insight and I am having to rely on my own feelings which feels like I am free-falling right now! Added on to this that my teaching will resume shortly which will mean I will have less and less time to spend with my participants.!

I am hoping this all goes well! Yikes! I keep moving between feelings of comfort with this process and the uneasiness of trying to ensure that I will eventually feel comfortable with this. Is this me experiencing my own contradictions within this system? Wondering about how well I am doing and wish I had someone to bounce ideas off. However, I have my Engestrom, Virkunnen, Sannino and Newnham close. They are helping me navigate this uncertain terrain. Just hope I am doing this correctly. Planning these sessions is certainly taking its toll.

5th November: Change Lab Session 4

The session today went well I believe. The use of Engestrom's 1994 model of external and internal model worked spectacularly well. I could see real double stimulation occurring firstly in how clear it made the discrepancies in the teacher's understanding and their search for something that could work. I tried throughout the session to really to get to the heart of the contradictions, and I think in some cases I may have lead to forcefully. I am a little concerned about that, but I think great gains were made today.

However, with the use of both Engestrom's and my own model, time really flew out the window. I had to leave the last 2 tasks for online instruction. I am very wary of losing time here and I think for us to start the process of generating the new model is imperative. The teachers have stated this after sessions, so I think I have definitely gotten the need state we so desperately need, and they are earnestly trying to engage with solutions. I have to admit I am enjoying this process and I love the interaction, the time flies in the sessions.

I want to present our findings and model on Friday this week to management. Time and space are constantly coming in all the time in this setting. Finding time, finding space in order to do things is so difficult and planning ahead especially with such a spontaneous yet carefully planned process makes flexibility on the part of participants and myself paramount. I think Google Classroom has been paramount in giving me the space and my participants the space in which we can co-ordinate things more effectively. I also want to see how well the 3x3 expansive learning frames may serve as a reflection tool in themselves - I think I may set a task for the teachers on this, allowing them to comment on areas which really sparked interest and garnered their insight.

I am also concerned about next week. I have lots of training to do and I may need to extend session further than I had originally anticipated. I am thinking I may perhaps try and arrange a session next week Friday to present to management our findings and new model. Then on the monday do a session with the technology and the lesson/s plans the teachers have and give them a week to do it. This may work well especially since I will be doing teacher-training at the same time.

Things are coming to a head where even I am finding my own space and time coming into conflict with the process. I hope I am managing this well. But I love this process and getting teachers to see elements of their practice that may be contradictory. What is encouraging for me is that many things are taking unexpected turns I never thought would come up, like creating their own content, courses, and their own restrictions in time. This is something that I have never considered before. This is just yet another great thing about this process that it is so very unpredictable.

The difficulty I am finding throughout this is planning for the unexpected times. I find it difficult to pick up and steer the conversation at times, to highlight the areas that need focus and to get to deeper elements. I want to remove myself and I find it hard when not to come in as I am so very wary of my own thoughts coming across, which I mentioned earlier. Managing Warren the Teacher and Warren the Researcher is such a difficult balance.

Also ensuring the recording of everything is difficult as well, especially in the new site. The 3x3 Frame was meant as a place for this but in the previous session with the wi-fi I was worried about having access all the time and possibly straining the system, which I would never be worried about when working at the Language School. I need to think about this carefully, but the ability to pick up my iPad and set a Change Lab that contains everything we are doing no matter where my participants are working has been an encouraging thing. I thought the student disruptions would have hurt this process more, but in fact I think (well at least to me) it just demonstrating the need for such flexibility in an academic environment of disruption and displacement Cape Town is facing at the moment. I think it also speaks the wider elements of the flexible knowledge worker… Going into planning my next session tonight and tomorrow with full hope that great ideas are generated. CANNOT WAIT!

6th - 7th November: Planning Change Lab Session 4/5

So far little work has been done on the 3 tasks I set for the teachers. I think this may be due to perhaps the time between sessions and the fact that they are all in what they called 'survival' mode with work. Or perhaps in their difficulty????

I will need the next session to have in place, space to either review what was needed to be done online and then make space for the modelling of the new activity. I honestly feel frustrated with this as I had wanted the individual work of the tasks to help us in coming to the discussions today and the videos to push us towards that concretizing space. I am trying to give teachers the space to think individually about the tools and theories being presented and then to get us all to work together. However, even in looking at the one teacher who did the work, the focus is always moving towards the new system without looking at the previous one. I think perhaps this may be my fault? I will need to rethink and ensure that this session 1.) gets the focus back on the current formulation 2.) concretizes more of what they experienced in Advanced 3.) THEN move on to the modelling of the new activity

8th November: Change Lab Session 5

The session today went better than expected. The teachers climbed much more onto what we needed. Some surprising things were found especially with the object-tool contradiction and the links between the not actually having a dedicated approach to the tool. More and more I think through double-stimulation we are coming to the heart of the ill-defined communicative approach that the school uses. This is something that keeps coming up. However what was surprising is the idea that they find themselves falling more onto the 'restrictive' side after looking at my model and this is perhaps the most interesting feature. It factored in much later with Ned suggesting that he would only be interested in using technology if it could CHANGE/ Democratize the way teachers are doing things! This is very very exciting, and exactly what I had hoped for, but was not at all sure where we were going towards. I am extremely excited what comes from this now.

However, again in Change Labs, and CHAT unpredictability is the only certainty and again it reared its surprising head. I had thought the ideas of intellectual property, teachers reasons for being there were all linked to the idea that they would be helping the school out. However, to my surprise came the idea of 'who' owns what we are doing, the problems of creation and the ideas of this negatively impacting professionalism. I was absolutely shocked and had no idea

that this was occurring and I wonder about my ability to factor this in adequately with my doctoral studies. But this does again seem to lead towards a deeper contradiction lying at the heart of EFL/ University departments, do I really want to create when all of it belongs to the corporation, etc. I definitely need a little guidance here.

This came to a head later when I proposed teachers presenting their ideas to management! They absolutely disagreed and were extremely concerned about presenting it in front of them. The discomfort teachers experienced made me feel that I should present what we had decided and work from there, mediating between the management and the teachers. Surprisingly they felt that their ideas would not be taken on and that again they were with the Change Lab to develop themselves and not necessarily for the school. Is this an impact of the new knowledge worker, the flexibility and the lack of opportunities to grow inside the organisation. I have had over the course of the Change Lab several of the teachers come up to me and ask for my ideas/ comments on their desire to pursue other teaching opportunities at other establishments. I wonder if this has had to do with what we have done or how this process has made them reflect. I am indeed concerned about this.

Furthermore, this also stands in stark contrast to the actual process of how previous things were taken onboard using Engestrom's model of organisational development. They stated while the discussion was open, the tasks ended being individualised. This however seems to suggest differently. I wonder if I should bring this up later?

Regardless, we agreed that I would be taking their initial ideas to management and see what would be okayed. I also felt that coming into this session and after what had happened (especially towards the end) that teachers needed to take some time back and reflect on the process so far. I created a questionnaire on Google forms to assess their current state as well as gather other suggestions, including a video task. I truly hope they complete it!

Next week Friday I will be presenting to management, and I am concerned about what they will take from the session. This anxiety is felt myself and I do agree with many of things my colleagues said about how management can let you down with your ideas. I myself have felt at times that James is unimpressed by the research and what I am doing and feel that I need to dot all the 'i's and 't's when doing anything at the centre. I feel exceptionally alone in this and I

constantly feel very insecure that my research will be allowed to continue. I think this comes down to the contradiction I feel again as Warren the teacher versus Warren the researcher.

9th - 16th November: Planning Management Meeting

Date: 16th November

This entire week I have been combing through videos, transcripts and my preliminary analyses. I have also been waiting for teachers to complete the tasks I have set. So far Marjorie and Ned have completed it, with Marjorie (as always) providing the most in-depth and intuitive ideas for the system. This has been helpful in setting up the slideshow presentation for the meeting. I am a little nervous of how it is going to go as I wonder about management's feelings about all that has been discussed. I have specifically tried to or rather taken the decision to leave the teachers issues with presenting to management on the wayside. The focus of this Change Lab is to work on technology and how this can be used to enhance their teaching and come closer to the individual student. The issue of time is a central issue that also seems to be coming up. This main contradiction of getting to the curriculum/ coursebook and getting to students own individual needs is the primary focus in the object and I am letting that guide me. However, I am fully aware that by missing this and taking this up further I may be missing an important aspect of this process. However with so few sessions left and the need to produce something (time) for me, I feel that I need to focus on what I can bring in the time that is given to me. Again something I need to bring up for the future.

I am going to go with simplicity in the meeting. Showing management the contradictions and the ideas that have been generated. Praying this works out as I intend it to go.

17th November: Change Lab Session 5.2 Management Meeting

The meeting went better than I expected it to go! Briana, James and Dani were much more responsive and understanding of what we have done so far! This is indeed a great success for what we have undergone, although James's reservations were made pronounced throughout the session - again. I truly am struggling with my security on this project with him as I feel that I am not either living up to the standard of what he wanted or more intuitively I think he lacks any feeling that technology can really help our teaching. I have no idea how to cope with this resistance, but I do have to say how appreciative I am for the opportunity to do this with the

team at 'THE UNIVERSITY' Language Centre and I know what the teachers come up with will show the capabilities of what is possible!

There were a number of interesting issues that came up. The first being that the online needs analysis was thrown out almost immediately. The preference for paper-based and the idea of tracking or keeping this was linked with the physicality of the paper. I had my own ideas, but again I know that this process is lead by my participants and my role here was to present to management not to interrogate or make them question their ideas. This was a check for feasibility and alignment of the proposed ideas, which I think all in all was gathered.

The teachers ideas around the teacher-training follow-through has already been approached by management. James, had the idea of having Dani come in and create the training program. This is interesting development and shows some insight management themselves have had in regard to the some of the contradictions with the CPD program. I am excited by this development very much, as it means I get to spend much more time with the other solutions.

Agreement was reached on all others, especially the idea of furthering or enhancing what we do. This makes me especially positive moving forward and I am super excited about what is coming! Looking forward to the next planning session.

18 - 19th November: Planning Change Lab Session 6.1

In setting up the next Change Lab session, I am still waiting for John to submit his thoughts and reflections on the video task I set for them. He however has expressed to me, that he is in the process of moving and does not have any internet connection at home. I will have to make space for their ideas going forward in the session and I think the reflection session at the beginning will help.

I also have seen in Ned's comments his own discomfort with the idea that these tasks online can be done for length of time. I am going to get an interview or Ask the Expert task set up so that he can see other teachers who have engaged with extended Project/ Task Based Learning. I think this is so very important in getting where we need to get to. To have access to this prior to the session has helped in amazing ways, and is another one way in which I truly believe that this Digital Change Laboratory can be immensely helpful in working in current circumstances.

The session is going to need some work on planning the ideas or ways of moving forward. I think I need teachers to see the new Task model and plan from there in going forward while looking at the previous model. I have to be extremely careful and re-orientate teachers to the focus on the General English classes rather than EAP or other electives. The problem in bringing in these really has to do with getting them focused on the problems that have arisen in that local system versus the others. I think the problem here lies in that both Marjorie and John have been tasked with changing and improving them. So I think they are hoping they can use what we do in the Change Labs with helping them in their design, which I am not against. Perhaps I need to spend some time explaining before or after the session that we could do this later after the Change Lab process is complete?

I am also a little bit weary for next week! I am going to start training teachers at the 'THE UNIVERSITY' Language Centre for a month while my research is ongoing! I am worried because I think my contradiction between me as a teacher versus the researcher may come to a head now. I already feel quite sparse and it takes me an extremely long time to plan sessions. So, I need to take the time between sessions to really maximise my time. Again, doing this is on my own can be extremely discomforting, but again I fully know where I want things to head towards. So I am

20 November: Change Lab Session 6.1

Today's session was the most exciting one I've had in weeks! Wow! They have come up with a new object - 'co-creating language'. A collaborative object! It's insanely interesting and I the ideas that they have had have worked exactly as I had planned. In giving them the experience of working with mobile learning, and giving them different tasks they were able to open up an entire retinue of things to try! I am so excited about what has come about. There are a few uncertainties with the new model and the course book is still there - but interestingly division of labour has changed immensely. I think I need to move to concretizing this more effectively for the next session and get them thinking about the practices that are associated with this! I wonder what is going to come up. This is all so new and exciting. Terribly excited about the next Change Lab as well where I am getting them to Ask the Expert over a Google Hangout call as well as I think this will take them a far way with getting into the lesson. I have given them information about the project, but I doubt that they will actually look at it. There is just a lot of information on the site and the time between sessions is way too short. I know John is still struggling with this regard with his move, and Ned is trying to finish his Honours

coursework and dissertation. I am trying to be accommodating but I can't help but wonder what may have emerged had they been sticking to the tasks I had set. However, as well this Change Lab is in the real world, with people having their own issues and interests that also have to continuously be recognised. I have to recognise this and accept that I may not get exactly what I want, what I am getting is actually enough and so freaking exciting! Cannot wait for Wednesday!

21 Nov: Change Lab Session Planning 6.2

Getting ready for the Change Lab session tomorrow is going alright. I know that most of this is going to come from the teachers so I am going to make extreme precautions in not directing the conversation. I believe it is so so so important that their questions are the highlight. I wish more teachers had submitted questions for Lindsay (the Expert) but sadly only Marjorie did (I am so glad she is doing this with us)! The session planning here is really the easiest it has been for me! So I am setting 50 minutes, for it and then 10 minutes of reflection/ reflection task to get what they have taken out. Let's hope this goes a long way to getting their worries and concerns accounted for.

I hope this session sticks with them the way I intend it to do. However, I wonder about how well this is going to double stimulate them? I do not know if I am making this link between our model, the Expert and what we need to do as clear as possible!

22 Nov: Change Lab Session 6.2: Ask the Expert

The ask the expert session went extremely well. Teachers really responded to someone who was not me telling them about the possibilities for ICT integration and what can come from it! I am so excited about the possibilities and I think they themselves saw that what we are doing is achievable and doable! I think especially for Ned showing him that a task based approach the way he wants is possible is the main thing.

I also think Marjorie and John handled the session well. There were so many interesting questions for the her and I think this went amazingly. The fact that I could bring her in and get them to speak with her remotely is such an interesting part of a task they could think of inputting! I wonder if this might drop for the teachers.

However, we have had to move rooms to do the session as the teacher's class we used needed to use her computer for her other work at the centre. So we used the 'Fishbowl'. This worked for the Hangout call and I love how we can move to other spaces quickly and efficiently use of Change Lab platform to engage with all these different types of activities.

One point of concern I experienced today is again with James. I had asked if the room was open from Briana but then got told at 2:00 that we had to move, as James had a meeting. I quickly got the group to move, but as I was moving the person (I think who was coming in for an interview) asked who I was, and James said "there is *only one* Warren". I think the emphasis was not for praise but in a tone of exasperation. I again feel very threatened, unwelcomed or anxious about my research and my place here. I am doing my utmost to help and work on issues and develop the teachers with their concerns etc. and while I know this is my research, I have taken great lengths to minimise the impact that this research has on the workings at the centre and others. However, again I feel that with management not bringing me in, specifically James calling or requesting this to occur, coupled with his own reservations about what I am passionate about has lended to these feelings I keep getting. Marjorie opened up to me as well earlier in the day where she also feels very unappreciated and nervous about her place at the centre. Her own attempts at developing the centre's resources or being used to develop syllabi have been a point of contention of her, and she also feels worried. I did not speak about my own experiences I am having right now, but I felt comforted by the fact that I am not alone in the feelings that I am having.

23 - 26 Nov: Change Lab Planning Session 6.3

Going forward, I know that I am nearing the end of my research. In the next session I need to get teachers working on the model and concretize it further. I do not think we have enough time to do this appropriately, but I need to get them into the classroom and experiencing how this model works with tech. In the next session, I need for teachers to concretize where they want to go, so I have added a couple of question marks for where we need to work more on. I think if we handle this and couple this with the reflections over the session (which I am still waiting for completion) some great strides can be made.

Furthermore, as I am sifting through the video files during the week, I have found some videos where I can see the new object in lessons by Marjorie and Ned. I think this will make a good way to firstly double stimulate the teachers when working with the models. By presenting these

and then getting them working with models I can see possibilities of teachers reaching for things to include or perhaps create greater links to the model itself. It may also help them reformulate the model again closer to the general English classes it is supposed to address! Here's hoping. I get very worried if I am doing this right, but the book by Virkkunnen & Newnham is helping me, showing me a pathway. I also keep looking at other Change Labs, as many as I can read or get my hands on to help!

27 Nov: Change Lab Session 6.3

Today's session went very well. I think it is definitely time to quickly move to them planning and doing the lessons with tech and the model to guide them. I think I am going to take a step back to see how it all pans out.

We went to great extremes in planning the model appropriately. I have also stopped scribing as I find us more and more collaborating on the model. I do not know if this is perhaps me, but getting the model out and working with them is helping me challenge assumptions and get the teachers clearer about what they exactly want. This may come back to haunt me, but I feel this new format of Change labs gets closer to the collaborative nature of what we are working on. I also feel much closer to the teachers with this new model.

The Ask the Expert had helped as I had hoped it would. I think teachers themselves are much more excited about what is happening! I am so keen to see what happens! Yikes here we go! Next session is demonstrating the tech and getting them working with a few tools!

28 Nov: Change Lab Planning Session 6.4

In going over what has happened and looking at the model I have settled on the following applications to demonstrate: Nearpod, for its use as a presentation or task tool; Google Docs, as Multimedia Text Sheets in their applicability for the classroom; Google Classroom, as a tool to show teachers as a portal or links to lessons; Google Forms, to create scavenger hunts and quizzes on the flies. All of these tools I have much experience in integrating them with mobile learning and I think in the next session I need to make it apparent to them the pros and cons of how they work in the classroom.

I am also a little bit concerned regarding time. It keeps coming up and it is real big issue as I need to finish closer on time! So let's keep hoping I can do it. I would like if there is time to

see them mapping these tools onto the model but I do not think there will be enough time. I also know we are jumping around quite extensively from tool-to-tool, but I have a very short window in which to do this with the teachers. I think I will also task them with starting to create the lessons on their own and me coming in after an hour of them working next week. This way they can take more autonomy over the process and in fact lead the lessons. They need to start taking this and shaping it!

29 Nov: Change Lab Session 6.4: Technology Introduction

The session today I think was effective but also had it's drawbacks. I made great headway in getting through all the applications but I had no time as I thought to see if they could pin these applications to the model. I think this may have helped but I can always try in the next session to rectify this when they have the lesson plans or materials! I am praying that they actually do this.

Ned noted today that this was a bit disorientating! I knew it would be but again I had to maximise the time to get them working with the applications in their classrooms! So, I am hoping it has shown them what is possible and that they CAN do this! So badly wish I was more with them at the moment so I can help them but then again they do need to take ownership.

After the session Marjorie briefly spoke to me about how much she has enjoyed the session! I am so grateful to have someone like her on this and I have asked her if she would be so kind to have follow-up with the other to over the week. I have also cautioned her not to do all the work herself as they need to work on this collaboratively! I think I may add a couple of resources on the Google Classroom in case they need to review with what they have planned.

30 November - 14 December: Change Lab Planning Session 7

Planning for these sessions is going to a difficult one. I really want to allow participants to direct this process. I do have some key questions about their lessons. Marjorie was so excited she even made her own Nearpod lesson and videotaped its use with her students, aside from the one she and Ned made. I cannot wait to hear their thoughts.

However, I think what I need to keep in mind in my planning is the need for participants to direct. I do have some key questions I am going to ask about their experimental lessons with

the model i.e. how well did it work? What didn't work? What needs more development. I think these will work well as I still see huge gaps in this model.

In the meantime, I am giving participants a dedicated space for planning. They have from the today till the 14th to get their lessons ready. I am stopping by after I finish my teacher-training. I have also asked participants to video their planning which they have agreed to. I wonder if there will be space to include their discussions here?

14 December: Change Lab Planning Session 7

Today was the day of their experimental lessons. In checking over the last week of so at their planning, I can really see teachers grappling with the model and sinking their teeth into it. They have kept their ideas of co-creation strictly in view, largely due to Ned. I do wonder however, if there lessons are really full into the model they created. I do think the Nearpod lesson for Marjorie and Ned's lesson is not nearly as much about co-creation as its about creating with content, but I will have to see. John's ideas are however more in line. It will interesting to see their insights.

17 December: Change Lab Planning Session 7

Tomorrow is my day with the teachers. So excited. I really cannot wait to hear what they have to say. There seems to have been some issues on the whatsapp group in Marjorie and Ned's lessons. I told them to write down their thoughts and we can review it in tomorrow's sessions.

18 December: Change Lab Planning Session 7.1

Only John was able to join today's sessions. Marjorie and Ned both had issues in attending. I wish they had told me. However Ned has been ill, and still has made a point of attending.

Anyway, the session was still really valuable. I really let John lead as I had thought this would be a place where his insights and reflections would be most valuable. It truly was. He really seems to have shifted his attitude and sees a lot of worth in the model. It still needs work with feedback structure, but he stated that basing his use of tech in it allowed him to work closer to the students. We reviewed the lesson and I was stunned at what was demonstrated with the students. They even kept working after he left the room! This is amazing.

We also discussed Ned and Marjorie's lesson. It appears they couldn't enact their lesson due to some admin issues with the Nearpod application. Mmm, I wonder how this all went about…. However we see management tomorrow and Ned will definitely be attending. I think again I will let the teachers take the lead here. This is *their* model.

20 December: Change Lab Planning Session 7.2

The final session for this year is done! What a session. Ned and John had a total change in their view for technology! It was incredible! Absolutely. Especially John's testimony about his lesson in how it helped him, and James definitely took notice. He was asking after the session how we can incorporate more of this…. Wow! Just wow!

Ned also discussed his lesson. While he was still unable to do what he wanted his apprehension has changed with tech. He was the one frequently stating how it could help their planning and get closer to students need. I was shocked. It actually didn't know what to say.

In the final part, I gave certificates to everyone to show all their work. James and I have a tentative meeting to discuss if we can continue with more work on making the model a reality. I am so looking forward to this.

I honestly have to say this process has been an incredible ride. A ton of work, but wow. Seeing the teachers take agency over their change and watching myself taking a side step will they take the lead was incredible. I do think in my dissertation I need to talk about the issues of being an insider. This was difficult to manage along with work, especially with me needing to make management happy and stick true to the research.

Appendix 9: Virtual Resources

In this section, I provide a website that contains extensive information about each part of the study.

This dissertation contains hyperlinks to the resources. However, should the actual URLs for specific pages or data be sought, I have included the URL for each resource below which can be copied and placed into the reader's browser.

Homepage URL: https://sites.google.com/view/appendix9lllwar00120191031/home

Appendix 9.1: Preliminary Study	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study
Appendix 9.1.1: Information Session 1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-1-project-informatiom-session
Appendix 9.1.2. Preliminary Study: Lesson	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons
9.1.2.1: Ned's Lesson's	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-1-neds-lessons
Ned Lesson 1: Online Journalism	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-1-neds-lessons#h.p_dcQvSkWmAP1-
Ned Lesson 2: Word Transformation	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-1-neds-lessons#h.p_wrNuzNv3CfCq
Ned Lesson 3: Passive Language Construction with Mobile Devices	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-1-neds-lessons#h.p_4ZsiRFQ0GQeY
9.1.2.2: Marjorie's Lessons	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-2-marjories-lessons
Marjorie Lesson 1: Fashion Industry & Google Classroom use	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-2-marjories-lessons#h.p_O6e4ZJ_3KM-2
Marjorie Lesson 2: Reading & Writing: Relationship between youth culture & fashion	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-2-marjories-lessons#h.p_hjJmdnfVLsL6
Marjorie Lesson 3: Writing a Summary	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-2-marjories-lessons#h.p_qRBdjq4DoQMf
9.1.2.3: John's Lessons	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-3-johns-lessons
John's Lesson 1: Island Survival	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-3-johns-lessons#h.p_BSfzHDkVo2ij

John's Lesson 2: Gameshows	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-2-lessons/9-1-2-3-johns-lessons#h.p_xs60lTlnpHpn
Appendix 9.1.3: Interviews	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews
9.1.3.1: James, Principal of ALC	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_QHGRjJVbqL5I
9.1.3.2: Dani, Previous Programme Co-ordinator of ALC	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_G9TZdszXqR8N
9.1.3.3: Briana, Previous Programme Co-ordinator of ALC	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_2__dvd6kqX20
9.1.3.4: John, Assistant Director of Studies, ALC	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_EMVewnYNquKh
9.1.3.5: Majorie, Advanced Teacher	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_HTo7CfeFq6bO
9.1.3.6: Ned, Advanced Teacher	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_VJJZ_HYrq-lx
9.1.3.7: Gertrude	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_FwDfcpvkrOd0
9.1.3.8: Henri	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p_TuZOzpGhrAQu
9.1.3.9: Sofia	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-3-interviews#h.p__2W-uR8WrQBk
Appendix 9.1.4: Student Questionnaire	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-1-preliminary-study/9-1-4-student-questionnaire

Appendix 9.2: Change Laboratory	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory
Appendix 9.2.1: Information Session 2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-1-project-information-session-2
Appendix 9.2.2: Charting the Situation	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-2-charting-the-situation
9.2.2.1: Change Laboratory Session 1.1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-2-charting-the-situation#h.p_ZiQVzo_uPRcK
9.2.2.2: Change Laboratory Session 1.2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-2-charting-the-situation#h.p_EjfgipAwYUx2
9.2.2.3: Change Laboratory Session 2.1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-2-charting-the-situation#h.p_StZ8f9wCcbHg
Appendix 9.2.3: Analysing the Situation	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation

9.2.3.1: Change Laboratory Session 2.2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation#h.p_ZiQVzo_uPRcK
9.2.3.2: Change Laboratory Session 3	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation#h.p_EjfgipAwYUx2
9.2.3.3: Change Laboratory Session 4	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation#h.p_StZ8f9wCcbHg
9.2.3.4: Change Laboratory Session 5.1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation#h.p_-1mVAF_eKiO4
9.2.3.4: Change Laboratory Session 5.2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-3-analysing-the-situation#h.p_x7hszEDmRyaM
Appendix 9.2.4: Creating a New Model	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-4-creating-a-new-model
9.2.4.1: Change Laboratory Session 6.1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-4-creating-a-new-model#h.p_ZiQVzo_uPRcK
9.2.4.2: Change Laboratory Session 6.2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-4-creating-a-new-model#h.p_EjfgipAwYUx2
9.4.4.3: Change Laboratory Session 6.3	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-4-creating-a-new-model#h.p_StZ8f9wCcbHg
Appendix 9.2.5: Evaluating the New Model	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-5-evaluating-the-new-model
9.2.5.1: Change Laboratory Session 7.1	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-5-evaluating-the-new-model#h.p_ZiQVzo_uPRcK
9.5.5.2: Change Laboratory Session 7.2	https://sites.google.com/view/appendix9lllwar00120191031/appendix-9-2-change-laboratory/9-2-5-evaluating-the-new-model#h.p_EjfgipAwYUx2

Appendix 9.3: Virtual 3x3 Expansive Learning Frame	https://sites.google.com/view/appendix9lllwar00120191031/9-3-virtual-3x3-expansive-learning-frame

Appendix 9.4: Professional Development Plan	https://sites.google.com/view/appendix9lllwar00120191031/9-4-professional-development-plan