



**Promoting Inclusive Higher Education in the
digital age:
Wrapping massive open online courses (MOOCs) for
youth from marginalised communities in
South Africa**

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by

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Acronyms	Name in full
MOOCs	Massive Open Online Courses
OER	open education resources
LoP	Landscapes of Practice
CoP	Communities of Practice
HE	Higher Education
HEI	Higher Education Institutions
NEET	not in education and employment
TVET	Technical and Vocational Education and Training
4IR	Fourth Industrial Revolution
AI	Artificial Intelligence
GLA	Growth Leadership Academy
RLabs	Reconstructed Living Lab
EDP	extended degree programme

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Abstract

In 2020, the Covid-19 pandemic led to the global shutdown of Higher Education Institutions (HEI) forcing the move from residential campuses to online learning. In South Africa, the shutdown further exacerbated the lack of access to Higher Education (HE) amongst youth, which adds to higher unemployment rates and perpetuates the cycle of poverty with detrimental consequences for society. However, in 2020 the forced move to online learning, and the use of freely available Massive Open Online Courses (MOOCs) provided an opportunity to rethink access to HE for youth from marginalised areas. In some cases, a blended learning approach has been adopted by universities to provide more flexible pathways to HE. The wrapping of MOOCs follows a similar process but can be specifically used to be inclusive of students traditionally excluded from HE.

The aim of the research explores the extent to which wrapped MOOCs made in South Africa could serve as effective ‘boundary objects’ for students to experience HE. This research aligns with the United Nations Sustainable Development Goal (SDG) specifically in relation to the fourth goal that targets inclusive and quality education and promotes lifelong learning for all. It explores how MOOCs, if wrapped or blended in a face-to-face programmes could prepare young people from marginalised communities for the workplace in the Fourth Industrial Revolution (4IR). The research aims to explore the characteristics of two wrapped MOOCs made in South Africa to make them more accessible to youth from marginalised communities.

The researcher utilised a case study methodology and employed ethnographic methods to explore how MOOCs were wrapped to make them more accessible to youth in marginalised communities in South Africa. The cases were two learning contexts where MOOCs were wrapped for the youth from those communities. The data was analysed using concepts from Wenger-Trayner et al.’s (2015) *Landscapes of Practice*. One of the key concepts is the boundary object, which can ideally play a mediating role between knowledge practices across contexts. It can thus grant different forms of access to those who would otherwise have been excluded from specific ways of knowing, identity work and experience of digital technologies.

The data found that some students were unaware that MOOCs existed. Students desired and accepted that MOOCs could be part of an offering of HE programmes or courses but mostly agreed that they would not take it on their own as they required the digital literacy, computer

facilities and Internet to complete it. They preferred that it was wrapped within a face-to-face programme. Still, once they experienced taking it, they saw themselves as knowledgeable in taking MOOCs and the confidence to take online courses in the future. They attributed the social and epistemological access they received more to the programme than to the MOOCs. Most participants did not want MOOCs to replace HE institutions as they valued face-to-face engagement, that the wrapped MOOC format made possible. But the opportunity to learn on a digital platform and work online made them feel more equipped to choose their own pathways in the HE landscape.

The study culminated in a set of characteristics that could make wrapped MOOCs effective 'boundary objects'. The research recommends that future MOOCs be wrapped to be inclusive of these characteristics to enhance social and epistemological access to HE for students from marginalised areas. The contribution of this research would be to create a list of principles that allows for relevant MOOCs out of approximately 13500 MOOCs, that currently exist, to be used, adapted and wrapped by the HE sector or various stakeholders that provide training, education and skills to youth in marginalised or refugee communities.

The Covid-19 pandemic shutdown impacted on the popularity of MOOCs where platforms like Coursera, edX, and FutureLearn attracted as many users in one month as they did in an entire year of 2019. The significance of the study was evident during the HE shutdown when access to educational resources became crucial in the remote and online teaching format. The research contributed theoretically in terms of applying a landscapes of practice framework to understand and extend online and blended learning provision to marginalised communities. Future studies can take the recommendations of this research and apply the list of principles to wrap MOOCs and other online courses within particular landscapes of practice to explore their effectiveness in promoting access to HE.

1.Introduction

1.1 Research Background and Problem Statement

Access to Higher Education (HE) sector has become a contentious issue as there is an increasing tension between providing tertiary education as a human right, versus the financial pressures faced by universities who are expected to operate as businesses. This tension directly impacts on the ability of those young people from historically marginalised areas especially in the global south to pull themselves out of poverty.

Education for all has been at the heart of the United Nations Sustainable Development Goals (SDG) specifically Goal 4 (Quality Education) targets inclusive and quality education and promotes lifelong learning for all. Islam, Akter & Knezevic (2019) said that education is the “bedrock of socio-economic, cultural and political upliftment of society” and strengthens the capacity of people to bring them up into a knowledge population (p.55). This research aligns with the SDGs in promoting access to “inclusive education to help equip” people in their own countries to find innovative solutions to their problems (p.54). But the SDG4 is not easily attainable and the demand for access to HE will increase exponentially by 2025 with more than 200 million students requiring access from emerging economies, including South Africa (Laurillard, 2016, p.1).

Currently the HE sector, especially in South Africa is in upheaval where government funding has decreased, and the sector is being disrupted by multiple private companies producing curricula for-profit. Universities around the world have had to keep up with digitisation and marketisation where there is increased competition to attract top international students and a competing demand to gain research grants – which is at an all-time high (Cliff, Walji, Jancic- Mogliacci, Morris & Ivancheva, 2020). The sector found new revenue streams through the concept of "unbundling" where the courses are separated and offered as standalone modules in parts by multiple stakeholders, often using digital processes and platforms (p.1). HEI is unable to support the demand for access to education by the vast majority of young people who require it.

Against this backdrop, the HE sector began to experiment with the creation of flexible learning opportunities through online platforms. In 2011, a particular type of online course

boomed in the sector. Called Massive Open Online Courses (MOOCs). MOOCs were hyped as a phenomenon that would disrupt HE as they packaged free courses from top universities to anyone with an Internet connection and provided an unprecedented scalability to reach an unlimited number of students at the same time. MOOCs were aimed at expanding access to global students, but also to attract and showcase cutting-edge research and curriculum by some of the prestigious universities around the world. Islam, Akter & Knezevic (2019) found that MOOCs can play a role in meeting the SDG4 because they can easily be accessed online at a cheaper cost, share knowledge easily and can strengthen and facilitate education to a certain extent (p.63). But by 2014, the limitations of MOOCs became evident because MOOCs are based on the Internet and there is little support for students and educator. Commentators also realised that MOOCs benefited mostly graduates and professionals and graduates and excluded learners from the poorest countries who most needed access to HE (Laurillard, 2016, p.2).

In 2020, the Covid-19 pandemic shut down universities around the world forcing campuses to move from face-to-face mode to teaching online. The move to emergency remote teaching (ERT) became a catalyst to transform the role of MOOCs in the HE landscape as they were ideal for adult learners who were able to do self-directed learning on an online platform. But more so, existing MOOCs could be viewed as a library of ready-made digital educational resources that were urgently needed to support Higher Education Institutions (HEI) to move into ERT. In the current context, the value of MOOCs presents a significant opportunity to rethink their usage.

The focus of this research is on how to restore the ideals of MOOCs to live up to its "free-for-all" model (Cuniah, 2017), when the majority of global south youth live in contexts where Internet connectivity is limited or non-existent. It explores whether existing MOOCs can be repurposed to be inclusive of youth from historically disadvantaged communities and who are most in need of free educational resources. To set up the context for the argument, the research will now look at the HE sector in South African in greater detail and explore its impact on youth unemployment. It will briefly unpack the significance of MOOCs in the current Covid-19 climate where online learning has come under the spotlight.

Access to HE is a wicked problem (Rittle & Webber, 1973) and not easily addressed because it is multi-layered with many causes that are difficult to describe and that have no definitive answer. Access to HE for youth in South Africa cannot only be solved by enrolling them all into HEI. It remains an "intractable problem embedded in complex systems that is

difficult to define and lacks clear solutions" (Mason et al., 2018, p.1). The Covid-19 pandemic further exacerbated this problem by forcing residential campuses to go online. Therefore the research helps to solve this problem by exploring how MOOCs can be used to open up more opportunities for youth from marginalised areas to access HE online. In this way, youth who have experience of taking a MOOC within a program can be prepared for a future where online learning is the norm and they can pick and choose their own path in the landscape of HE.

1.2 South African Higher Education Context

In South Africa state contributions to university education declined consistently since 2012, but the burden on students' enrolments increased during the same period (Stellenbosch University, 2017). In light of the dependence of universities on tuition fees as a source of revenue, scrapping or capping of tuition fees would leave universities with a deficit. The current Covid-19 pandemic also exacerbated the austerity measures triggered by the impact of the shutdown. In South Africa, the Higher Education Department (DHET) announced cuts in the allocated budget of around R2,5 billion during the Covid-19 pandemic. In July 2020, Blade Nzimande, the Minister of Higher Education, announced the allocation of just over R79 billion to universities and R13 billion to Technical and Vocational Education and Training (TVET) colleges (Kassen, 2020).

The DHET aims to have 1,62 million students enrolled by 2030, but based on the financial burden of the universities, it is evident that HEI are not financially or infrastructurally equipped to provide access to young people not in education and employment (NEET) (Nzimande, 2020). This creates tremendous pressure for HEIs to keep financially afloat and having to make tough decisions about either extending access or not responding to unemployed youth in the country. The research is not focused on the business model of HEI in South Africa but included the contexts to indicate the changing nature of the sector and the possibility of new forms of access in the future.

It is also significant to mention the 2015/2016 #FeesMustFall (FMF) protests succeeded in persuading the government to cover the fees of tertiary students from low-income households. However, despite the financial barrier to accessing education being diminished, the majority of youth in the country still do not have the necessary qualifications to attend HEI. The research also acknowledges the importance of #FeesMustFall students' demand to decolonise the curriculum from westernised and Eurocentric ideas (Barry, 2017). Therefore,

the research is not arguing for MOOCs made in the global north being dumped on young people from poor areas as a form of charity. These MOOCs, however could be reframed to localise knowledge to ensure the dominance of Eurocentric knowledge systems is not perpetuated through existing MOOCs hosted on global north platforms.

In 2015/16 the first MOOCs were being made in South African universities during the FMF student protests. It is interesting and somewhat ironic to note that MOOCs made in the global south were being touted as free education, while students in South Africa were protesting, and in some cases burning university buildings while fighting for free education. However, there are a number of arguments and complexities that show why MOOCs were not appropriate educational resources for these protesting students, and at the heart of it was they were never the intended target audience. The research will argue that existing MOOCs are able to be repurposed to overcome their intrinsic design to be inclusive of both the global north and south students.

1.3 Youth unemployment

Access to HE is still viewed as the key to moving young people out of a cycle of poverty and linked to this is the government's policy to increase economic development and job creation through the country growing its human capital (De Lannoy, Graham, Patel & Leibbrandt, 2018, p.19). Also the lack of access to HE is linked to the unemployment rate amongst youth in South Africa (Statistics South Africa, 2020, June 24). The rate has increased from 55.2 percent in 2019 to 59 percent in the first quarter of 2020 (Statistics South Africa, 2020, June 24). This increase is concerning despite multiple interventions by various stakeholders to target youth unemployment from the corporate sector, to providing skills development programmes and providing government funding for to cover the fees for youth from low income households.

The youth are not passive recipients in this process but aspire to find a way out of poverty through education where "expectations for a degree, and a professional career rather than a menial job, lead them to value university education over technical and vocational education and training (TVET)" (De Lannoy et al., 2018, p.33). The demand for access to HE is increasing with South Africa having too few institutions to accommodate the number of young people requiring access. For those trapped in the poverty cycle and for those who remain

unemployed, these circumstances ultimately impact on their mental and physical well-being (p.1).

Young people from marginalised communities are also blocked from entering universities because they cannot afford the fees and lack the necessary qualifications. Even when youth from marginalised backgrounds succeed in accessing an HEI and graduating, finding employment is not guaranteed. This complexity is evident by a 2020 report where unemployment rates amongst graduates increased by 8.5 percent in 2020 from the previous year - an indication that even when access to HE is achieved employment is not guaranteed.

The research is not arguing that issues of access to HE or unemployment will be solved by providing MOOCs to this cohort. It views youth from these communities as having their own agency, aspirations and desires to take themselves out of poverty. These young people are searching for alternative pathways where they may want to learn entrepreneurial skills, attend a college or university, work in their community or take a MOOC. Making MOOCs accessible to unemployed or marginalised youth would appear to be easily solved by providing unlimited Internet access and digital technologies. However, whether youth from marginalised communities even want or value MOOCs needs exploring. Covid-19 pandemic forced online learning in all sectors of education and youth know their future rests in online learning. Therefore knowing how to take MOOCs and do online courses allows youth to take their education into their own hands. This can provide them with the agency in choosing their pathways of where they want to study, who they want to become and how they imagine their life to be. This research gathers the opinions of youth specifically from South Africa that are generally excluded from taking MOOCs because they are not online.

1.4 The Fourth Industrial Revolution and impact on Higher Education

Youth from marginalised backgrounds require more than just access to HE but also an experience of learning online and becoming confident with all aspects of digital technologies. Merrington (2017) warned that unemployed youth are facing a future where the rapid rate of the Fourth Industrial Revolution (4IR) means half the content taught in first year in a technical degree will be outdated by the time students graduate. He warns that the education system needs to be reframed to take into account the impact of the 4IR as both social and technical skills will be relevant in the labour market (para. 23). Therefore excluding youth from

marginalised backgrounds to engage in the workplace increases the gap if there are no opportunities to work or gain experience with digital software, platforms and applications.

Already, the gap between business' needs and what is produced by the formal education system is startling; this is borne out of the daily experience and also by unemployment statistics. Parts of the old education model, including that of universities, are likely to become extinct unless they can become agile. (Merrington, 2017, para. 24)

The research agrees with Merrington (2017) that even if youth from poor households overcome these challenges and graduate from an HEI, finding employment can be a challenge. These challenges include a possible mismatch between the focus of the degree and what the workplace needs, as well as a lack of job-seeking information and limited social capital (Graham, Williams & Chisoro, 2019, p. 372). MOOCs can be used strategically to target the 4IR impact in the workplace by accessing skills for jobs specifically in mobile development, statistical analysis, data mining, network information security, java development, middleware and integration software (Merrington, 2017).

Therefore the exposure and opportunity for youth to take MOOCs – as well as choose their own pathways to access HE – may possibly equip them to better deal with the impact of 4IR and a future where employment opportunities require knowledge of working on digital platforms.

However, beyond the dismal unemployment rate and crises facing HE in South Africa, the research draws on Wenger-Trayner, Fenton-O' Creevy, Hutchinson, Kubiak and Wenger-Trayner (2015) contention that there has never been a more opportune moment for universities to play a convening role across the HE sector to not just produce or transmit knowledge, but to co-construct "new forms of knowledge, new practices and social change" (p.158). The research argues that universities could play a convening role in supporting the repurposing of existing MOOCs for various stakeholders.

The access to MOOCs as a flexible learning pathway that is free to use and provides students with an experience of online learning would seem a perfect solution. But Laurillard (2014) points out the design flaws of MOOCs excluded millions of learners who lacked access to the Internet or digital technologies. Therefore, the research positions itself to find out how

existing MOOCs could be beneficial to youth from poor communities, despite their exclusionary online design.

1.5 Positionality of the researcher

The researcher manages the video production of MOOCs at a South African university, where she worked in a team that produced 23 MOOCs. She oversees the work of the video recording and editing of the educators' material with learning designers who work on the content. These MOOCs are hosted on providers of online learning material Coursera¹ and Future Learn. Therefore, by working in the production of MOOCs, the researcher is cognisant of her bias. She adopts Mantzoukas (2005) approach that bias is unavoidable in qualitative studies, and in this case particularly, cannot be avoided or eliminated. On the contrary, it should be embraced and become part of the research and which may in turn give insights that an insider perspective may offer (p. 291). The researcher acknowledges her positionality and undergoes a reflexive process throughout the research process. In Chapter 3, she covers more details about her positionality, the research's validity and reliability.

1.6 Research Aims

The aim of the research explores the extent to which wrapped Massive Open Online Courses (MOOCs) made in South African could serve as effective 'boundary objects' for students from marginalised areas to have an experience of HE.

The researcher was motivated to explore the potential of existing MOOCs to benefit not only the educated and wealthy but those in society who need it more because of their context and lack of access to HE. The research is not calling for digital technology to solve the problem of access to HE but rather provides a context-sensitive approach to repurposing educational resources for learners in South Africa.

¹ Coursera and FutureLearn are MOOC platforms that hosts courses created by top universities and companies around the world. <https://www.coursera.org> <https://www.futurelearn.com>

1.7 Research Objectives

In order to achieve this aim, the research will analyse two all MOOCs made in South Africa and how they were wrapped in a formal and informal course for students from marginalised areas. The research will search for specific characteristics that would allow for students from marginalised areas to cross over into HE experience and gain social and epistemological access through learning in a blended environment. The framing of these questions of access is that MOOCs fit in the informal domain of HE but can offer opportunities to non-traditional² (Bennett & Kent, 2017, p.12) students excluded from formal HEI. The research also responds to Bates's (2014) point about the lack of research in understanding what participants learnt from MOOCs in terms of their feelings and perceptions (p.147). The research is framed through a social learning theory approach that takes into account the learner's experiences, context and social position.

The research focused on two case studies in South Africa to determine the following:

- **Research Questions**

RQ1: What are the characteristics to make a wrapped MOOC an effective boundary object?

RQ2: To what extent can a wrapped MOOC give social and epistemological access to higher education in South Africa?

The purpose of locating the research in a South African context is to explore the relationship between MOOCs as educational resources that can be repackaged, adopted and repurposed in poorly resourced areas. It also aims to evaluate the type of learning that youth in historically disadvantaged communities can gain from two wrapped MOOCs.

1.8 Significance of the Research

The significance of the research increased with the Covid-19 pandemic when HEI were shutdown globally and the move to blended and online learning became the only option for

² Non-traditional students are described as new groups of students excluded from higher education because of a complex number of reasons related to social, economic and cultural circumstances particularly from families who do not have a history of attending HEI or from working class households (Schuetze & Slowey, 2002 cited in Bennett & Kent).

residential campuses to remain open. The awareness of MOOCs and their popularity during the pandemic also increased the significance of this research where the reuse and adaptability of MOOCs can now be used globally by various stakeholders in the sector. It can also be of value to HEI that are moving to flexible forms of provisions in higher education.

The research also reflects the views of learners in a South African context, who are from marginalised backgrounds and given the digital facilities to take a wrapped MOOC. The research also specifically targets two wrapped MOOCs made in South Africa to discover if these were able to be inclusive of both local and global students. It explores if the wrapped MOOCs could provide social and epistemological access to youth from marginalised backgrounds.

MOOCs have been widely researched since 2011 and in Africa, there are a number of studies specifically from the University of Cape Town on African MOOC takers where researchers looked at those seeking work opportunities and how they managed their time (Deacon, Walji, Jawitz, Small & Jaffer, 2019). The other research is from the perspective of educators who created and wrapped MOOCs in South Africa (Deacon, Jaffer, Small & Walji, 2018). Bruff, Fisher, McEwen & Smith (2013) explored student and instructor reflections on wrapping MOOCs for blended courses. However, this research is significant as it speaks to non-traditional MOOC takers who are generally excluded and even unaware of MOOCs who were only able to access a MOOC through the wrapping process. The findings of this research can also be used by HEI educators using online courses in blended modes for students from similar backgrounds.

This research incorporates a similar ethos as the study by Abdel-Maksoud (2019) who looked at how educators can integrate MOOCs into flipped learning interventions in the HE sector to maximise the benefit of using high-quality resources provided by existing MOOCs (Abel-Maksoud, 2019). This research hopes to extend the findings and praxis (Appendix F) to organisations outside of the HE sector working with refugees, unemployed youth and those who require gateway skills to incorporate wrapped MOOCs into their offering and provide more HE access to these groups.

This research takes the literature forward by exploring wrapped MOOCs as potential 'boundary objects' (Star & Griesemer, 1989) and includes the students' from marginalised groups who are not traditional MOOC takers. This is an exploratory research that aims to generate new knowledge around repurposing MOOCs made in the global south. It also

produces artefacts to guide youth development stakeholders on how to wrap MOOCs to be more inclusive in the global south.

1.9 Thesis outline

Chapter 2 is a literature review on the background of MOOCs as a phenomenon in the HE sector globally and specifically in South Africa. It then focuses on the different types of MOOCs and their use across the formal and informal domains. The literature and definition of wrapped MOOCs are covered and highlight how previous research in the global south has approached it. The chapter then unpacks the concepts of access to respond to the research questions around what type of access is appropriate for MOOCs to provide in the global south. The chapter introduces the conceptual framework, drawing on Landscapes of Practice (LoP), a social learning theory developed and refined by Wenger-Trayner et al. (2015). This framework is applied in later chapters to explore the extent to which wrapped MOOCs can operate as 'boundary objects' across different communities in and beyond HEI, within a complex landscape of practice. The definition of a boundary object explores the way MOOCs are wrapped to be more inclusive for non-traditional students.

Chapter 3 describes the methodological choices made in the research and explains how a qualitative case study approach with ethnographic methods is applied in the findings and analysis chapters. The analytical framework, in line with the LoP model, is presented. The research sites and participants' profiles are shown. The positionality of the researcher and the need for reflexivity are detailed. The ethical considerations are unpacked, and the chapter concludes with how the research is validated and its limitations.

Chapter 4 presents the findings of the data collection. It begins with an analysis of the demographics of the participants who took part in the two wrapped MOOCs. The findings are coded through the lens of the analytical framework detailed in Chapter 3 with some predetermined themes and also includes the unintended themes arising from the data. Each theme is discussed in detail using quotations to validate the results.

Chapter 5 begins by positioning the findings in relation to the characteristics that were found to make the two wrapped MOOCs into boundary objects. These characteristics form the basis for the guiding principles in the Praxis Chapter (Appendix F) to support how existing MOOCs are repurposed as inclusive educational resources for marginalised youth. The chapter

also discusses the social and epistemological access that the wrapped MOOC provided and the implications of the boundary object.

Chapter 6 is the conclusion summing up the significance of MOOCs in the context of HE, Covid-19 pandemic, the future of 4IR and how marginalised youth can benefit from making MOOCs more inclusive through the wrapping process. The chapter ends with the recommendations for communication strategies around using MOOCs in the HE sector and for youth development programmes to become aware of the value of MOOC as free educational resources.

2. Literature Review

2.1 Discussion of the Literature

This chapter covers literature on MOOCs since 2011, by unpacking the hype around MOOCs and then its challenges to provide HE access to all who need it. The research then looks into the literature on the types of MOOCs and focusses on the concept of wrapped MOOCs. It explores the two types of access required to ensure that MOOCs are inclusive to marginalised youth. Finally, the chapter unpacks the reasons for choosing the conceptual framework of Landscapes of Practice from Wenger-Trayner et al., (2015) to explore the data and determine how to repackage MOOCs to provide access to marginalised youth.

2.2 Background of MOOCs

The New York Times declared "2012, the year of the MOOC" in an article by Pappano (2012). She predicted in her popular MOOC article that MOOCs would "bring the best education in the world to the most remote corners of the planet, help people in their careers, and expand intellectual and personal networks" (para.13). Similarly, the co-founder of Coursera, Koller (2012) expressed the platform's goal "to take the best courses from the best instructors at the best universities and provide it to everyone around the world for free" (Koller, TedTalk, 2012, 18:52).

These quotes capture the expectation surrounding the phenomenon of Massive Open Online Courses (MOOCs) that erupted into the global higher education sector in 2011. MOOCs were touted as disruptive (Conole, 2016) innovative learning tools, a silver bullet for solving the problem of affordability and access to HE but also threatening residential HEI and possibly making them obsolete (Sandeem, 2013).

The origin of MOOCs is often traced back to Sebastian Thrun who presented a Stanford University course online on "Introduction to Artificial Intelligence" in 2011. The course attracted 160 000 learners enrolling from around 190 countries (Yuan & Powell, 2013; Breslow, 2016). Thrun went on to become the founder of Udacity, one of the top five MOOC platforms set up in response to this possibility for massive dissemination. This Stanford University course became the golden standard to open up the "emancipatory potential" of this type of access to higher education" (Kent & Bennett, 2017, p.2). The revolutionary nature of

MOOCs was linked to the assumption that they threatened traditional university funding because of free offering of MOOCs and the very existence of the institution (Groove, 2013; Shirky, 2013; Zhu, 2012) as cited in Kent & Bennett (p.2).

Thousands of MOOCs were produced and hosted on global MOOC platforms offering free courses from top universities. In 2012, the "Big Three" MOOC providers – Coursera, Udacity and edX - would pave the way for new players on the HE landscapes (Wang, 2017, p.46).

MOOCs represented a new era in the sector where their potential was that students in any part of the world with an Internet connection could participate and experience learning from universities they could never hope to attend. MOOCs also were part of the catalyst for what Bennett & Kent (2017) name as the commodification of knowledge in the HE sector that drove the need to profile universities to attract students positioned as consumers (p.14). MOOCs indicated the expansion of the players in the HE sector and "an attempt to create a global mass market for a product previously reserved for the elite and middle classes (Bennett & Kent 2017, p.14). But Knox (2016) disagreed saying that MOOCs maintain the hierarchy and orthodoxy of elitist universities and the quality and scale of how MOOCs disrupted HE is limited by a particular "framework of the humanist subject" (p. 318).

The MOOC hype soon died down and Popenici (2014) concurred that MOOCs were unlikely to solve any of the problems of access to HE in the developing world. The intrinsic design of MOOCs being only accessible online meant that excluded a significant proportion of the population especially in the global south that did not have Internet access. Over the years, MOOCs have gained the reputation of being an elitist educational experience "that caters best to the Western, university-educated, middle class" (Bennett & Kent, 2017, p.13). This highlights that MOOC platforms increasingly moved away from the free offering by introducing more paywalls (Deacon, Jawitz, Small & Walji, 2017). Coursera and other EdTech companies have been at the forefront in providing MOOCs for almost a decade.

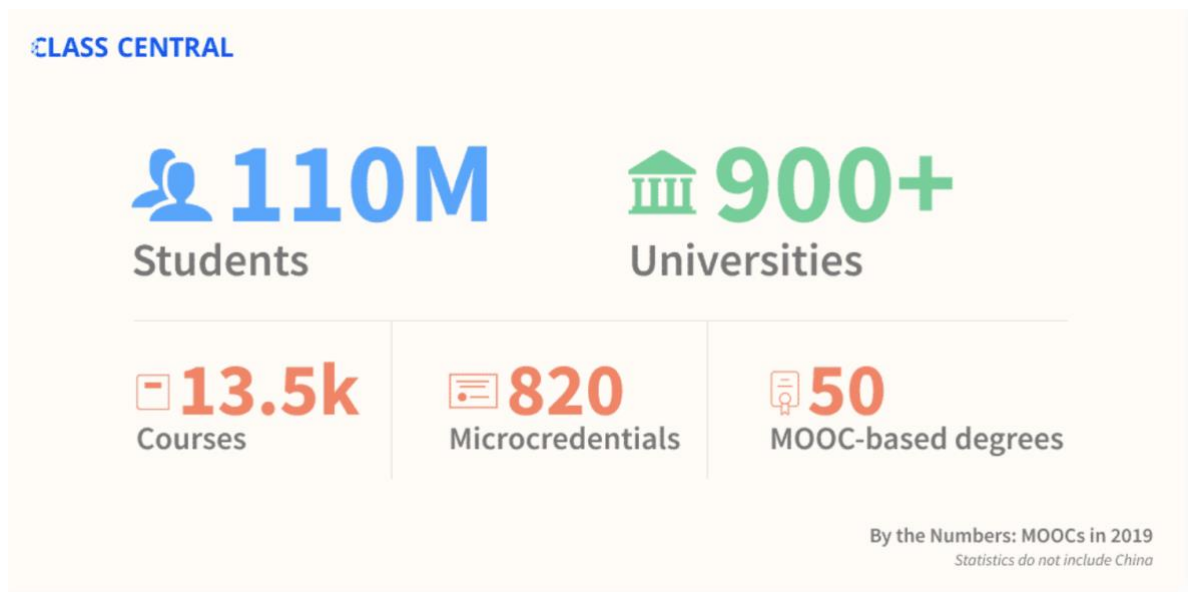


Figure 1: Number of MOOCs globally made ³ (Class Central, Dhawal Shah, 2019)

The research concurs with the optimism of Bates (2014) that MOOCs are a niche but essential part of HE and expands non-formal and alternative forms of learning opportunities to non-traditional HE students. MOOCs remain relevant especially after the Covid-19 pandemic outbreak, that highlighted not only the need for crucial educational resources, but also the opportunity to provide skills development and transition into the online learning space. Figure 1 illustrates that currently there are around 13 500 MOOCs created by 900 universities and have enrolled hundreds of thousands of students without an academic record. This staggering number of MOOCs represents thousands of videos, podcasts, reading materials, assignments and quizzes all ready-made and from some of the best universities in the world. The Covid-19 pandemic has unexpectedly resulted in MOOCs enrolments increasing exponentially on the Coursera platform that showed a 650 percent higher uptake in March 2020 compared to the previous year (Impey, 2020). The research argues that the existing MOOCs could be widely distributed and repurposed especially during the Covid pandemic shutdown.

2.2.1 Components of a MOOC

MOOCs have specific components that Abdel-Maksoud (2019) points out to make them unique from other e-learning resources or courses. The acronym MOOC is derived from the components to describe what a MOOC is: massive, open, online course. These components

³ <https://www.classcentral.com/report/mooc-stats-2019>

will be unpacked based on Abdel-Maksoud (2019) explanations. A MOOC is taken online and accessed by anyone who has Internet connectivity and digital technologies.

MOOCs are massive, meaning they can enrol hundreds of thousands of students simultaneously on one course. The attraction of MOOCs was further enhanced because courses were made by the top universities in the world (Bennett & Kent, 2017). It became possible for even impoverished learners living in the remotest part of the world to take a free course from one of the top Ivy League universities (Lushnikova, Chintakayala & Rodante, 2012). The disruptive nature of MOOCs was due to the ease of scalability, where thousands of students could enrol in one course made by and through low-cost MOOC platforms like Coursera, FutureLearn and edX (Rambe & Moeti, 2017).

The first 'O' stands for 'open' in that there are no admission requirements (Sandeem, 2013), meaning that no prior knowledge of a course or entry-level access is needed. Yuan & Powell (2013, p.6) state that MOOCs began with "ideals of openness in education" to overcome geographical, demographic, economic barriers to learning. The openness of a MOOC also refers to the open education resource (OER) movement, whereby the content may be the author or institution's intellectual property, or under a creative commons licence (Czerniewicz, Deacon, Fife, Small & Walji, 2015, p.3). However, the OER approach is not a standardised practice when creating MOOCs, and the MOOC platforms like Coursera, FutureLearn and EdX have strict rules about reuse of educational resources or learning materials from MOOCs because of the business models for funding the production (Zawacki-Richter et al., 2018, p.250).

That said, Czerniewicz, Deacon, Walji, & Glover (2017) point out that despite OER policies not being adopted by MOOC makers more widely, they are required in the global south because universities have had minimal capacity to create online courses and support flexible forms of learning (p. 353). This apparent bifurcation appears surprising, as MOOCs claim to be concerned with widening access to education, and OERs are a means of increasing access (Ebner, Lorenz, Lackner & Jemni Kinshuk, 2017). Thus the relationship between MOOCs and OER would appear to be necessary for achieving higher education access overall (Czerniewicz et al., 2017, p.6). However, Czerniewicz, Deacon, Small & Walji (2014) warned that MOOCs are made for "consumption rather than adaptation, with most being available only under full copyright; most also demand that they keep the copyright in user-generated content and some even specify that this would include commercial rights," (p.124). The University of Cape

Town, therefore, created MOOCs under Creative Commons license, which made the wrapping of their MOOCs for the global south much more manageable.

Adam (2019) cites Wiley (2011) by pointing out that “MOOCs have moved far away from the open-access promoted by the Open Education Movement (OEM) regarding the legal “5 R's framework” of being able to remix, revise, reuse, retain and redistribute educational resources” (p.375). Nevertheless, the research aims to revisit the ethos of the 5Rs which means reuse, retain, revise, remix and redistribute by overcoming the barriers of copyright through the process of taking an existing MOOC and working out a new learning design to use aspects of the MOOCs for an unintended target audience.

The second ‘O’ stands for online, which is the characteristic at the centre of MOOCs exclusionary design that prevents learners who do not have continuous Internet access, digital technologies and computers or access to laptops from enrolling on a MOOC. This online component was both a positive and a harmful element. It meant there would be no onsite classes (Abdel-Maksoud, 2019) and anyone with Internet access could take a MOOC regardless of their physical location.

Abdel-Maksoud (2019) points out that as a course, the 'C' component, a MOOC should have some form of assessment, such as quizzes, tests or exams that allow educators to evaluate students' progress. However, MOOCs are not credit-bearing and cannot be a mechanism for university eligibility (Czerniewicz et al., 2015).

People taking MOOCs are not compelled to do so and thus may be better described as volunteer learners. They may be motivated to learn for free or at low cost knowing there are no consequences for not necessarily completing everything. (Deacon et al., 2019, p. 22).

The fact that MOOCs are generally free (if the certificate is not being purchased) means the participant can explore and take a MOOC without completing it, learn what they need to and leave without expense. This allows for participants to select and assemble with other resources in particular ways to create their own customised learning path.

This freedom and flexibility of MOOCs is set up for participants to sojourn, visit or become deeply immersed (Fenton-O’Creevy, Brigham, Jones & Smith, 2015a) in the content of the MOOC. MOOCs can be seen as a set of resources that MOOC takers select and assemble

with other resources in particular ways to create their own customised learning path. They do not even have to complete a MOOC to receive the learning they need from it.

During the Covid-19 lockdown the popularity of MOOCs was revived because the format seemed to work where thousands of people were forced to work from home and stay indoors for months and could search for free online courses where they did not have to complete it. This was illustrated by a Yale University MOOC having two million enrolments on a course titled: "The Science of Well-being". This MOOC claimed to teach participants how to be happier in their life (Griffin, 2020). The Covid-19 pandemic created a fertile context for online learning around the world thus increasing the awareness of MOOCs during this period. In the past, MOOCs were not a widely known phenomenon outside of HE and learning sectors. The move towards more blended models in the HE sector is also why MOOCs have become relevant during the pandemic as traditional face-to-face models of teaching is not sustainable (Mishra, 2020). The research explores whether taking a wrapped MOOCs could prepare students from marginalised communities to experience online and blended courses in preparation for a future where onsite campus learning may be limited.

2.2.2 Types of MOOCs

Before MOOCs appeared on the HE landscape, there were other modes of teaching outside a physical classroom such as distance learning, e-learning, blended and hybrid models that institutions globally adopted with the introduction of the Internet (Benson & Samarawickrema, 2009). The history of e-learning is not part of the research, except to note that a context-driven approach was used for this model. E-learning encouraged teachers to understand and incorporate the local context into the learning design of their course (p.6).

MOOCs fit in a non-formal space of the HE curriculum and experimented with some of the formal areas (Czerniewicz et al., 2015). Bates's (2014) contention is that MOOCs offer an opportunity to enhance social learning at scale, and their place in the education sector is in non-formal learning (p.147). This is precisely why they are so appropriate for youth organisations that require free resources to support and bolster their current non-formal courses. The research specifically focuses on two MOOCs made in South Africa, one in the formal and one in the non-formal space. It is not arguing that wrapped MOOCs should or could replace HE accredited courses or degrees. It aims to explore if MOOCs can be used to expose marginalised youth to new fields, new technologies and train young people to enter the workplace and play

a role in supporting students throughout in South African universities (Czerniewicz et al., 2015, p.6).

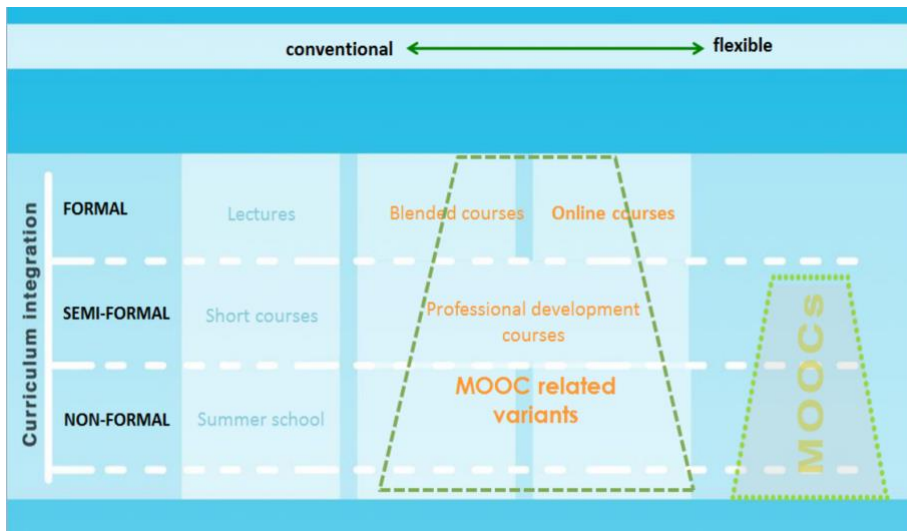


Figure 2: Curriculum landscapes developed by the UCT Centre for Innovation in Learning and Teaching (Czerniewicz et al., 2015).

When MOOCs first emerged, there were cMOOCs or connectivist MOOCs (King et al. (2018) and xMOOCs or instructionist MOOCs (Bates, 2014). cMOOCs included collaborative and connected learning pedagogy with an innovative approach to learning and emphasis on the participation of students. The underlying foundation is that "knowledge is a social construct and distributed over networks of connections through participants' engagement, self-direction, creativity, collaboration and social networks" (Abdel-Maksoud, 2019, p.3). xMOOCs are the majority of the type being made and characterised by the out-dated (Clow, 2013) and passive learner approach, where the educator primarily creates videos focusing on information transmission without much peer interaction but instead focused on individual learning (Siemens, 2013). Breslow (2016) has reviewed the literature of MOOCs from 2012 to 2015 and has found that xMOOCs are the dominant type hosted on the MOOC platforms (Breslow, 2016, p.57). The ideal would be to create more cMOOCs for non-traditional students but the cost and business model for making MOOCs by HEI has proven not to be sustainable. Therefore the research argues that existing MOOCs can play a more significant role in society to provide access to HE through wrapping them for non-traditional MOOC takers.

2.3 The failure of MOOCs to be inclusive to youth from South Africa

The co-founder of Coursera, Daphne Koller, had pledged to provide free education for all, but by 2014, it was apparent that this was impossible. MOOCs by the nature of being online would exclude more than 50 per cent of the population indicated in the table by Internet World Stats (2020) who have no access to the Internet.

INTERNET USAGE STATISTICS **The Internet Big Picture** **World Internet Users and 2020 Population Stats**

WORLD INTERNET USAGE AND POPULATION STATISTICS 2019 Year-End Estimates						
World Regions	Population (2020 Est.)	Population % of World	Internet Users 31 Dec 2019	Penetration Rate (% Pop.)	Growth 2000-2020	Internet World %
Africa	1,340,598,447	17.2 %	526,374,930	39.3 %	11,559 %	11.5 %
Asia	4,294,516,659	55.1 %	2,300,469,859	53.6 %	1,913 %	50.3 %
Europe	834,995,197	10.7 %	727,814,272	87.2 %	592 %	15.9 %
Latin America / Caribbean	658,345,826	8.5 %	453,702,292	68.9 %	2,411 %	10.0 %
Middle East	260,991,690	3.9 %	180,498,292	69.2 %	5,395 %	3.9 %
North America	368,869,647	4.7 %	348,908,868	94.6 %	222 %	7.6 %
Oceania / Australia	42,690,838	0.5 %	28,775,373	67.4 %	277 %	0.6 %
WORLD TOTAL	7,796,615,710	100.0 %	4,574,150,134	58.7 %	1,167 %	100.0 %

NOTES: (1) Internet Usage and World Population Statistics estimates are for Dec 31, 2019, as of March 3, 2020. (2) CLICK on each world region name for detailed regional usage information. (3) Demographic (Population) numbers are based on data from the [United Nations Population Division](#). (4) Internet usage information comes from data published by [Nielsen Online](#), by the [International Telecommunications Union](#), by [GfK](#), by local ICT Regulators and other reliable sources. (5) For definitions, navigation help and disclaimers, please refer to the [Website Surfing Guide](#). (6) The information from this website may be cited, giving the due credit and placing a link back to www.internetworldstats.com. Copyright © 2020, Miniwatts Marketing Group. All rights reserved worldwide.

Table 1: Internet users according to continent usage (World Internet Stats, 2020)⁴

In 2011, commentators hoped that MOOCs could be inclusive of students from impoverished communities because of the lack of registration fees to enrol (Lambert, 2020, p.2) and the attraction to courses taught by world experts from renowned universities. The MOOC commentators became more sceptical as the years passed. This headline, in particular, summed up what the general consensus was, "80 percent of MOOC Students Already Have a College Degree, So far, MOOCs appeal mostly to privileged students. What happened to the education revolution?" (Daly, 2013).

By 2016, the criticism was widespread that MOOCs would not live up to the hype and could not be inclusive of the "those without access to higher education in developing countries were conspicuously underrepresented among the early adopters" (Bennett & Kent, 2017, p.12 citing Christensen et al., 2013). The investment in MOOCs by HEI seemed to be increasing

⁴ <https://www.internetworldstats.com/stats.htm>

the gap between the “have and have not” (Laurillard, 2014) and critics described MOOCs as an expensive marketing tool to profile the reputation of the HEI to attract international students. An early study by the University of Pennsylvania found that Coursera users were predominantly male, well-educated, or had a degree and were using MOOCs to further their careers (Bennett & Kent, 2017). They found that despite MOOCs being revolutionary and promising to democratise higher education to overcome the boundaries of high fees, admission requirements and physical location, it was not inclusive for “non-traditional students.” (Bennett & Kent, 2017, p.12). They define non-traditional students as those not formally accepted into university because of their context, namely being from poor backgrounds and having no history of family members who attended university (Bennett & Kent, 2017, p.12). In this research, the non-traditional students or unemployed youth from impoverished areas are referred to as youth from marginalised areas.

Jaffer, Govender & Brown (2017) comment that MOOCs could not respond to the problems facing HEI, especially in providing universal access to all (p.208). This lack of inclusivity towards some learners is attributed to the intrinsic design of MOOCs that is only accessible online, hence excluding marginalised youth, especially in the global south, marked by challenges in Internet connectivity, digital technologies and experiences of self-directed learning (Rambe and Moeti, 2017). Other barriers include MOOCs being presented predominantly in English (Lambert, 2020), and the financial costs, namely that the MOOC platforms moving from providing free courses to charging fees for specialised MOOC courses and targeting corporates for upskilling employees. This commodification of MOOCs was a significant blow to the model of free education for all (Lambert, 2020). Coupled with the suggestion by edX⁵'s president, Agarwal (2014) in a TEDTalk pointed out they were using the blended model by licensing MOOCs to universities at a fee to enable MOOCs to be used like textbooks. He stated that youth were already using more digital technologies than previous generations and education should look towards gamification and technology to give access to education. This moved the debate firmly into MOOCs as a commercial rather than altruistic opportunity for HEI (Bennett & Kent, 2017, p.12).

⁵ edX is a MOOC platform founded by Harvard and MIT, is has 20 million learners and hosts.
<https://www.edx.org/about-us>

Sharma (2014) acknowledged the delusion about MOOCs and that a course created by educators in the global north does not consider the context, intellectual and technological barriers facing students in the global south and therefore it fails to be inclusive. She wrote about a MOOC 2.0 platform from the global south that would ideally take and seek to address the needs of those “at the bottom of the pyramid” (para.6).

Despite the missed opportunity for MOOCs to be “open” for all, this research supports the optimism of Khan, Hameed, Yu, Islam, Sheikh & Khan (2018) that MOOCs still have value within and beyond the HE sector. They argue that MOOCs provide practical yet alternative learning models, given the high cost of education and accessibility problems facing marginalised youth excluded from accessing higher education. However, MOOCs are not just physically inaccessible; they also exclude these youth at a pedagogical level because they require learners to have the discipline, experience and context conducive to self-directed learning.

Currently, there are around 13 500 existing MOOCs (excluding Chinese MOOCs) on global MOOC platforms that are available online. Oyo & Kalema (2014) respond to the failure of MOOCs to be inclusive of African students by arguing that MOOCs could be an affordable undergraduate education delivery method for the majority of poor students on the Africa continent. Indeed, MOOCs could eliminate Africa's significant school dropouts if they can be used in secondary school education to provide bridging courses or skills to become familiar with online learning (p.3).

The research resonates with Bates's (2014) belief that MOOCs will be a small part of non-formal learning, but it is still niche and significant to warrant its place in the landscape of HE. Commentators widely agree that MOOCs do not necessarily provide 'free education for all' and point out that generally MOOCs succeeded in extending access to the privileged and educated (Laurillard, 2014). The research argues that MOOCs still hold value in expanding access to those excluded from taking MOOCs, but expansion requires more than an Internet connection or computer laboratories. The point is that MOOCs should not be written off as expensive marketing tools that are used by participants who already have a high level of access, but rather seen as opportunities to expand the diverse offering of educational resources in a dynamic and challenging context of HE. By arguing that wrapped MOOCs may have the potential to be inclusive of the non-traditional MOOC taker, this research also points to the lessons learnt in wrapping MOOCs made in South Africa for the global south.

2.3.1 The arrival of MOOCs in the South African HE sector

MOOCs are still an unknown phenomenon outside of the HE sector in South Africa. Since 2014, three of the top universities have embarked on making MOOCs in the country despite the finding that it was intrinsically limiting for learners from poorly resourced communities who did not have access to digital technologies and the Internet.

The first university to jump on the global MOOC bandwagon was the University of Cape Town (UCT) with the former Vice-Chancellor Dr Max Price allocating strategic funding for the design of 12 MOOCs (Czerniewicz et al., 2015). These MOOCs were made as a pilot project aimed primarily at showcasing the teaching and research excellence of the university. Czerniewicz, Deacon, Fife, Small & Walji (2015) detailed how UCT's Centre for Innovation in Learning and Teaching (CILT) chose MOOCs according to a list in Figure 2.

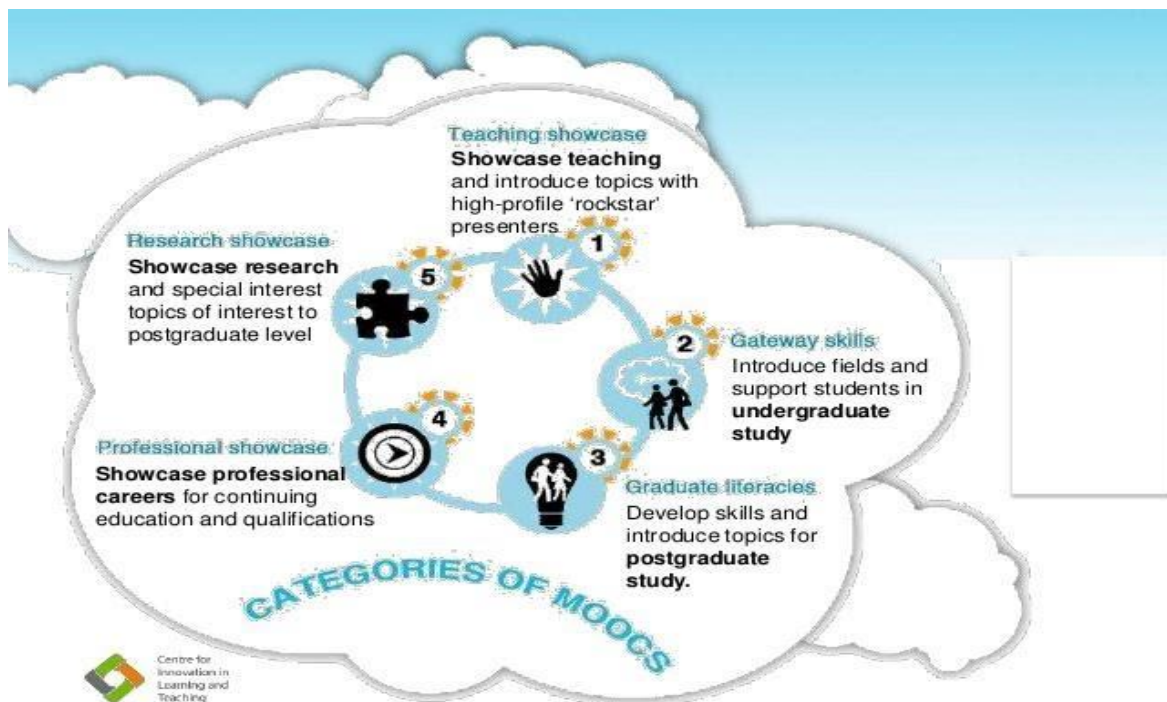


Figure 3: UCT MOOC categories for type of MOOCs (Czerniewicz et al. 2015, p.4)

The overarching goal was to build internal capacity where CILT would have the staffing and experience to move to blended and online learning through the production of MOOCs. This research explores MOOCs that fit into the "gateway skills" and "professional showcase" categories, as appropriate interventions to impact the youth bulge.

Besides the innovative aspect, MOOCs are an expensive undertaking for universities with Czerniewicz et al. (2015) finding that Northern universities' expenditure for MOOC production ranged between US\$39 000, while in an interview with *Class Central*, UCT CILT members estimated the cost between R300 000 to R600 000 per course (Pickard, 2017, para.5).

Czerniewicz et al. (2015) point out that despite the expenses incurred by MOOCs, HEI should seek out organisations and institutions to co-create low-tech solution-driven MOOCs for a South African context, while ensuring that they are producing global south content (Czerniewicz et al. 2015, p.9). The research positions itself in a similar space.

In 2017, UCT CILT successfully produced 10 MOOCs with 200 000 learners enrolled in their MOOCs, specifically from Africa. According to Sukaina Walji, Course Curriculum Head of CILT (who was interviewed) around 16 percent of the UCT MOOCs takers were from African countries with half from South Africa. This is significant as their MOOCs are attracting local markets meaning there is preference for content that is relatable to an African or global south context. Currently, UCT has produced 23 MOOCs with research papers published and have built up a global reputation for making MOOCs that have extended their reach across Africa and abroad (Pickard, 2017).

Ultimately the benefit of the MOOCs made at UCT has been to build capacity for online learning. This was confirmed in an article where the UCT MOOC co-ordinator explained that MOOCs indicate a move to an online and blended approach and is making studying more feasible for those fully employed (Burger, 2016). The research explores if taking a MOOC gives youth from marginalised backgrounds an experience and confidence to do blended and online courses.

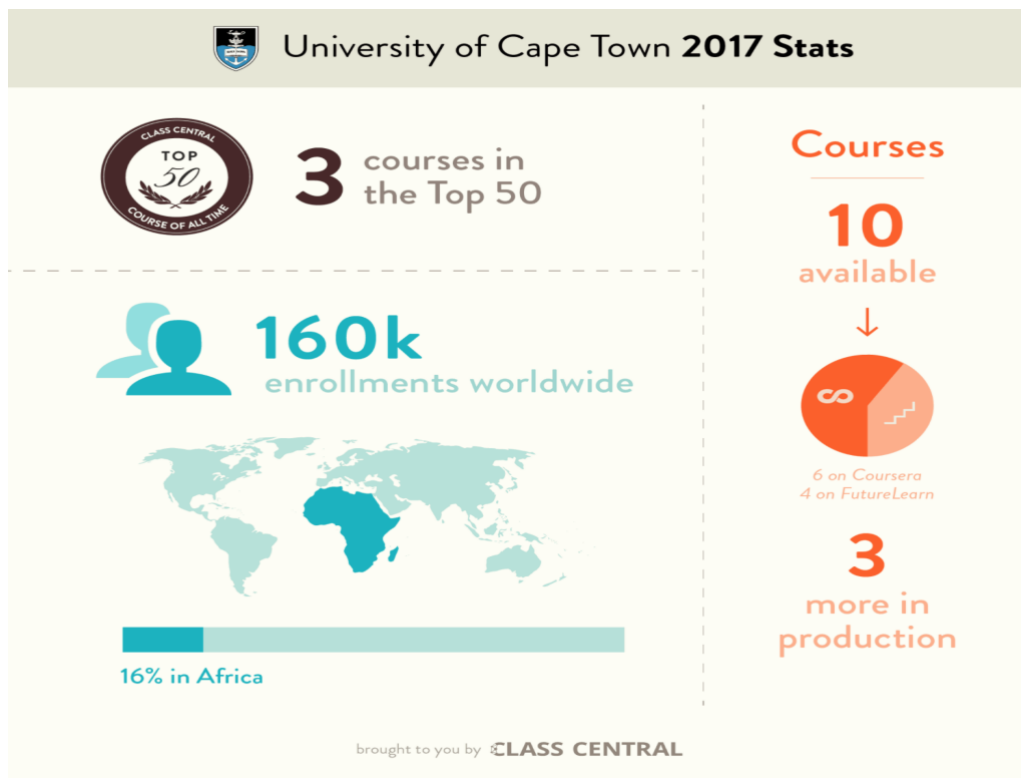


Figure 4: Class Central diagram of UCT MOOCs enrolment statistics during Covid-19 pandemic (Pickard, 2017)⁶

Recently a South African university has had a massive spike in the use of their 23 MOOCs because of the Covid-19 pandemic and the shutting down of the global HE sector. The move towards emergency remote teaching (ERT) has resulted in the "Becoming a changemaker: Introduction to Social Innovation" MOOC having 65 000 registrations (April 2020).

The University of Witwatersrand also made five MOOCs on the EdX platform. The University of Stellenbosch has created four in collaboration with FutureLearn. Despite these MOOCs produced in South Africa, the vast majority of students attending the universities providing them are unaware of what a MOOC is or that it is free online (News24, 2016).

The literature points to an acknowledgement that early users of MOOCs have degrees and are computer savvy. However, there still exist opportunities to extend and supplement formal education to non-traditional, diverse groups of students and learners (Schmid et al.,

⁶ <https://www.classcentral.com/report/university-of-cape-town-moocs/>

2015, p.126). This research concurs with Schmid et al. (2015) that wrapping a MOOC is not to replace opportunities for this group to attend residential universities, but rather to aid learning to those who need access to HE, whether or not affiliated to any particular institution.

2.3.2 Emerging models of MOOCs

Wenger-Trayner et al. (2015) point to the evolution of higher education where universities have the opportunity to convene landscapes of practice, by co-constructing new forms of knowledge and new methods. The research locates itself within the "opportunity of informal learning" and the demands for skills development to secure better employment chances. Wenger-Trayner et al. (2015) also predict that current models of formal education are becoming out-dated and may not work in a future where the workplace skills have evolved with the rapid impact of digital technologies.

Therefore, despite the failure of MOOCs to live up to their potential to make education accessible to all who require it, the research aligns with Bruff, Fisher, McEwen & Smith (2013). They contend that even though MOOCs are a stand-alone course, their place in the landscape of HE is an opportunity to be relevant as part of blended or hybrid courses

(p.188). This research is interested in the landscape of HE where MOOCs exist and how they can move across this landscape to be more inclusive of non-traditional MOOC participants. Czerniewicz et al. (2014) agree with Bruff et al. (2013) that MOOCs open up flexible delivery of courses within the informal and formal domains to repurpose them to extend and provide access to HE to non-traditional MOOC audiences (Czerniewicz et al., 2014, p.11).

Mapitsa, Khumalo, Engel & Wooldridge, 2019 (2019) argue that despite the disappointment in MOOCs as a panacea for access to education, the role of MOOCs is still relevant in Africa. MOOCs hold "greater promise for collaborative learning, and because of the opportunities for student-generated content, they are also useful for contextually relevant learning" (Mapitsa et al., p.2) citing Castillo et al. (2015).

Several models emerged from MOOCs, and the focus of this research is on the wrapped MOOC model. The models presented by Figure 5 give brief explanations of the various types of models developed by UCT's CILT (Czerniewicz et al., 2014) as part of the landscape of educational provisions.

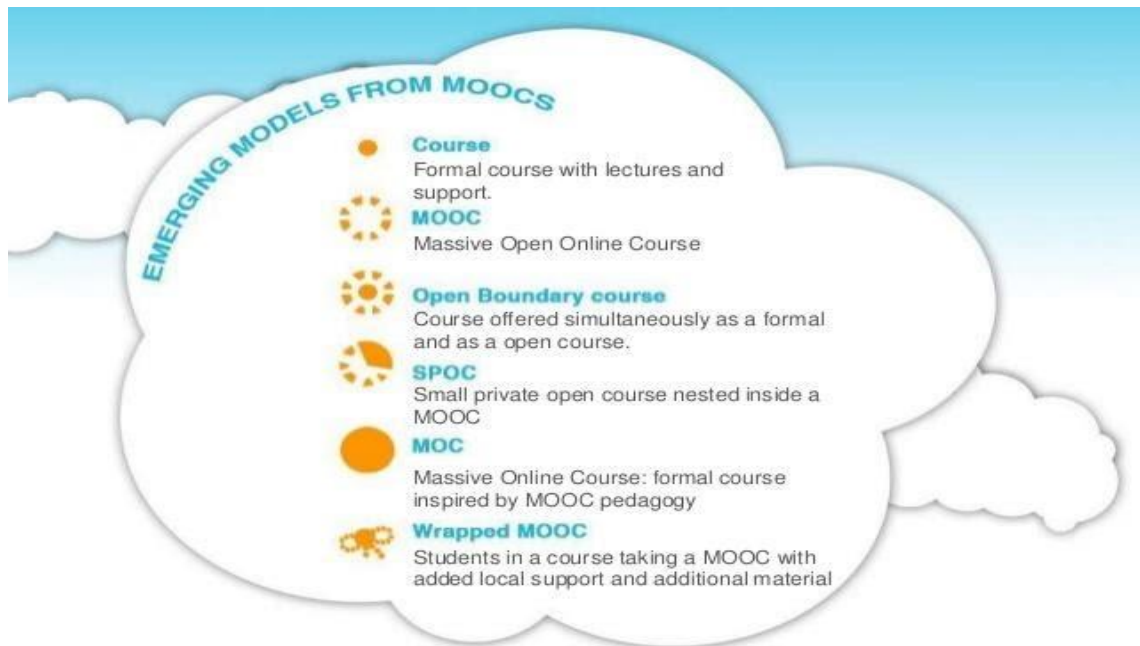


Figure 5: Emerging models from MOOCs (Czerniewicz et al., 2014)

The diagram by UCT's CILT presents a list of models that can enable MOOCs to operate as resources for regular or formal teaching (CILT website, 2014). The list on the website indicates that MOOCs can be used in flipped courses, blended in face-to-face sessions, used in corporations for employees' professional development. Finally the model that this research focuses on is the wrapping of a MOOC to provide resources for students in face-to-face classes.

It is sufficient for this research to acknowledge the existence of SPOCs (small private online courses) and MOCs (massive online courses), found both in the formal domain and blended or flipped courses. Blended online, flipped classrooms and wrapped MOOCs are very similar in that they all combine a hybrid model between utilising online, offline resources and face-to-face teaching. The difference between blended courses and wrapped MOOCs, is that a blended course takes place in the formal context, whereas a wrapped MOOC can take place in both the formal or informal context. According to Adinda & Marquet (2018), blended courses are used in multiple ways, but it is a formal education program where a student can learn through online and face-to-face sessions. Flipped classrooms utilise MOOCs as offline or online resources for “fee-paying students” (Czerniewicz et al., 2014, p.11) in a formal setting in preparation for face-to-face discussions in class. Bruff et al. (2013) citing Caulfield, (2012) found that MOOCs can be used as a blended course by "wrapping" their course around existing

MOOCs and using the MOOC videos and resources instead of creating new materials. The idea of a blended approach using MOOC resources will be looked at in the two case studies in this research.

According to Czerniewicz, Deacon, Small & Walji (2014) the boundary between the formal and informal domains are impermeable from the student perspective. This boundary between the two domains is where the research locates itself, exploring how to make it more porous to allow for the benefits of MOOCs to be extended to non-traditional students. Therefore MOOCs are being used in a multitude of ways and for a multitude of purposes. The adaptability of MOOCs allows for their reusability in various contexts.

Currently, with the Covid-19 pandemic, MOOC platforms such as FutureLearn, Coursera, EdX and Canvas have partnered with hundreds of tertiary and other institutions and have between them enrolled about 10 million students. It is notable that although African enrolments represent the lowest proportionally, they are on the rise.

2.3.3 Characteristics of wrapped MOOCs

The research explores two wrapped MOOCs made in the global south to investigate if they have characteristics that could extend access to HE. Research on online interventions often explores the affordances of online spaces (Gibson, Ostashewski, Flintoff, Grant & Knight, 2015). Affordance refers to “the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used” (Bower, 2008, p.5 citing Norman, 1998). MOOCs for instance might have the “perceived affordance” of openness or accessibility, but to what extent are they accessible? In the research the focus is not on the existing properties or affordances of MOOCs per se, but rather on characteristics that could be built into wrapped MOOCs in order to make them provide the affordance of accessibility. The characteristics are not fixed and could be adapted in particular contexts. The research investigates two wrapped MOOCs that were taken by students from marginalised communities to determine if there were specific characteristics present in the wrapping that allowed these students to gain access to the HE content. If so, the characteristics will be used to create guidelines for future wrapping of MOOCs to be more inclusive towards youth from marginalised communities specifically in South Africa.

2.3.4 What is a wrapped MOOC?

The research draws on Jaffer et al. (2017, p.208) explanation of ‘wrapping’ as follows: "MOOCs used as textbooks or OER, where local users or facilitators select the content they wish to engage with, shifting the primary site of learning from the MOOC to the face-to-face context". Wrapping a MOOC can be used in a similar way in a classroom as educators use textbooks. Kloos, Muñoz-Merino, Alario-Hoyos, Ayres & Fernández-Panadero (2015) found several ways to wrap a MOOC. These include: wrapping a MOOC as part of a flipped classroom setting, as preparation material for a course, as part of tutorial facilitation without the teaching component, as tutorials or assessments for a taught course, and as part of online meetup facilitation replacing a course (Deacon, et al. 2018, p.6). They found that the wrapped MOOC utilises a variety of methods that include an aspect of both face-to-face and online or offline components. The wrapped MOOC usually takes place in a formal university course. However, it could feature in a flexible and non-formal domain with flexible curricula to provide access to a university course and expand its reach beyond HEI. As such, wrapped MOOCs can be part of conventional formal teaching or used outside a university course landscape (p. 62). The idea that existing MOOCs need not be wasted but rather wrapped in the free domain to extend HE access to the youth bulge who desperately need some level of HE is at the core of the appeal for wrapped MOOCs.

The research reiterates the argument by Deacon, Jawitz, Small & Walji (2017) that if one understands how learners in a local context engage and experience wrapped MOOCs, this could help design strategies to assist more educators and learners to “take advantage of MOOC learning opportunities” (p.67). The research responds to this idea by aiming to explore local and marginalised youths' experience of taking a wrapped MOOC to understand what worked and to adopt these guidelines to various stakeholders who require the educational content. It specifically looks at how to wrap a MOOC to be inclusive of a global south student. The general approach to wrapping a MOOC discussed in the literature does not prescribe guiding principles when wrapping for a specific audience. Deacon et al. (2018) admit that they did not know how UCT MOOCs were being wrapped or used in all instances but hoped that they created opportunities in the online course landscape. They differentiated between "different (intended) institutional and (unintended) non-institutional forms of wrapping" (Deacon et al., (2018, p.63). Therefore, it was not the intention of MOOC educators to wrap the MOOC but instead

opened up the possibilities for others outside of the institution to wrap the MOOCs for their purposes.

Wrapping for various audiences is more straightforward when the content in the MOOCs is under Creative Commons license (Deacon et al., 2018). The UCT MOOC materials were all made available as Open Education Resources (OER) to allow for the legal use or copying of the course materials and to extend the wrapping beyond those educators who created the MOOC. Currently, the process of wrapping is still complex for those organisations or youth programmes outside of the university that makes MOOCs. This will be discussed further in the following chapters but it is important to note that MOOCs released under Creative Commons licenses make the wrapping far easier.

2.3.5 Forms of wrapping

Wrapping a MOOC can be done in a multitude of ways taking into consideration the context, the need for resources, the students and the educator driving the way it takes place. Deacon et al. (2018) unpacks the various forms of wrapping making the point that it is a fluid process and generally customised to the type of course and learning outcomes set by a specific educator (Deacon et al., 2018, p.68). They also found that MOOC educators were motivated to wrap MOOCs because it cut down on time pressure and overcame constraints of formal academic programmes when they were able to use these online resources in established courses (p.67).

However, the literature points out the most common ways that MOOCs get wrapped. These include a process whereby an educator or instructor chooses parts of the MOOC to use within a face-to-face course (Bruff, Fisher, McEwen & Smith, 2013). Other models include ‘add-in’ and ‘add-on’ forms of wrapping (Deacon et al., 2018, p.63). Add-in refers to a model where an educator incorporates MOOC resources or selection of them into an existing course or curriculum. Here, the MOOC resources complement the course material. ‘Add-on’ is where an educator takes the entire MOOC and uses it as a course (p. 63). Jaffer et al. (2017) explain the ‘add-on’ model is supported by face-to-face or meetup sessions with facilitation in a group. Deacon et al. (2018) found that these variations of wrapping can take place in the formal (inside a university) and informal domains (outside the university). However, most often, the informal wrapping process takes place without the involvement of the MOOC creators and can happen organically (p. 63). In this research, two wrapped MOOCs are used as case studies in formal

and informal domains. These case studies used the 'add in' model where the MOOCs were taken on the platform in their entirety in computer laboratories. The face-to-face sessions were designed by the educators as extra course work around the MOOC content. But there is a whole spectrum in the 'add in' model where some MOOCs can be used like textbooks and not in its entirety on the platform. But only some videos or resources from the MOOC are used to add into a course.

Deacon et al. (2018) underline that the wrapped MOOC approach is appropriate in an informal education setting where the learning is needed for self-advancement and to improve one's life (p.63). Deacon et al. (2018) also found that wrapped MOOCs can be an effective way of "reaching people less likely to take a MOOC on their initiative and who may benefit from additional support" (p.61).

Bruff et al. (2013) pointed out that wrapping MOOCs can give instructors a sense of community with other instructors, with the potential of opening up collegial links and collaboration across disciplines and institutions. They hope this will lead to an open "world repository" (p.197). However in a study on wrapped MOOCs from UCT, Deacon et al. (2018) reported that educators who relied on informal wrapping off-campus did not know who wrapped their MOOCs. They point out that MOOC platforms such as Coursera and FutureLearn would allow for wrapping of courses for universities but would prohibit non-MOOC makers unless specific requests were made (p. 67).

The research is aiming to explore if a MOOC made in South Africa can be wrapped to be inclusive of characteristics that make it more accessible to youth from marginalised communities. These characteristics could also be adapted to blended courses that has become more popular after the Covid-19 pandemic where HEI adopted this approach to include formal courses with online and face-to-face components.

2.4 Types of access to Higher Education

As mentioned in Chapter One, the idea that MOOCs can provide access to HE as a solution to youth unemployment would be simplistic and sweep over the systemic inequalities that exist in both the HE sector and the country at large. However, it does not undermine the value that existing MOOCs can extend HE to non-traditional students and provide supplementary educational resources to programmes that are targeting the problem of youth unemployment. According to Adam (2019), MOOCs can only attempt to create a partial

experience for HE, as attending a physical university is still by and large reserved for the privileged. This research incorporates Mbembe's (2016) definition that “access, we are also saying the possibility to inhabit a space to the extent that one can say, ‘This is my home. I am not a foreigner. I belong here’. This is not hospitality. It is not charity” (p.30).

This research is not making an argument that taking one wrapped MOOC is similar to having access to an entire HEI experience. Wrapped MOOCs, as mentioned earlier, can be part of the informal or formal domain and provide an opportunity to extend access to marginalised students not able to attend residential universities or students in university feeling excluded epistemologically.

That said, access to HE is nuanced and complex, with Sehoole & Adeyemo (2016) distinguishing between two types of access to HE into social and epistemological access. Social access is subdivided into physical and digital access that means to ensure students have access to the physical facility of the institution, as well as access to digital technologies and ICT connectivity required to operate in an HEI. Sehoole & Adeyemo (2016), citing Cele & Brandt (2005), state that physical access also includes the qualifications or admission requirements to enter higher education.

Sehoole & Adeyemo (2016) argue that social access is required to ensure all students have equal opportunities to succeed in HE and creates a “virtuous cycle of growth and reducing poverty and inequality” inherited from apartheid era (Sehoole & Adeyemo, 2016, p.13). Providing social access to marginalised communities in poor areas, according to Walker (2018), enhances the capability and well-being of the students as part of education development and access (p.558). Walker (2018) concurs that arguing for access to educational resources is not sufficient; it is how the student has 'agency' to make choices, work towards goals and develop the capacity to critically think and learn (Walker, 2018, p.558).

2.5 MOOCs and issues of access

In the case of MOOCs, digital access prevents epistemological access. The students without Internet access cannot enrol on the MOOC and therefore cannot engage with the content or engage with the content of the MOOC. This brings up the more complex type of access, that of epistemological access. Morrow (1994) describes epistemological access as political, because it is about giving the students the ability to receive, engage and critically assess disciplinary content and knowledge through academic literacies (p.33). It was evident

during the #FeesMustFall protests that the call for decolonisation of the curriculum, financial redress and transformation in HE in South Africa was central to the demands of students enrolled in HEI. According to Nyamnjoh (2016), this “is ample demonstration of how little has changed for the better in Africa's higher education institutions to make them truly accessible and relevant to Africa and its peoples” (p.11). Arguing for MOOCs to be more inclusive of students from the global south, especially in Africa would be superficial if it did not include the interrogation and redress of the type of knowledge system these MOOCs are perpetuating (Adam, 2019).

The majority of existing MOOCs fail to provide both social and epistemological access to marginalised youth in South Africa precisely because of their intrinsic design and having been produced in the global north, where 94 percent (Figure 2) of the population have Internet and digital technologies. A MOOC is not an educational product produced with learners in the global south in mind, who may have intermittent Internet and limited or no digital technologies. Despite the MOOCs requiring no prior qualifications and open access to anyone - there may be a barrier to social access because an experience and knowledge of self-directed learning is needed.

"Anyone with internet access can arguably enrol in a MOOC but possessing the confidence to know what to do and how to do it, once 'in' a course is a different proposition" according to Bennett & Kent (2017, p.16). The early xMOOC design remained the prototype for this type of access. Here, the assumption appeared to be that access alone would be sufficient for non-traditional students to be able to confidently participate and competently complete the learning activities of a given course" (Bennett & Kent, 2017, p.16). MOOCs are like any formal online courses where there is no face-to-face classrooms or physical presence and synchronised learning. Therefore, young people from poor households who have only experienced primary education cannot be expected to be familiar with signing up for a MOOC. The isolation of independent, self-directed learning (Bennett & Kent, 2017, p.16) and engaging in the forums, adds another layer of complexity and therefore MOOCs taken in isolation may not necessarily provide social access to this cohort.

The existing MOOCs made in the global north should not merely be taken and used without critical thinking and localisation of content. King et al. (2018) warn that MOOCs made mainly in the global north can create a dilution of local academic culture and academic nationalism, which can reinforce north dominance and an imbalance in the flow of knowledge

from south to north (p.7). The fact that this criticism of MOOCs urges stakeholders not to blindly accept them, even if they are free for students from poor communities in the global south, is echoed by Adam (2019).

Adam (2019) criticised MOOCs for being a form of digital neo-colonialism, where globally north made MOOCs are adopted. She warns that educators who are teaching diverse participants should interrogate these MOOCs as they could erode local and indigenous knowledge systems (Adam, 2019). She further argues that MOOCs made in the global north and hosted on global north platforms, have digital technology inequalities embedded in "Western-centric epistemologies" (Adam, 2019). She says the "digital divide is an exacerbation of historical inequalities"(p.365). Such platforms tend to embed Western-centric epistemologies and propagate these without questioning their global relevance (p.365).

Therefore, the research revisits wrapping a MOOC as an opportunity to interrogate the knowledge accessed through a global north MOOC platform. Wrapping the MOOC could also provide the opportunity to include local content, or context sensitive materials rather than dumping MOOCs on unemployed youth without any scrutiny or reframing. The type of knowledge that MOOCs are imparting is critiqued especially in the global south. The wrapping should not perpetuate but rather interrogate the legacy of colonisation and apartheid in HEIs that remain largely Eurocentric (Heleta, 2016).

The process of wrapping a MOOC to make it accessible to marginalised youth, therefore, becomes a social justice exercise related to HE access and local relevance. Global south educators used similar arguments for the creation and distribution of OER resources made there. Hodgkinson-Williams & Trotter (2018) question who has the right to decide on what counts as legitimate knowledge. Citing Luckett & Shay (2017) they point out that reframing is inadequate and rather the inclusion of those excluded from the frame-setting itself is needed for a transformative response to take place (Hodgkinson-Williams & Trotter, 2018, p.208). Their research frames the access of wrapped MOOCs in a similar way where it calls for the inclusion of all stakeholders when making educational resources. Hodgkinson-Williams & Trotter argues that students being targeted by OER should not be framed as charity cases (p.208). Similarly, MOOCs made in the global south can "rebalance the skewed global networks" (Czerniewicz et al., 2017, p.8) and when included can broaden access to HE when the ideals of openness and licensing is integrated into MOOC making. The research resonates with these ideals which also underpinned the production of OERs.

During Covid-19 shutdown of HEI, the shift to online courses increased the popularity of MOOCs and also how learners felt able to choose their own pathways to accessing HE. This disruption to HE and the awareness of online courses meant that these students have more choices and pathways to accessing HE instead of feeling like the only option is to get into a HEI.

2.6 The Conceptual Framework

The research utilises the social learning theory of Landscapes of Practice (LoP) from Wenger-Trayner et al. (2015) as a conceptual framework for responding to the research questions about the characteristics of wrapped MOOCs as boundary objects. The reason for this choice is that MOOCs offer great potential for social aspects of learning (Bates, 2014, p.147) and the LoP concepts has a congruous application into the specific wrapped MOOC case studies.

Social learning theory was proposed in the late 1990s as a cognitive process that takes place in a social context, where the learning happens in the relationship between the context and the learner. Wenger (2010) locates the theory of Communities of Practice (CoP) within this social learning framework. The CoP approach was a constructivist one that challenged the cognitivist approach. CoP contends that learning is an individual process of acquisition within a social unit that has a complex context (Omidvar & Kislov, 2014, p. 2). Wenger-Trayner et al. (2015) recognised the evolution of the CoP approach to LoP and this research acknowledges the CoP and how the LoP provides a more expansive view of how learning takes place across multiple practices. The evolution resides in the focus from the individual or single practice to discover how a body of knowledge or learning occurs across a “complex system through a number of communities of practice and the boundaries between them” (Wenger-Trayner et al., 2015, p.13).

The reason for choosing LoP is because the research resonates with ideas of social learning theorists who argue that "learning does not rest with the individual but is a social process situated in a cultural and historical context" (Farnsworth, Kleanthous & Wenger-Trayner, 2016, p.3). In their latest book, Wenger-Trayner et al. (2015) explain that learning is socially situated, a process of identity formation, reliant on relational and participatory practices within a shared lived experience of the world with the knowledge embedded in various social contexts (p.9). In applying this theory to young people from marginalised groups,

the acknowledgement of their histories, life experiences, upbringing and access to basic education subsumes that they are passive learners waiting for MOOCs or wrapped MOOCs to give them knowledge. Rather they are framed as stakeholders in the process of making meaning with the knowledge they receive from the wrapped MOOC and processing that through their own feelings, thoughts and life experiences.

The use of this conceptual framework ties into the research's argument that MOOCs create opportunities for social learning, where the experience and bodies of knowledge of the world are accessible through a digital landscape. It is also a response to the invitation by Wenger-Trayner et al. (2015) to apply the theory through looking at the trajectory of marginalised youth and how they can gain learning and modulate their identity through sophisticated practices in the landscape.

This theory was chosen as it fits into the changing nature and business of HE where multiple new practices are springing up to disrupt traditional pathways in the HE sector. A learner has the opportunity to choose from formal and informal domains, private and public institutions, online and non-profit programmes to gain access to HE. Therefore, the agency of the student is evident across the landscape of HE.

In the case of youth from a marginalised community, the landscape would be the various practices that make up the HE sector as well as the workplace which is their ultimate destination to pull themselves out of the poverty cycle. Wenger-Trayner et al. (2015) propose that in a complex landscape of practice, participants can learn from a range of individuals from different contexts, including 'brokers' who have insight across various contexts. Brokers will be discussed in detail, but Wenger (2000) in CoP explains that the boundaries between communities are opportunities for learning where people can "introduce elements from one practice to another" (p.235). In this wrapped MOOC process, the learning designers and educators play the role of brokers between the MOOC platforms and wrapping it for a youth programme or university course. They understand the alignment that is required from both practices to allow for boundary-crossing.

In the landscape, there may be a hierarchy between practices, but no single practice 'subsumes' the other (p.17). Thus, Wenger-Trayner et al., (2015) argue that these barriers are significant as they hold opportunities for learning but also create tensions, require negotiation and are problematic. This means the landscape is "epistemologically flat, politically unequal

and potentially contestable” (p.17). This is important for the research as students from marginalised backgrounds already experience hierarchical structures through being excluded from attending HEI or being blocked from participating in the economy because of a lack of jobs or skills. Each practice creates meaning and a “practice of depth requires a sustained history of social learning” (p.17). An example of this is how the researcher who is a practitioner in making MOOCs is attempting to cross over a boundary into an academic community. The researcher could have a peripheral experience of academia through a Masters dissertation but it only gains a shared history and becomes deeply immersed if she pursues a PhD degree, researchers and publishes papers and eventually will get the legitimacy of other academics once she has built up her competence and practiced as an academic over time.

Therefore the boundary between these practices becomes a learning opportunity for students and in this example, the researcher, who has to negotiate the crossing into this boundary that offers new insights, stimulate ideas of who they are and where they belong. Crossing of the boundary between HE and marginalised communities is framed in the concepts of LoP where ideas of how students learn and what or who they need to cross over the boundary is explored in the research.

Therefore, the choice of the conceptual framework is also significant as it can be used as an application of the LoP in the literature as it is fairly recent despite having its roots in CoP.

2.6.1 Knowledgeability

The research uses several concepts from LoP that will be discussed when analysing the data. The first one is knowledgeability that refers to the way a person learns from various practices, how one becomes familiar with the content, and experiences learning across the landscape. Knowledgeability is a concept that Wenger-Trayner et al. (2015) introduced in LoP to describe the process of acquiring forms of knowledge across practices. They state that, “knowledgeability is not defined with respect to the regime of competence of any single community, but within a broader landscape that includes a set of practices beyond a person’s ability to claim competence in all” (p.23).

In their explanation of knowledgeability, they distinguish it from claims of competence, which was previously discussed under CoP by Wenger (2010) as the level of expertise acquired through engaging with others in the community (p.2). To be competent in a single community is to use the repertoire of resources, understand what matters and what the purpose of the

community is (p.2). Participation in a single community has various levels of competence that can be understood through the concept of legitimate peripheral practice (Wenger, 2010).

Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts, and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice. (Lave & Wenger, 1991, p.29).

Therefore this legitimate peripheral participation illustrates that even in CoP, the various levels of participation were considered to explain how a newcomer gains competence over time until they gain mastery over the community's valued practices.

However, the concept of competence is restrictive in two ways. Firstly, it focuses on a single community's practices, and secondly, it assumes that the goal of any practice is to acquire competence. Wenger-Trayner et al. (2015) explain that while one cannot be competent in all practices, one can be knowledgeable in quite a few practices across multiple communities. They state, "Whereas we use competence to describe the dimension of knowing negotiated and defined within a single community of practice, knowledgeability manifests in a person's relations to a multiplicity of practices across the landscape" (p.23). The research therefore does not aim to evaluate the competence of the students taking the wrapped MOOC. Rather it considers the learning they experienced when crossing over interrelated communities and how participants gained knowledgeability at the periphery of a particular practice like the MOOC, or engaged more in another like the youth programme or university course, and how these different practices influenced each other in the landscape of practice (Farnsworth et al., 2016, p.5).

Participants exercise choice around the degree of mastery they would like to have for certain practices outside a set of books, across multiple social learning units. Hence, for Wenger-Trayner et al. (2015) it becomes unrealistic to expect participants to develop competence in all the practices in which they engage. The research focuses on whether the wrapped MOOCs allows the students from marginalised communities to know the world in a new way, to be curious about their place in the world, ask questions and seek news ways of interpreting what they learnt in relation to who they are and where they come from (Wenger-Trayner, 2013).

2.6.2 Identity

To be knowledgeable in particular practices involves a dynamic process of identification with those practices. “We are not born with complex identities. We become multiplied through our trajectory across the landscape,” (Kubiak, Cameron, Conole, Fenton-O-Creevy, Mylrea, Rees & Shreeve, 2015, p.79). When we cross over a boundary into another practice, the learning impacts on our identity in terms of how we see ourselves in the new practice, whether we failed or succeeded in the transition to experiencing new knowledge, how we felt about the process and where we aspire to go in the future as a result of the boundary crossing. In this way knowledgeability is, therefore, interlinked with identity. For knowledgeability to be long-lasting, participants not only need to engage in the practice but also follow the rules of engagement, often experiencing intense emotions about what they are learning and how it is transforming them in particular ways through the practice. They go through feelings of failure, success, achievement, imagining themselves in the future while being exposed to knowledge that open them up to new possibilities and different ways of interpreting the world. Therefore learning is not just about passively accepting knowledge but also includes the emotional process that a student goes through internally when they move across a boundary, especially one that they previously felt excluded from.

If learning is not just about learning to do, but is also, importantly about learning to be then those who have a role in supporting learning need to pay explicit attention to identity work. (Fenton-O’Creevy, Dimitriadis & Scobie, 2015, p.42).

Again, the focus is on participants acquiring the requisite knowledge to fulfil their aspirations in the landscape and 'becoming' what they imagine as their future identity. Thus, two individuals taking the same course might leverage their knowledge with different motivations, to construct very different identities for themselves.

In an interview with Wenger (2016), he discusses why identity is a focal part of learning. “A key implication for education is that you cannot give people knowledge without inviting them into an identity for which this knowledge represents a meaningful way of being,” (Farnsworth et al., 2016). The quote provides the framing for the discussion of why identity work is integral to this research, and whether the two wrapped MOOC include characteristics to support identity work for students from marginalised backgrounds.

The process of engaging in, belonging to or dipping into multiple practices in the landscape can lead to multi-membership to specific contexts as well as multiple identities to choose from within the landscape (Wenger-Trayner et al., 2015, p.19).

2.6.3 Three modes of identification

During the process of becoming knowledgeable in the field, three modes impact our identities: engagement, alignment and imagination. These three are interconnected and get modulated in particular ways as required, to achieve knowledgeability. For example, some practices might welcome more engagement and imagination than alignment. That said, the three modes are important, since engagement without imagination can lead to routine practice, and engagement without alignment can lead to chaos. These concepts are defined and explained in greater detail below. This research explores how the three modes relate to issues of social and epistemological access. They are applied to investigate whether the characteristics found in the wrapped MOOCs allowed the students to cross the boundary into HE.

- **Engagement**

The theme of engagement is defined by Wenger-Trayner et al. (2015) as the participation in particular communities in the landscape. Wenger-Trayner et al. (2015) found that there is no substitute for engagement as a mechanism for learning regardless of whether it is superficial or involves deeply immersing into the practice (p.20). The notion of participation was also central to CoP. However, engagement looks at participation across various practices and not just in one single practice. But the relationship between the modes makes the learning more effective if engagement is accompanied by alignment and imagination.

- **Alignment**

Wenger-Trayner et al. (2015) define alignment as follows, "Alignment is a central element of a community's local regime of competence, but it is also essential to the functioning of broader systems, such as agreeing on the strategy of an organisation, deciding the laws of a country, or enlisting stakeholders in addressing a global challenge" (p.22). This quote highlights adherence to rules and regulations of the community Interestingly enough, during Covid-19 pandemic, the HE used alignment as a central theme to shift from residential campus to remote teaching, by enlisting several stakeholders like the government, educators, students

and universities to address the impact of the virus. The research explores alignment to adhering to rules and navigating MOOC platforms to overcome the boundary and give access to marginalised youth.

Alignment is not just about compliance to the rules and its also not a one-way process. In the LoP, alignment is complicated by the fact that it acknowledges a two-way process of negotiation where there is a mutual agreement between parties (p.21). Thus, adherence to the rules gives rise to "co-ordinating enterprises, interpretations and context so that action has the effect we expect" (Wenger-Trayner et al., 2015, p.21). Alignment becomes significant for understanding the effects that prescribed rules on existing MOOC platforms have on MOOC takers' learning experience and identity formation. A similar question then governs how wrapped MOOCs revisit alignment to achieve particular forms of engagement.

- **Imagination**

While engagement and alignment structure the learner experiences in the present, the third mode, which is imagination, projects the learner into the realm of reflection and 'becoming'. "Imagination functions inside a community as members make assumptions about each other, recall the past, talk about their future, but it can also travel without limits and is a way to experience identification way beyond our immediate engagement" (Wenger-Trayner et al., 2015, p.22).

Imagination is a mode enabling us to perceive, reflect or imagine who we are, and to see ourselves from various perspectives. The learning process can enable the individual to strive for their aspirations, revisit their beliefs, boost their self-confidence, all of which are critical in one's identity formation. Imagination is also significant because it allows us to interpret our participation in the landscape by taking a step back and reflecting on what we have learnt, and looking at possibilities of where we could belong and who we can become (p. 21).

The three modes are interlinked and tend to overlap. The critical aspect is that our identities are built through the landscape even if we do not necessarily "participate in all practices, but it can become part of our experience" (p.20).

The three modes in combination work effectively to "make sense of the world and our position in it" (p.21). Wenger (2000) explained that each model presents a different aspect of the formation of social learning and identity, and a different level of involvement in work (p.

228). He explained that the work of engagement could be in conflict with the work of imagination or reflection and vice versa (p.228). They are always present but distinctive, and "if one (modes of identification) is missing you have difficulty in negotiating meaning" (p. 21). This also suggests that education needs to "provide support, material, and occasions for all three processes to work in concert" (Farnsworth et al., 2016, p.13). The data will be analysed in relation to these three modes to explain how participants experience the wrapped MOOC and how these modes impact on their learning and identity through the landscape of HE.

2.6.4 Becoming and Belonging in Landscapes of Practice

The theory does not separate learning from the becoming of the learner. That is why identity is such a central concept. If learning shapes identity, an implication for education comes with this knowledge, representing a meaningful way of being. (Farnsworth et al., 2016, p.8).

This quote again emphasises how central identity is in the LoP and at the core of learning is the process of understanding who we are in a social context and also the multiple ways we relate to other practices. It also allows us to imagine where we could be in the future (p.7). Therefore, identity work in the research focuses on how the wrapped MOOC impacts on students perceptions prior and post taking the programmes. This will determine if they have experienced "becoming a person who inhabits the landscape with an identity being built by the trajectory through that landscape" (p.19). Wenger-Trayner et al. (2015) expand on this notion by explaining that the journey through practices causes our identity to change, that it transforms and shapes who we are by incorporating past experiences, projection of ourselves in the future and our experience of identity in the present (p.19).

The trajectory of identity within communities and through a landscape has been a vital focus of both CoP (Wenger 1998) and LoP (Wenger-Trayner et al., 2015), and in both theories, there has been the idea that learning is not just about the acquisition of knowledge. Rather, knowledge is internalised and shifts the identity of the learner through a process where issues of becoming and belonging get reframed.

Wenger discussed ideas of identity as belonging and becoming at a lecture at the University of Brighton in 2013. He embraced the notion of identity as multiple and fluid and based on one's engagement across various contexts within the landscape of practice.

"The landscape shapes our experience of ourselves and in doing so contribute to our identities" (Wenger-Trayner et al., 2015). Thus, in LoP, similarly to CoP, identity is a multifaceted model where a member can belong to many communities and have multiple identities. However, in Wenger (2000) the idea of multi membership was discussed to suggest that our sense of belonging is not uniform across communities, that we can identify with some communities strongly and not with others. We also define who we are by what is familiar and what is foreign, by what we need to know and what we can safely ignore (p. 228).

In LoP the sense of belonging is more complex, for one can belong to more than one context at a given time within the landscape. Hodson (2020) refers to this possibility as "multi-membership"- somebody who is a member or belongs to two or more adjacent communities and can engage in shared learning across more than one domain" (Hodson, 2020, p.507). In the context of this study, this means that there is more opportunity for young people to define themselves and belong to more than one community.

There is also the notion of 'negotiation' that Wenger-Trayner et al. (2015) refer to as the possibility to modulate the degree of participation and identification within the landscape (Wenger-Trayner et al., 2015, p.23). So, one can belong to some communities more strongly than to others. The research thus recognises that LoP creates a more complex trajectory through a landscape with different communities, and therefore does not prescribe the idea of belonging or becoming as predictable.

These concepts of belonging and becoming are significant in discovering if wrapped MOOC provides epistemological access to HE to students from marginalised areas. These students would need to have reflected on who they are becoming, where they belong and possibly imagine their lives in those spaces in the future.

2.6.5 Boundaries of Practice

The research focuses on the practices of Higher Education and the boundary that exists between HE and the communities to which the marginalised youth belong. The landscape is therefore diverse, and "boundaries of practice are unavoidable, not formally marked but unmistakable" (Wenger-Trayner et al., 2015, p.17). In the LoP, "the boundaries hold potential for unexpected learning and crossing a boundary is necessary for living in a landscape of practice" (p.18). The tensions, learning opportunities and traversing across the boundaries of practices are documented by other contributors to the theory of Wenger-Trayner et al. (2015,

p.18). They have asked several questions when exploring the boundary encounters, but the two listed below are worth answering in the research concerning access to HE:

"What kind of boundary objects and activities can support this boundary orientated pedagogy and create points of focus for engaging multiple perspectives?"

"Who can act as brokers to articulate regimes of competence across boundaries?"

The research explores LoP's concepts of knowledgeability, boundary objects and identity in more complex and nuanced ways. The LoP is described as a "plug and play" theory (Farnsworth et al., 2016, p.3) to suggest that the theory can be applied to a variety of settings without the theory being prescriptive. Wenger-Trayner et al. (2015) predicted the evolution of higher education means there is an opportunity to co-construct new forms of knowledge and new learning practices in a complex landscape, where formal and informal practices are valuable. MOOCs present a new learning practice that can be a catalyst for HE to co-construct new forms of knowledge. Wenger-Trayner et al. (2015) also state that the variety of offerings through informal courses could better respond to the changes in the workplace. However, this provides an opportunity for HEI to "play a convening role across a complex landscape" (p. 158). Given the arguments in the literature, the opportunity to specifically wrap MOOCs to create new ways of engaging in HE courses and extend access in the global south to non-traditional students, this research resonates with Wenger-Trayner's et al.'s (2015) surmise.

The recent impact of Covid-19 pandemic and the emergency shift to Emergency Response Teaching (ERT) for most of the global HE sector have shown that retaining the traditional and formal ways of teaching and learning has not prepared universities on how to manage the disruption of shutting down the residential campus. Universities across the world have had to revisit business models to find revenue for the loss of international students as well as the potential for providing new revenue streams. Therefore, an inclusive and innovative approach is required to attract and deliver a diverse offering of informal and formal courses (Dennis, 2020).

2.6.6 Boundary objects and the role of brokers

Closely linked to the boundaries or barriers in a landscape is the boundary object, which Wenger (2000) describes as objects that support connections between practices and allow for members from one community to cross over into another community (p.236). These boundary

objects are not brokers but rather come in the form of artefacts, discourses and processes (p.236). Brokers are people who can have legitimacy or knowledge of different communities and introduce elements from one community to another (Wenger, 2000, p. 235). In this research, the wrapped MOOCs are explored as potential boundary objects, and the educators, facilitators or learning designers are seen to be the brokers.

The research explores whether MOOCs when wrapped can be considered as having potential as a boundary object that effectively allows for the marginalised students to cross over to the HE community. It can be argued that all MOOCs are also boundary objects because they will empower a participant in an online community or course that includes activities. They may not be successful or effective boundary objects and may not provide knowledge and practices of other communities. Perhaps MOOCs have become boundary fortifications in keeping content and knowledge for an elite few who knew how to engage with them. Possibly there can be boundary objects that are effective and less effective. This research focussed on the design of wrapped MOOCs and whether it can facilitate access across the boundaries of different communities. The aim was to discover if wrapped MOOCs can provide knowledgeable, identity work and ultimately social and epistemological access.

Can wrapped MOOCs cross over the boundaries to enable participants access to particular contexts within the landscape of practice? If the wrapped MOOC is able to allow participants to cross over these boundaries, then Star & Griesemer (1989) would call it a boundary object. A boundary object is defined as an object that is part of multiple communities and can adapt to various contexts despite the "constraints of the several parties employing them, yet robust enough to maintain a common identity across sites" (p.388). The research explores how the wrapped MOOC allows various marginalised groups to collaborate on a standard task or course that is traditionally only available in HE and online.

In order for the MOOC to be accessible to the young person, it could be wrapped following particular guiding principles to become a more effective type of boundary object so it can move from the context of HE to the poorly resourced community. Only if the wrapped MOOC is able to provide learning to poorly resourced students can it function as a boundary object. The marginalised communities in the two case studies explored in this research are assumed to have similar practices and shared knowledge experience by members in the respective communities. The research does not compare or assume that there are similarities between these two marginalised communities.

That said, while boundary objects can mediate between contexts within the landscape, it is not always possible to predict the type of learning that will occur for "boundaries hold potential for unexpected learning" (Wenger-Trayner et al., 2015, p.18). This is because there are different perspectives being shared across those contexts, bringing about new insights and innovations.

Wenger-Trayner et al. (2015) add that the spaces where two communities engage are potentially tension-filled spaces because of the lack of shared context or history, but valuable nonetheless (p.17). The research explores wrapped MOOCs as a potential boundary object that can allow for overlapping pedagogical points for engaging communities. The argument is that through the wrapping, an existing MOOC offers access to a HE course and an experience that is meaningful as it could impact on their identity, trajectory through the landscape and future. This research attempts what Wenger (2000) explains as rethinking wrapped MOOC their design to function as boundary objects to "illuminate how they contribute to or hinder the functioning of learning systems" (p.236).

That said, given the unpredictability of the boundary object, there may be a risk of time being wasted and not much being learnt (Wenger-Trayner et al. 2015, p.18). This is the reason why wrapping a MOOC specifically for this group cannot be random and requires specific characteristics to make it a valuable boundary object. For this, existing MOOCs and their content need to be wrapped and aligned for global south students whose mother-tongue is not English and the knowledge imparted needs to be contextualised or localised for the marginalised youth. Wrapping the MOOC then becomes an opportunity to interrogate the content and reframe it for local contexts.

The research culminates in specific guidelines that can allow for meaningful contextualisation and wrapping of MOOCs for specific contexts. This research goes beyond the existing literature to provide opportunities for those in the youth development and government programmes to use MOOCs by being guided on how to wrap them for a global south context.

The fundamental concepts of the conceptual framework are represented in the diagram (Figure 6) below.



Figure 6: Diagram of the configuration of conceptual framework (©Deane, 2020)

Figure 6 illustrates the link between the LoP concepts and shows how the boundary object works in relation to the marginalised community and HE. The diagram will be referred to repeatedly in the following chapters to frame the findings and discussion. At the top are the two main communities that are the focus of this research, the marginalised community and HE. They are connected by a boundary object that ideally, could enable boundary crossing between both contexts. This crossing could be an opportunity for access to learning. The research explores whether the two wrapped MOOCs under scrutiny could function as such boundary objects and enable access, in this case, both social and epistemological access. These forms of access can then enable knowledgeability in the sense of identity work, if the wrapped MOOC

characteristics can promote the three modes of identification discussed previously: engagement, alignment and imagination (Wenger-Trayner et al., 2015).

2.6 Summary

This chapter has explored the literature on MOOCs, wrapped MOOCs and the opportunity that wrapping provides to offer social and epistemological access to marginalised youth. It further unpacked the conceptual framework used in the research by Wenger-Trayner et al. (2015) Landscapes of Practice that will be used to derive the characteristics required to potentially turn a wrapped MOOC into an effective boundary object that can move across a landscape from formal HE and informal learning communities. The following chapter will focus on the methodological choices made in the research to explore the concept of the boundary object.

3. Methodology

3.1 Introduction

This chapter describes the methodological choices of the research and explains how it guides the analysis chapters. The research adopts a case study methodology and employs ethnographic methods to explore the wrapped MOOC as a boundary object. The researcher's positionality is made transparent. In the following chapters, this positionality is discussed along with the research findings, to enable 'deep theorising' (Lillis, 2008). The chapter discusses the choices for data collection methods, data analysis and ethical considerations. The chapter concludes with how the research was validated and the limitations of the process.

3.2 Research Methodology: Qualitative case study

A qualitative case study approach explored how two wrapped MOOCs could give access to learning in marginalised groups. The reason for choosing the qualitative method as opposed to the quantitative method is because it allows the unpacking of questions like who, what, why, how, when and is used when non-numerical data is collected through observations, interviews and focus group sessions (Saunders, Lewis & Thornhill, 2009, p.151). The descriptive methods also recognise the prior experience of the researcher (p.151). The other reason for choosing a qualitative approach is that it is "interpretative" (Van Maanen 1983, p.522) and aims to construct discursive meaning through analysing worldly phenomena, rather than focus on frequency and other ways of quantifying data (Van Maanen, 1983). The research used a qualitative approach to observe what happens when marginalised youth take a wrapped MOOC within a particular context. Hammersley (2012) who published extensively on qualitative methodology and wrote about participants, argues that the researcher should "allow them to speak on their terms in interviews if we are to be able to understand their distinctive perspectives" (Hammersley, 2012, p.11). He found that a qualitative approach also acknowledges that people interpret situations in various ways, engage with them, and do not just respond to an external phenomenon (Hammersley, 2012, p. 11).

This research used a qualitative method to investigate two case studies similar to Walji Deacon, Small & Czerniewicz (2016) who used this method to explore learner engagement in UCT MOOCs. The research focuses on learner engagement of a wrapped MOOC within marginalised groups justifying this choice because it generalised learner engagement and found the use of quantitative methods appropriate (Walji et al., 2016). However, they highlighted that

when seeking a deeper understanding of what learners experience, "do and say, we must look more closely to learners voices as legitimate evidence to understand engagement"(p.15). The qualitative approach is appropriate to use when explicitly focusing on students from marginalised or resource-poor groups accessing information offline, who are not usually the target of traditional MOOCs that are hosted online.

The qualitative approach is an appropriate choice as the researcher seeks to arrive at findings not steeped in statistical patterns or mathematical processes as in quantitative studies (Golafshani, 2003). The research resonates with the qualitative approach because it is not about drop-out rates, rather it explores access to learning and how the student experiences and thinks about the wrapped MOOC within their contexts. The researcher chose the case study methodology because it allows for the exploration of a bounded context phenomenon, a 'case' through multiple lenses which Baxter & Jack (2008) describe as the unit of analysis measured to determine what the cause is (p.545). The research analysed the process of wrapping a MOOC to gauge the type of characteristics that were present in the wrapping and explored whether they could travel across a landscape of HE.

In this research, the cases are two wrapped MOOCs taken by particular groups of participants. The question posed is whether or not wrapped MOOCs operate as boundary objects that can give access to HE to marginalised youth. Yin (2014) points out that the value of the case study approach is the possibility of asking 'how' and 'why' questions. In this instance, the research is asking these questions of relation to innovation in HE, wrapped MOOCs, and how their effects get experienced in marginalised settings.

The researcher also chose the case study methodology because it "recognises the importance of the subjective human creation of meaning, within limited objectivity" (Baxter & Jack, 2008, p. 545). The students taking the wrapped MOOC construct their subjective meaning about it within their context. However, they give valuable insight into how existing MOOCs can be wrapped in the future to be made into boundary objects. It is one of the advantages of this consultative approach between the researcher and the participant while enabling participants to tell their stories (Crabtree & Miller, 1992). The two case study participants were from South Africa and had never been exposed to MOOCs and therefore had little knowledge of the production of what a wrapping means. Therefore, the researcher gathered these students' stories that described their reality to enable the researcher to understand better the students' learning process (Lather, 1991).

3.3 Research Sites

There were two research sites, the first is a South African university campus and the second an impoverished suburb in Cape Town. The MOOCs were by the same South African university and wrapped in a formal and informal setting respectively. The choice of these two MOOCs being made in South Africa and not in the global north is significant as it affects the research questions:

RQ1: What are the characteristics needed to make a wrapped MOOC an effective boundary object?

RQ2: To what extent can a wrapped MOOC give social and epistemological access to higher education in South Africa.

The first research site is at the same university where the wrapped Writing MOOC was made. These two case studies or MOOCs hosted on the Coursera platform were MOOCs from the gateway skills and teaching showcase categories (see Figure 2). The wrapped Writing MOOC made within the gateway skills category, and the other was the wrapped Changemaker MOOC from the teaching showcase category. The research explored two MOOCs made in the global south because the content was localised before being wrapped in a local setting. The educators of the two MOOCs included local content or characters that were relatable to a student living in South Africa or possibly elsewhere on the continent. The understanding behind this was that the design of global north MOOCs may not be context-sensitive for the global south audience. This distinction is a crucial aspect in the research process and impacts the findings, as wrapping a MOOC made in the global south, will differ in complexity from wrapping a MOOC from the global north.

These two MOOCs were chosen because the wrapping was inclusive of marginalised groups and not necessarily the target audience of global north MOOC platforms. The researcher aimed to explore the design of these global south wrapped MOOCs to gauge if there are lessons learnt that could be used by other organisations to repurpose MOOCs. The framework for this exploration is to determine whether the wrapped MOOC as a potential boundary object can support access to HE more effectively or less effectively than existing MOOCs. And if so, to determine what type of boundary object it is, and what its characteristics are.

As far as the researcher was able to establish, no other research focused on interviewing students in these two case studies. These MOOCs were mostly wrapped independently of the university’s MOOC production department, and therefore not part of the MOOC project. When these MOOCs were launched on Coursera, the wrapping took place outside of the scope of the MOOC project. According to Deacon et al. (2018), wrapping of the MOOCs was encouraged and made possible because all MOOC materials were released under the Creative Commons license, allowing anyone to use the material in whatever way they chose. This open educational resource approach to MOOCs was to encourage reuse and repackaging (Czerniewicz et al., 2017). The openness of the MOOC resources also impacts on the wrapping and will be discussed in later chapters.

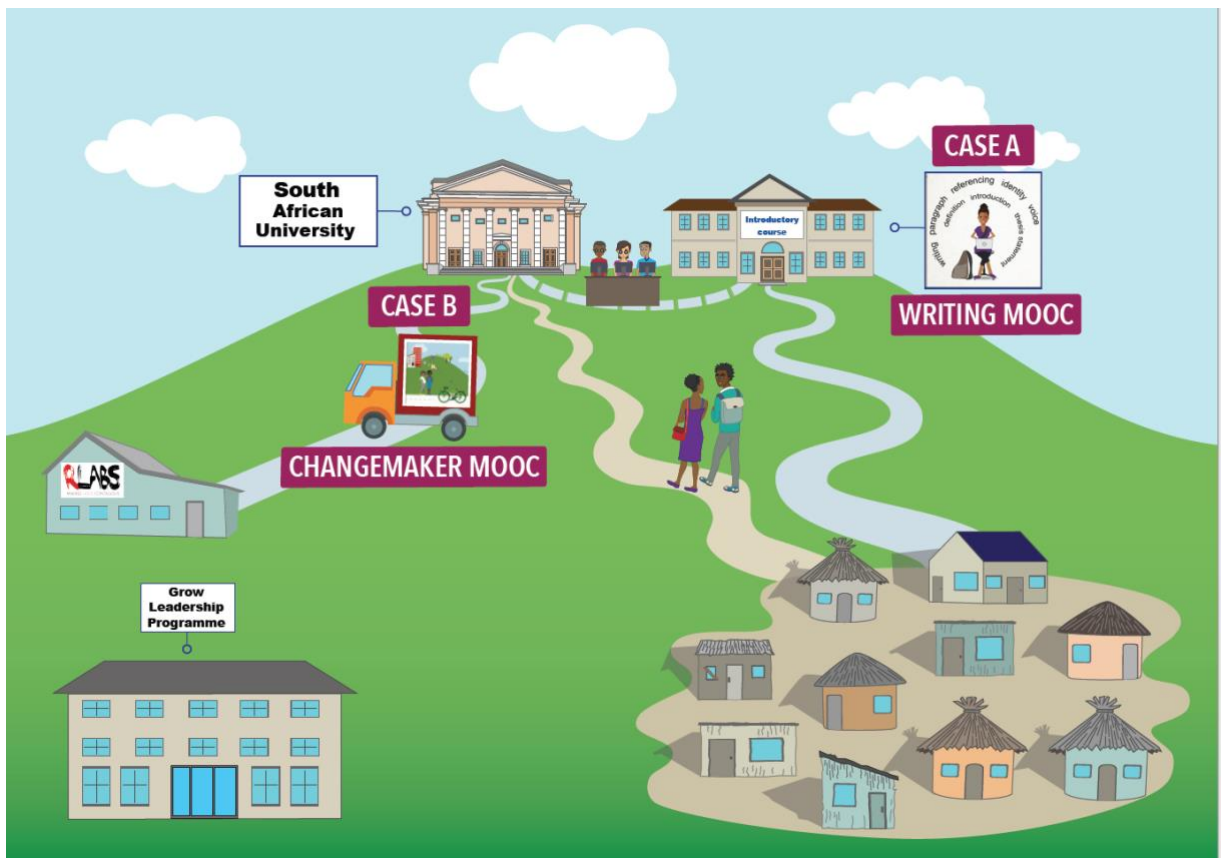


Figure 7: Illustration of the research sites (©Deane, 2020)

Here are more details about the two case studies (Figure 7):

A - Writing your World: Finding yourself in the academic space - referred to as the wrapped Writing MOOC, wrapped in a formal course within a South African university (Appendix E). The illustration shows the students who come from marginalised backgrounds and are enrolled in the university and took the wrapped Writing MOOC.

B -Becoming a changemaker: Introduction to Social Innovation - referred to as the wrapped Changemaker MOOC wrapped in an informal course in a poorly resourced area (Appendix E). The illustration is a depiction of the Changemaker MOOC being taken by the van - to the RLabs organisation in a marginalised community.

Case A or Writing MOOC was wrapped by educators from the South African university who made the MOOC. In 2018, the educators wrapped the MOOC for first-year students' semester course referred to in this research study as the 'Introductory course'. The programme is part of an extended degree (EDP) whereby an extra year is used to prepare them for coping with the academic expectations at university. This programme is state funded to widen opportunities for students from 'previously disadvantaged' backgrounds who may not have performed as required in their exit exams but were identified as having the potential to succeed. Some of these students are given financial aid from the National Student Financial Aid Scheme. Despite receiving physical access to the university, these students still struggle to gain epistemological access as well as being at risk of dropping out without these types of programmes. According to Sehoole & Adeyemo (2016), the majority of students who are at risk of dropping out because of disadvantaged educational backgrounds are not prepared for university or are unable to cope with the demands made on them (Sehoole & Adeyemo, 2016, p. 10). Therefore, it could be argued that despite students having physical access to a South African university, the research site may signal some levels of marginalisation within the larger student community because of the students' backgrounds.

Around 130 students enrolled in the four-week Writing MOOC as part of a semester-long introductory course. These university students were provided with computer-lab access on campus every week to access the wrapped Writing MOOC on the Coursera platform. They also had face-to-face sessions where they discussed the themes of identity, mobility and migration. The interviews were conducted on the campus where students had privacy and for their convenience. Each interview took around 30 to 40 minutes. There were six interviews completed from this cohort, but five were included because the other student did not meet the NFAS criteria.

Case B, or the Becoming a Changemaker MOOC, was wrapped in the Global Leadership Programme (GLA) by an organisation called the Reconstructed Living Lab (RLabs). According to their website RLabs is a social movement in Bridgetown, Cape Town, which is now active in 22 countries. RLabs states on their website that they empower youth through

innovative technology and teach them skills to engage with their community (RLabs, n.d) RLabs was founded in 2008, by Dr Marlon Parker, who is also a presenter on the wrapped Changemaker MOOC and includes the RLabs story as a social innovation case study. This GLA programme consists of various courses from digital literacies to preparing for employment, presentation skills and building leadership qualities in young people. Students pay a minimal fee to enrol in the Global Leadership Academy (GLA) programme.

This programme is an 8-month course with around 20 -30 hours per week that includes face-to-face and digital laboratory sessions. The students took the MOOC in the digital literacy module with access to computers and unlimited internet access to complete the online six-week course. This case study will be referred to as the wrapped Changemaker MOOC going forward.

3.4 The Ethnographic methods

The researcher used ethnographic methods and applied the understanding of ethnography as a method and as deep theorising (Lillis, 2008). Ethnography was born out of anthropology and spoke to the idea of “naturalistic” research (Saunders et al., 2009, p.150). The researcher's position as head of the video production of MOOCs enabled her to use multiple identities. She works in the South African university that made the two MOOCs, and this position was a motivation for the research questions. As a researcher, she collected data on wrapped MOOCs and also enrolled in the Master's in Philosophy (Inclusive Innovation) that inspired the wrapped Changemaker MOOC. The research design aims to ensure these multiple identities are acknowledged and offer insight but do not to interfere with the process of providing valid and reliable data that is ethically collected and analysed. The methods used in this research resonate with Spradley (1979), who stated that ethnography is about learning from the people and not studying them like objects to be observed. Incorporating this ethnographic approach is appropriate because the researcher is not parachuting as an outsider into these two research sites but has been working in a department that makes MOOCs. She, therefore, does not view the students as subjects to study but rather to learn from. The researcher explores whether a human-centred or context-sensitive approach taken from design thinking principles could make MOOCs more inclusive of students from marginalised groups. Brown & Wyatt (2010) describes design thinking principles as ways to solve problems in a society through "workarounds and improvise solutions to incorporate those into the offerings they create. The research sites can be described as the edges, “the places where extreme people live differently, think differently, and consume differently” (p.32).

The researcher's position can benefit the research rather than hinder it. Her disposition to learn from her participants can minimise her own possible bias as an insider in the MOOC making industry.

The researcher used Lillis's (2008) levels of ethnography as a method and utilised deep theorising during the entire process from data collection to analysis and discussion. Therefore, when writing up the data, the researcher makes these layers apparent by adding her insider knowledge to interpret the data (Lillis, 2008, p.355).

Townsend & Urbanic (2014) contend that a qualitative approach aims to understand the situation in this research - how the wrapped MOOC impacts on marginalised students - from the perspective of the students and not the researcher's (p.202).

"This is called the emic, or insider's perspective, as opposed to the etic, or outsider's perspective" (p.202) The researcher holds an emic perspective as part of MOOC production processes which provides her with insight into how these MOOCs are developed. However, the researcher also has an etic perspective in the sense that she is outside of the community of wrapped MOOC takers. While the emic perspective comes with its advantages in terms of greater awareness, her outsider perspective concerning the MOOC taking experience might allow her to view the field with a fresh gaze without taking aspects of it for granted.

The researcher employs the concept of 'talk around the text', to observe and analyse what students are not saying as it provides her with experience to interpret the text. This insider or emic perspective interprets what is implied (Lillis, 2008, p.359) letting her move between identities of writer and researcher. According to Lillis (2008) the emic and etic approach of the researcher can create some tension when the researcher uses the emic or insider view rather than keeping to a fundamentally etic or researcher perspective (p.359).

The researcher needed to unpack participants' perspectives and familiarise herself with their use of abbreviations and colloquial language. The researcher chooses to use the emic approach when writing around the text about students' perspectives but moves to the etic approach when analysing the data. She can relate to the students she interviews, understanding their colloquial language and their abbreviated references to elements in the MOOCs. The researcher knows how to engage with them as she comes from their context, having lived in the same community near Bridgetown (RLabs students) and worked in the same university (Introductory students). Her familiarity allows her to broker and negotiates her positionality in

these two communities. She adhered to her etic perspective as a researcher by aligning to the rules of quantitative data collection and analysis.

The research also used multiple data sources by including a focus group from RLabs and a student evaluation report from the Introductory course. According to Lillis (2008), this means there was a "sustained involvement in the context of production" that allows for what Geertz (1973) would refer to as "thick description" and observed everything significant in and about the context, to derive an interpretative understanding of how the potential boundary object operated (p.367).

The other level is ethnography as "deep theorising" (Lillis, 2008) where the researcher acknowledges that text and context are not two separate phenomena but can be brought closer together through these analytical tools (p.373). The small-scale study with few interviews with participants across two contexts allowed the researcher to drill deep and theorise what was happening in the field. The researcher then used a process of meaning-making through reflexivity, as explained in the next sections.

3.5 Positionality

"Positionality represents a space in which objectivism and subjectivism meet" (Bourke, 2014, p.3). The researcher is a 44-year-old, South African woman, employed at a South African university where she heads up the video production component of making MOOCs and blended courses. Her background growing up in Apartheid as a woman of colour and receiving a secondary level of education through the Bantu system has shaped her journey in the landscape of HE where access to university was unavailable because of the high cost and her lack of qualifications. It is only through working at a university setting and receiving a student discount as well as being a practitioner in the field of video production for the past two decades that she was able to apply for her Master's dissertation. Her lived experience showed her the impact that access to HE can have on the lives of those excluded from it.

Her interest in repurposing MOOCs was triggered by 2016 #FeesMustFall where protesting students were shutting down the campus and calling for free education. At the time she was involved in making free MOOCs. The rationale for the research was that if MOOCs made in South Africa could be inclusive of students from impoverished areas, then why not wrap those already made MOOCs for all students. However, the two MOOCs, in particular, were chosen for the type of social learning they incorporated into the content.

The researcher resonated with the value of the content of these MOOCs specifically for those students excluded from taking them. The reason for choosing the MOOCs was based on her insider knowledge that these two MOOCs were inclusive of shaping the content specifically for a global south student in the learning design process. These two MOOCs can also contribute to the debate that global south knowledge has value and can be shared with the global north. Hence, she focused on two MOOCs made in South Africa, that have local content, to find out if they provided social and epistemological access to students from marginalised youth.

Her compassion for marginalised students and her own lived experience made her a broker between communities allowing her to explore the boundaries of both HE and marginalised youth. Her broker role enables her to look into ways of "developing boundary infrastructure" in her MOOC production work to make them more inclusive to the context (Wenger, 2000, p.236). That said, she also experienced the outsider perspective intrinsic to brokers who "often do not fully belong anywhere and may not contribute directly to any specific outcome, (thus) the value they bring can easily be overlooked" (p.236). The value she brings is to put back into practice (in MOOC production) the findings of the data.

As mentioned, the department where she works was involved in making these two MOOCs in partnership with lecturers from other departments. However, the researcher was only involved in the production of the Writing MOOC and partially involved in the Changemaker MOOC. However, in both cases, the researcher was not part of the learning design process or the pedagogical methods. She was also not involved in any of the wrapping processes of the two MOOCs. Nevertheless, she maintained an awareness of balancing and striving for objectivity, mindful of her subjectivity. (Bourke, 2014, p.3).

Therefore by working in the production of MOOCs, the researcher has been cognisant of her bias. She resonates with Mantzoukas (2005) who states that bias is unavoidable in qualitative studies, and this case particularly, cannot be avoided or eliminated. On the contrary, it should be embraced and become part of the research for the insights that an insider perspective may offer (p.291). The researcher acknowledged her positionality and made it part of her reflexive process in the research. This researcher does not claim to be entirely objective but to be aware of the need to gesture towards or aspire for objectivity as an ideal to maintain the integrity of the research. The researcher uses objectivity as an approach to findings that assumes that they are factual. Subjectivity is used in this research as an approach to findings

that acknowledges that they are open to interpretations including the researcher's own. The positionality, validity and reliability of the research are covered below.

3.6 Reflexivity

The researcher was very aware of her positionality from the time she first walked into the Master of Philosophy class. She embarked upon the research to gain more knowledge about how to make MOOCs relevant and have more value in the global south. The research included a reflexive process at each stage, where she discussed with her supervisor the steps she took to ensure her bias was controlled and acknowledged. Polit & Beck (2010) described 'reflexivity as reflecting critically on oneself and analysing and noting personal opinions, values that affect data collection and interpretation' (p. 39). They also cite Brannick & Coghlan (2006) as saying it is the concept that views the relationship between the researcher and the research object (Polit & Beck, 2010, p.39). The researcher writes about her journey within the text by signposting it (when appropriate) in the discussion chapter to ensure transparency and also provide insights that allow the researcher to find her academic voice.

There are two types of reflexivity that the researcher used (Finlay, 2002) quoted in Cunningham and Carmichael (2018):

- 1) Personal insight through introspection. This has been presented in the form of notes included in the footnotes.
- 2) Collaboration through reflective dialogue to reach a collective understanding. Here, the researcher had bi-weekly discussions with her co-supervisor to reflect on the stages of the research. It is significant to note that the researcher recognised that her position at her university might have created a particular power dynamic between her and the students. To mitigate this power dynamic, she dressed like a research student and did not introduce herself with her work title. She used her prior knowledge of MOOCs in a positive way that made the interviews understandable and more comfortable to grasp what the students were referring to in the content. This is in line with Marshall & Rossman (1999) contention that experience in the field provides the research as a valuable source of insight (p.25).

3.7 Participants, sample size and selection

The participants or students were explicitly chosen by the researcher to understand from their perspective the experience of taking a wrapped MOOC in the global south. This is linked to Kubiak et al. (2015) who told the story of Sheila, who struggles with “unengaged alignment” when she follows the academic practice of doing a Master’s in Business but does not fully engage or immerse herself in the teachings. Similarly, the researcher struggled with her own sense of personal integrity by being part of the production of MOOCs that did not necessarily include students in the vicinity or within of the university making it (p.72), except for the those in the two case studies. Through this research, she aimed to investigate whether these students actually wanted to take a MOOC and if so, what types of MOOCs were of value to them. Even if they did have access to MOOCs, would they want to take them in isolation or in a group, in a classroom or as part of a course?

The participants were made up of various demographic races except for white students and will be referred to as students. They were aged between 19 and 23 years old, and it is essential to note that all of the students were not able to afford HEI and all were from marginalised backgrounds. The demographics can be found in the table above to indicate the five students from the university interviewed for the wrapped Writing MOOC and the five students from RLabs.

The sample size was ten in total, with five interviews from each case study. The researcher interviewed eleven but reached data saturation at ten. According to Marshall, Cardon, Poddar & Fontenot (2013) data saturation in qualitative research methods occurs when participants are interviewed in the research "until the data set is complete, as indicated by data replication or redundancy", and nothing new is added. (p.11). The saturation number was similar to Deacon et al. 's (2018) study that conducted five interviews with educators to explore wrapping the Social Innovation MOOC. Marshall et al. (2013) contend that justifying this sample size can be based on a precedent, where a similar study used the same design. Creswell (2007) recommends three to five interviews per case study. Maxwell (2008) states that small sample size is typical of qualitative research, and they enable the researcher to understand the unique circumstances in which they occur (p.235).

In the case of the Changemaker and Writing wrapped MOOCs, the self-selection sampling method (Saunders et al., 2009, p. 241) was used and around nine students from the

2018 GLA programme were contacted by the RLabs facilitators and asked if they were willing to participate in the data collection process. These students volunteered in a 'self-selection' (p.241) process, and five students were available to participate. The students were all between the ages of 19 to 22 years old, and the criterion for interviewing them was that they had completed the GLA programme where the wrapped Changemaker MOOC was wrapped. The GLA programme only accepts unemployed young people who do not have access to HEIs and come from the surrounding areas. Therefore, they were all considered to be marginalised and from a resource-poor area. Two of those interviewed were employed after the GLA programme as they had graduated the previous year.

In the case of the Writing wrapped MOOC, the educators sent out an email to the 2018 cohort and asked for students to contact the researcher to participate in the data collection process. Students selected were those whose fees were paid by the National Student Financial Aid Scheme (NSFAS), a government funding organisation to fund those from poor households. They were all from marginalised communities and would not have had the opportunity to attend a university without NSFAS, and enrolled on the extended degree programme.

3.8 Data collection

The primary data collection was conducted using ethnographic methods. The data was collected during the first quarter of 2019 when the researcher conducted semi-structured interviews with students from the two case studies. The reason for choosing semi-structured interviews is that there is flexibility around the questions asked, and the researcher can always probe further if in need of elaboration or clarification (Saunders et al., 2009, p.360) . In the study, the researcher used themes and questions as prompts to generate the questions. These questions were broad enough to allow the participants room to manoeuvre and also guide the “flow of the conversation” (p. 360). That said, in order to maintain consistency, which is an essential aspect of the reliability of the study, the researcher used the same guiding questions (Appendix B) and prompts as a starting point across both contexts where the wrapped MOOCs were being taken.

The researcher was also aware that the students were not accustomed to being interviewed and therefore wanted to create an informal or non-threatening interview process. All the interviews were audio-recorded to ensure the researcher's attention was focused on the conversation. She maintained eye contact and allowed the student to feel comfortable in her

presence. Saunders et al. (2009) state there are advantages and disadvantages of audio recording the interviews but advise that permission be sought from the interviewees and that they be allowed to ask questions and choose for the recording to be switched off. The researcher opted to record the audio to be able to capture direct quotes, re-listen to the data and have a permanent record of the statements made. These outweighed the likely disadvantages (p.341).

The RLabs interviews were conducted at the RLabs office in Bridgetown in 2019, and the students were familiar with the location. The facilitators were asked to be brokers that provided “personal entry” (p.173) to their students, in order to establish credibility in the process. The interviews were set up by the facilitators but conducted privately in a room over two weeks in January 2019. The researcher employed recommendations by Saunders et al., 2009, p.336) to do the interviews in a neutral tone and asked questions in an appropriate register that the RLabs students could understand. She listened, made notes, but also asked probing questions to explore responses.

Since the researcher also lived in a suburb in Bridgetown and came from a marginalised background, she was more relatable to the students interviewed. Her multiple identities and relatability meant that she did not come across as too much of an outsider that the students would be distrustful of her, allowing her to reduce their anxiety and ask them questions in a non-academic way (p.333). Dressing less formally and doing the interviews in their own space where they felt comfortable. This management of the multi membership the researcher used to negotiate levels of trust was also part of her journey across the landscape from practitioner to the academic community (Kubiak et al., 2015, p.65).

As for the students from the Writing wrapped MOOC, they were interviewed in April 2019. They were already on campus and did not need to incur the cost of transportation. The educators who taught on the wrapped Writing MOOC also taught on the Introductory course and introduced the researcher via email. A “clear account of purpose” (Saunders et al., 2009, p.173) of the research was explained to the cohort of 2018 Introductory semester students with the request that they contact the researcher if they were willing to participate in the study. All the students from both case studies did not know the researcher's role as part of the production of MOOCs and only viewed her identity as that of a researcher.

3.8.1 Focus group and evaluation survey

A focus group at RLabs was held consisting of nine students who were part of the GLA programme from the same cohort of students that were interviewed for the primary data. The focus group session (Appendix C) was used as triangulation as a way to collect and validate the primary data from a range of methods (Maxwell, 2008, p.245). However, the researcher was unable to gain access to a parallel focus group with the wrapped Writing MOOC cohort as the students from the Introductory course were not accessible in a focus group format. .

Therefore, an evaluation report (Appendix D) was used as part of the triangulation process, after receiving permission from the educators. The anonymous comments in the report were from 130 students who participated. The researcher also accessed the Coursera platform forums for both the Changemaker MOOC to access reviews and comments as part of the triangulation process.

3.9 Data coding

The interviews were transcribed and coded using a qualitative data analysis software programme called Atlas.ti. These ten interviews were coded according to predetermined and emerging codes through the narratives. Some of the predetermined coded themes were adapted from Wenger's (1998) concepts of social learning characterised by four components of social participation: meaning, practice, community and identity (Ban, 2020, p.28) and particular concepts from LoP. Care was taken to ensure that the earlier social learning concepts used were still relevant in LoP and did not contradict its main tenets. These codes included: learning as becoming, belonging, engagement, knowledgeability and experience. The predetermined codes were loosely applied to ensure that the data also generated unexpected codes. These included: feeling lost, adaptability, peer learning, subtitling and transcriptions, blended model, awareness of MOOCs.

Maxwell (2008) contends that coding is not about producing what happened but slightly rearranging codes into categories “that allow for comparisons” to understand what is going on and to “generate themes and to organise data to support these ideas” (Maxwell, 2008, p.239). The researcher was reflexive in the coding process where codes generated from the data and predetermined codes were not influenced by her bias. She analysed what the data was revealing without looking for what she wanted to find. She did this by coding the data line-by-line, a rigorous method that helps you to refrain from imputing your motives, fears or unresolved

personal issues to your respondents and to your collected data. (Charmaz, 1996). The process of coding was done multiple times, so they became more refined, and she began to see the patterns or categorisations of the codes. She then linked the sub-codes and highlighted the links between them along with the exceptions (Charmaz, 1996).

3.9.1 Data analysis using Landscapes of Practice

As mentioned in Chapter 2, the research explained the conceptual framework from Wenger-Trayner et al.'s (2015) Landscapes of Practice (LoP). The LoP will be used to analyse the data. The analysis incorporates the themes of modes of identification: alignment, imagination and engagement.

3.9.2 Analytical framework



Figure 8: Analytical Framework for Landscapes of Practice (©Deane, 2020)

The diagram is a visual representation of the LoP when applied to the research. It is referred to when describing the concepts and how they relate to each other. The configuration illustrates some LoP concepts like knowledgeability and modes of identification. It also illustrates the links between those concepts and social and epistemological access. The landscape of HE is the entire backdrop to the multiple communities that reside in the landscape. The arrows indicate that the data in the findings chapter will feed into three modes of identification. The three modes are interrelated and are analysed collectively to explore how the wrapped MOOCs can give social and epistemological access.

- [Knowledgeability](#)

As mentioned, one of the critical differences between CoP and LoP is the concept of knowledgeability, explained as familiarity with a subject matter and by a person's "relations to a multiplicity of practices across the landscape" (Wenger-Trayner et al., 2015, p.13). The concept of knowledgeability is what Wenger-Trayner describes as an experience of various practices where one cannot be competent in all practices, nor is it just the acquisition of information (Farnsworth et al., 2016, p.5). Knowledgeability is connected to identity work and negotiating one's position through the landscape (p.5).

The data analysis explores whether the students became familiar with learning on a MOOC platform to the extent that they would feel confident in taking another online course or MOOCs independently of the course. It may be assumed that knowledgeability of the content means that students are able to interact with peers in a classroom or on an online forum through sharing their experiences and backgrounds to create new forms of knowledge. Given the link between knowledgeability and identity formation in the field, the data analysis will look for components where epistemological access has an effect on identity, where the students may experience the "world in a new way" (Wenger-Trayner, 2013).

- [Modes of Identification](#)

The research uses the three modes of identification: engagement, alignment and imagination to explore how learning took place in the wrapped MOOC (Wenger-Trayner et al., 2015, p.20). These modes are distinctive, but when combined, they are beneficial and can make learning more effective. The diagram explains the relationship between these three modes to illustrate what Wenger-Trayner et al. (2015, p.20). It explains how these modes work in conjunction, and if one is out of balance or not present, how the learning process is affected.

Therefore "becoming productive within the landscape depends on one's ability to leverage the complementarity of these processes" (p.22).

The analysis concerning the two wrapped MOOCs case studies would involve looking at how the process of wrapping facilitated alignment to the rules of the platform to allow for the students to engage with the content of the MOOC and imagine themselves in the landscape to understand who they are (p.21). This then interlinks with the identity work that is central in the LoP theory, where Farnsworth et al. (2016) argue that you "cannot give people knowledge without inviting them into an identity for which this knowledge represents a meaningful way of being" (p.8).

- [Social and Epistemological access](#)

Social and epistemological access to HE could be linked to themes of alignment and engagement. As mentioned in Chapter 2, social access is divided into physical and digital access. This form of access is explored with the theme of alignment to gauge if the wrapping process tackled the barriers to digital access to the MOOC platforms. It also could look at how the physical access was provided or not, if students were unable to do self-directed learning, engage on the forums online or dropped out. The issue of epistemological access is significant because of the context of wrapping the MOOC in an African context, where promoting indigenous knowledge, adapting and localising content have been at the forefront of responding to the dominance of global north knowledge systems.

The analytical framework of LoP ultimately points to the research question to interrogate if the two wrapped MOOCs are boundary objects. This means the wrapped MOOCs would be able to move across the higher education landscape and overcome the barriers between HE and marginalised youth. Access is linked to students feeling differently after taking the wrapped MOOC and their role in the various practices after the programmes.

"Relations amongst practices are at once epistemologically flat, politically unequal and potentially contestable," says Wenger-Trayner et al. (2015, p.17). This notion of flatness is different from CoP where there was a hierarchy of knowledge within a community between Master and apprentice. Wenger-Trayner et al. (2015) state that "no practice could represent the whole even if they have the power to influence large regions of the landscape" (p.16). This is where the research explores the data to determine at what level the boundary object allowed students to bring their knowledge and experience into the practice and engage with the content.

Boundaries in LoP are unavoidable and also hold places of tension and potential for unexpected learning (p.17).

The argument for looking for what constitutes characteristics of a boundary object in a wrapped MOOC will allow for the research to be replicated for government youth programmes, non-profit organisations and tertiary institutions demonstrating how to use MOOCs as low cost, free online resources. The data can also be analysed to argue that wrapping or repurposing the MOOC into a boundary object creates an opportunity to reframe the political inequalities and epistemological flatness of the practices (Wenger-Trayner et al., 2015).

3.10 Reflexivity

The researcher experienced her reflexive process where she was able to view her own multi membership and multiple identities in the various practices she was passing through in the landscape from her practitioner role in making MOOCs to one belonging to the academic community of researchers to one familiar with the marginalised community being researched. She attempted to separate the different communities to avoid the bias (Kubiak et al., 2015, p. 65). She has a high degree of competence in the MOOC production community and was undergoing a steep learning curve when she moved into academic practice. Fenton-O' Creevy et al. (2015a) found that boundary encounters built resilience in practice-based students challenging their sense of identity (p. 53). The researcher found her resilience was built in the intense emotions she experienced as part of her 'learning to do' and 'learning to be' a researcher in the field (Fenton-O-Creevy, Dimitriadis & Scobie, 2015b, p.41). She was careful to manage her multi membership when interviewing students to be distinctive and fully immersed in the process. She negotiated her multi membership identity and moved between them effortlessly without the students being aware of her full-time work (Kubiak et al. 2015, p.66).

The supervisor for this research is Dr Aditi Hunma, and she was chosen for her work in the field of digital literacy as well as working in a department that teaches students in the extended degree programme, some of whom come from marginalised contexts. She also taught on the Writing MOOCs and has published in the field of education in the global south context. She played a supervisory role, offering guidance on the research process and ethical considerations. Any clarification about the Introductory course was gathered from the Course Convenor. Thus, the process of data collection was kept separate from the supervisory

relationship for ethical reasons. The separation of roles was facilitated by the fact that the participants were students, rather than the MOOC educators.

3.11 Ethical considerations

The ethical approval for the research was granted by the university's Commerce Faculty's Ethics Committee for the data collection to take place throughout 2019. A separate permission process was granted by the Department of Student Affairs to interview university students from the wrapped Writing MOOC case study. The rationale and research proposal were sent to the committee together with the consent forms and the open-ended questions. The ethics approval stipulates that the students' identities will be protected, and all transcriptions will be anonymised.

3.11.1 Consent

In both case studies, the wrapped Writing MOOC educators, and RLabs facilitators were approached by the researcher to discuss the aim of the research and to manage the informed consent process. The students who came forward to be interviewed were given the consent form and told that their right to confidentiality would be preserved during the interviews. They all signed the consent forms (Appendix A) which are a written agreement where both the researcher and student agree to the terms of the data collection process, and specifically, where the student permits the interview to be used in specified ways (Saunders et al., 2009, p. 360).

3.11.2 Validity and Reliability

Research is valid if the research instruments measure what they are meant to measure. To ensure the research has validity, the researcher responded to the criteria set out by Long and Johnson (2000) namely, “reflective journal-keeping; respondent validation; prolonged involvement; persistent observation; peer debriefing; and triangulation”(2000, p. 33). The researcher met with her co-supervisor to discuss possible biases and also at every stage of the research process. By the nature of working in the MOOC space, the researcher was able to observe the MOOC wrapping process and also involve the wrapped Writing MOOC educators and the RLabs organisation to ensure they oversaw the data collection process. The peer-debriefing was done at the university with colleagues who work as learning designers to discuss the process and findings. Triangulation is “collecting information from a diverse range of individuals and settings - using a variety of methods” (Maxwell, 2008, p. 245) and was

achieved through the use of the GLA focus group, the Introductory course student evaluation report and Changemaker MOOC forum discussions. Excerpts from the course evaluation report can be found in the Appendix D, the focus group excerpts in Appendix C.

Validity is defined by Saunders et al. (2009) as “the extent to which data collection methods accurately measure what they were intended to measure and the extent to which research findings are really about what they profess to be” (p. 603). The researcher positionalality provides a depth of experience and knowledge of MOOCs but allows for her bias to be monitored by peers and co-supervisors. Maxwell cites Becker and Geer (1957). Who claimed the benefit of long-term participant observation - which the researcher does because of her role working in the production of MOOCs as a South African university - gives data that is complete rather than dependent on inference.

The research instrument is reliable if it presents similar or consistent results at various iterations (Lincoln & Guba, 1985). In this case, triangulation was used to ascertain the reliability of the data collection process.

To ensure that this research has integrity, the researcher adopted validity and reliability checks at every stage of the research process. Therefore, the researcher, who considers herself a novice in this field, went through all the necessary criteria to ensure the research is valid and was done reliably.

3.11.3 Transparency

The researcher maintained her plan to collect data from the two groups of students and has transcripts of all interviews as well as data codes available for transparency and accountability. Data codes for some of the themes will be illustrated in the following chapter. Excerpts from the focus group and student evaluation report can be found in and codes can be found in Appendix C and D. The use of coding software Atlas.Ti makes all the codes available for scrutiny.

3.11.4 Triangulation

Validity and reliability reinforce triangulation. Golfasni (2003) cites Creswell & Miller (2000) to define triangulation as multiple sources of information to form themes or categories in a study" (Golfasni, 2003, p.604). As mentioned, the researcher used a focus group from

RLabs, where nine participants took part in a discussion on the experience of taking the Changemaker wrapped MOOC. A focus group from the wrapped Writing MOOC was not possible as students from the university were on vacation during the data collection timeframe. However, the interviews, secondary data from the student survey, notes and online forums on the Coursera platforms all combined to create multiple sources of information to confirm hunches, identify patterns and made the findings more accurate and more reliable.

3.12 Limitations of the research

Limitations of the research include the small-scale of the data sample and the short-term duration of the fieldwork, as ideally the researcher would have wanted to do a longitudinal study and tracked the participants before and after taking the wrapped MOOC. However, these limitations were acknowledged and allowed the researcher to use a deep theorising approach as well as incorporate secondary data. Another limitation was the inexperience of the young participants. They had never taken a MOOC before they did the wrapped MOOC and were less articulate in sharing their experience. Their statements had to be probed and inferred.

The validity and reliability of the research were maintained through various steps discussed in the previous section. However, the research findings are not generalisable as they may not be replicated with other wrapped MOOCs groups because of the small group of students and the specific context in which students took the wrapped MOOCs. The wrapped MOOCs were also made and wrapped in South Africa, and the findings need to be framed in this regard. There is a good probability that the wrapping would be different if the MOOCs were made in the global north. That said, the characteristics of wrapped MOOCs and the guidelines for wrapping a MOOC would be transferable and could be further adapted across other contexts.

The research data collection occurred at a specific point in time. This was before the Covid-19 pandemic that had a global impact on higher education and was a catalyst for remote teaching, especially with students that came from marginalised and poor-resourced areas. Therefore, future research could focus on the role of MOOCs during the Covid-19 pandemic for vulnerable students. What could still resonate from this study are the ways of making innovation more inclusive in the context of a social and educational crisis, and future studies could explore the scope of the MOOC wrapping guidelines offered in this study, to meet the new demands on HEI.

3.13 Summary

This chapter unpacked the qualitative choice case study approach to collect data from marginalised students who took two wrapped MOOCs within a formal and informal sector of HE. The chapter discussed the research sites and the ethnographic and 'deep theorising' methods. The analytical framework to analyse the data is Wenger-Trayner's et al.'s (2015) Landscape of Practice (LoP) and unpacks key themes of identity and the definition of a boundary object. The chapter also explains the adherence to the highest level of ethics, validity and reliability of the data that was captured and analysed for academic rigour. The next chapter will explore the findings of the data and highlight extracts from the semi-structured interviews with students to validate the findings. The following chapter will specifically focus on the findings of the data through the use of coded and emerging themes.

4. Findings

4.1 Purpose of the research

This chapter is a presentation of the findings to address the research questions;

RQ1: What are the characteristics needed to make a MOOC wrapped into an effective boundary object?

RQ2: To what extent can a wrapped MOOC give social and epistemological access to higher education in South Africa?

It begins with an overview of the demographics of the participants who are students that participated in a wrapped MOOC. The findings are organised into coded themes, drawing on the analytical framework described in Chapter 3.

4.2 Participants

As mentioned, criteria for participants referred to as 'students' for this research was those participating in the wrapped version of the Changemaker and wrapped Writing MOOCs.

Code For Respondents	Community	Gender	Status
University 1	Tembisa, Gauteng	Male	Second year studying politics aiming to work in policy development
University 2	Eastern Cape township	Female	Second year psychology aiming to become a neuropsychologist
University 3	Rural area in Phalaborwa	Female	Second year studying law
University 4	Pretoria	Male	Second year philosophy and art history
University 5	Witpoortjie in Krugersdorp	Female	Second year studying politics and economics
RLAB1	Bridgetown	Male	Employed at RLabs but aiming to become a coach
RLAB2	Surrey Estate	Female	Planning on entering HE to study psychology
RLAB3	Bridgetown	Male	Employed as an animator in a corporate
RLAB4	Bridgetown	Male	Employed as an animator in a corporate
RLAB5	Mitchell's Plein	Female	Unemployed but aiming to do coaching for peers

Table 2: Demographics of students from both case studies

The demographic composition of the participants did not reflect any white students in the two case studies, as youth from impoverished backgrounds are still predominantly from black and coloured communities.

- Case Study A - Writing MOOC

The students from the wrapped Writing MOOC are all currently enrolled at a South African university but described as a group from a marginalised community. The reason for this designation is because the students interviewed were in the extended degree programme (EDP) and received NSFAS funding to attend the university. Not all students on the EDP are from impoverished contexts, but their families may have been disadvantaged because of apartheid. The EDP courses are interventions used to address the unequal opportunities for students in HEI from previously disadvantaged contexts. They are required to do an extra year on their degree as the first-year courses are generally bridging courses. The Introductory course was part of the intervention at university to increase the throughput of students from previously disadvantaged or under-resourced communities.

- Case Study B - Changemaker MOOC

The RLabs students are from the "Cape Flats", historically designated, poor and marginalised communities during apartheid. These RLabs students are specifically from areas in Cape Town; Bridgetown, Athlone, Mitchells Plain and Mannenburg. They either cannot afford to attend tertiary education or lack the academic requirements to be accepted into HEIs. On this basis, they receive free or heavily subsidised access to various educational training programmes at RLabs. RLabs is a social innovation organisation that services over "9.5 million people accessing services in 23 countries over the last eight years" (Vallie, 2018, para. 7).

RLabs runs the Grow Leadership Academy (GLA) programme in Bridgetown, which is an area defined as a "marginalised community" on the RLabs website with their students facing issues of gangsterism, substance abuse and theft (Van Harte, 2019). Statistics South Africa reports that the youth unemployment rate rose to 58.2 percent in the third quarter of 2019 and those matriculating are unlikely to find a job or be absorbed into the job market because of a lack of experience; employers are hiring older people with more experience and degrees (StatsSA, 2019). RLabs provides access to various types of information and communications technology (ICT), leadership and entrepreneurial training and courses without the constraints and cost of courses offered by HEI in preparation for the world of work.

4.3 Organisation of the findings

The organisation of the findings is divided into two sections:

1. The students' impressions of MOOCs
2. The students' impressions of wrapped MOOCs

This division allows the researcher to delve into issues of social and epistemological access related to how the students felt about wrapped MOOCs prior to taking them. It also links to the social learning theory approach specifically in relation to Wenger-Trayner et al. (2015) point that learning is socially situated, a process of identity formation in a lived experience of the world with the knowledge embedded in various social contexts (p. 9). The research also resonates with the social learning theorists like Wenger-Trayner et al. (2015) recognises the life experience, knowledge and context of the students who apply the content from the wrapped MOOC rather than passively acquiring the knowledge.

The findings were also organised into a few predetermined codes from Landscapes of Practice (LoP) and Communities of Practice (CoP). The predetermined codes from CoP (Wenger, 2000) are belonging and becoming and the predetermined codes from LoP (Wenger-Trayner et al., 2015) knowledgeability and engagement. There are also a few emergent codes from the data that cover the perceptions of the MOOCs being wrapped into a course, the localisation of the content and the preference for a blended model approach.

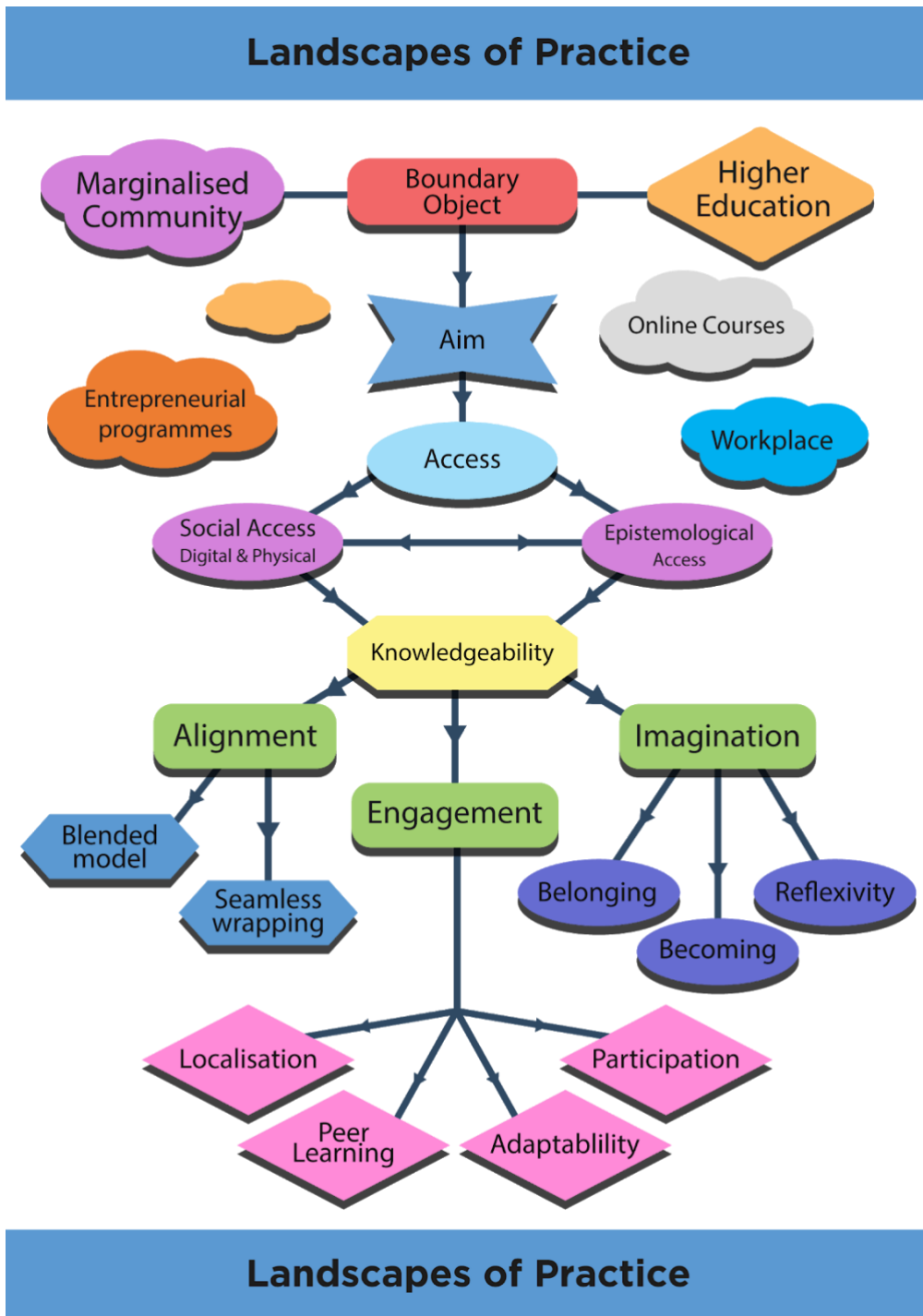


Figure 9: Characteristics of wrapped MOOCs (© Deane, 2020)

As mentioned in Chapter 3, the diagram (Figure 9) indicates the relationship between Wenger-Trayner et al.'s (2015) knowledgeability is a predetermined code and the three modes of identification are themes linked to the codes. The codes at the end of the diagram are the characteristics found in the wrapped MOOC. These will be discussed in the next chapter and how they address issues of social and epistemological access. In Figure 9, the findings are

illustrated at the bottom of the diagram as the characteristics found in the data and give effect to the themes above. For example, the codes of peer learning, adaptability, localisation and participation are all related to the LoP concept of engagement.

Similarly, it will show how the predetermined codes like belonging and becoming clustered with reflexivity, which is an emergent code found in the data. These connected to the mode of imagination. Alignment arose from the codes when students referred to their impression of wrapped MOOC and how they negotiated the rigidity of the MOOC platform to engage with the content. The diagram illustrates how the characteristics are related to the three modes of identification which is linked to knowledgeableability and ultimately shows the wrapped MOOCs are both boundary objects.

The combination of alignment, engagement and imagination present in practice, creates an interrelatedness between all three modes. These modes create the experiences of identification and disidentification when students participate in the practice (Wenger-Trayner et al., 2015, p. 22). These concepts and relationships are discussed in detail in the analysis of the findings.

4.4 Students' impressions of MOOCs

The data signalled that students were not aware of the existence MOOCs or that they were free online. In both cases they were only exposed to the MOOCs because they were enrolled on a programme or course. They would not have found MOOCs or been able to access them independently of the course or programme. Students from both case studies viewed the lack of Internet connectivity and laptops or computers as the reason they would not have found or taken MOOCs by themselves.

4.4.1 Rigidity of the MOOC platform

According to interview data, existing MOOCs on platforms like Coursera is rigid and lacks flexibility in the following ways:

1. fails to give access to some students in the global south contexts
2. fails to be flexible to be taken according to students' schedules
3. fails to include context sensitive content
4. fails to make signing up easier for students without email addresses

5. fails to make financial aid processes easier

The data signalled that students in both cases found it challenging to sign up to a course and setting up an email address. There are two elements where the rigidity of the platform impacts on students; the first is specifically towards students who do not have any experience with working on the MOOC platform. Therefore, the access is about knowledge and relevance. The second is how the platform schedules the MOOC to be taken consecutively through four to six weeks with no room for adapting it to the students' schedule. The rigidity of the online platform would relate to Wenger-Trayner's et al.'s (2015) concept of alignment (p. 21). This alignment is complex and is not just about adhering to the rules but rather a two-way process where there can be a negotiation of rules. This alignment prevents the engagement and imagination of the content on the MOOCs if rigidity is a barrier. The rigidity of the platform illustrates the application of the LoP where the three modes need to be in balance for learning to be effective (p.20).

MOOC platforms like Coursera require a participant to have an email account and experience in signing onto a platform to activate their account. Students from both case studies received support with the signing up.

It was annoying trying to navigate the MOOC to be quite frank, and it was difficult logging in and finding where to submit comments for certain things proved more time constraining than I would've preferred. Anonymous participant

The pacing of the four weeks of wrapped Writing MOOC was found to be out of sync with the students' academic term. The fact that the MOOC was initially inserted into the Introductory course, as a global course within a course, without any changes made to the MOOC sequence, content and pacing, compelled students and lecturers to submit to the MOOC platform's rigidity. The rigidity of doing a live MOOC with other global MOOC takers meant that there were MOOC assignments to complete each week. The students were, therefore, forced to submit pieces of writing to be used on peer review processes. This comment was from wrapped Writing MOOCs student evaluation report:

I think the short-term deadlines you get (is a challenge). You get three months and if you don't complete in weeks (set out) [...]then basically the course stops you from doing anything. You basically have to restart the course. That was not such a good thing for me. Anonymous evaluation report survey from a participant.

The wrapping was not entirely streamlined in the Introductory course, and this indicated how some of the content was repeated in the classroom and in the MOOC. *"It felt like it was boring because it was just a repetition of what we did in class."* #University3.

Wrapping can overcome the rigidity of the platform but it requires negotiating the scheduling which is an example of the negotiation of alignment (Wenger-Trayner et al., 2015). This negotiation with alignment is a process of identification where tensions arise between the intentions of the Writing MOOC educators and the constraints of the platform. The challenge may arise when online assessments are meant to be completed within a set time period where the rigidity of the MOOC and the schedule set out becomes a barrier to reusing the MOOCs.

The RLabs students did not know what MOOCs were before taking one in the GLA programme. They did not complain about the rigidity of the platform per se. Nevertheless, RLabs5 found it complicated to go through the administration process to apply for financial aid and get rejected despite being from a poor background. The financial aid process was too complicated for her to complete despite her eligibility. This will prevent students from marginalised communities to access MOOCs as they would need to apply for financial aid.

4.4 2 Feeling excluded, lost, digitally excluded

- Feeling excluded

Access to higher education is central to the research question, and therefore the researcher aimed to establish how the students felt before participating in the GLA programme and Introductory course. She explored whether the students transformed or felt differently about themselves and their context after taking the wrapped MOOC and how it answers the research question. She asked the students about their background and also how they felt about their lives before being participants in the wrapped MOOCs.

The researcher was careful not to project onto the students whether they felt marginalised rather than just being from marginalised communities. However, in the findings, the majority of students from both case studies recognised they were from an underserved or marginalised community or background and aptly articulated their feelings of exclusion before participating in the GLA programme and Introductory course.

I'm from Bonteheuwel. The environment is highly negative because of the internal negative activities like gangsterism. Many of the parents are not educated and stuff like that. #RLabs1 (0:07)

In the case of RLabs1, the natural progression from high school and to an HEI is not inevitable because of the high fees and not meeting admission requirements. RLabs students interviewed were aware of poverty, gangsterism and widespread drug use coupled with high levels of unemployment in their community. Growing up in this context, the perception that they are victims of their context with limited options to change the trajectory of their lives is prevalent. Another RLabs4 student explained how his parents do not support him and dealing with the challenge of poverty, and lack of opportunity was not just physical but extended into how he felt about himself.

I was unemployed at the beginning of the year. I was unemployed. I just got thrown out of my parent's house, I had nothing. I got dropped the exact same day. Gun pointed. So I came into 2018 with nothing. #RLabs4 (09:51).

As discussed in Chapter 3, all the university students interviewed were on the NSFAS scheme, which identified them as coming from marginalised communities. Despite them being at a South African university, they all reported feeling excluded from the broader university community because they were on the EDP. This is an interesting tension where they feel a sense of exclusion while in HEI on an extended curriculum programme intended to support inclusion. "Well, my parents can't afford to pay the fees on their own." said #University1. The university students reported being ambivalent about being put on the EDP.

They said that it is for students who might need extra help, in terms of studies, and there could be extra pressure because we didn't do so well. So (we) might need a little bit of help to get better marks. #University2 (3:42)

In the quote below, University1 also shared that he felt he did not belong to the student community.

Well, I don't like the idea...Because of the difference in our skills, (compared) to other people, the ones that are not in the (EDP) program. I think it creates some sort of division, but I understand the idea behind it. #University1 (2:40)

These feelings of exclusion are linked to Wenger-Trayner's et al.'s (2015) concept of engagement in practice across a landscape. This refers to the act of doing things, working on issues and talking, creating outputs and reflecting together as part of the learning journey (p. 20). In this case, before engagement in the wrapped MOOC, the students saw themselves as excluded from HE, and not being able to engage in the practices of the institution fully. This may indicate a boundary exists between the EDP and HEI despite perceptions that they are in a university.

- Feeling lost

Both sets of students reported feelings of being lost after matriculating from school. This is an unexpected finding in the data despite the difference between the two sets of students.

It was evident from the findings that the reasons for feeling lost were because of the lack of opportunities and career guidance at school. They expressed not knowing what path to take after school whether they attend an HEI or not. Tied to the feelings of being lost is the process of identity work, discussed later.

#	Name	Text Content	Document	Codes	Number of Codes	Comment
18:30	I didn't know what I want to do. I didn't...	I didn't know wh...	RLabs 5. doc	feeling lost after...	1	
12:3	I only discovered afterwards when I wa...	I only discovere...	RLabs1.docx	feeling lost after...	1	
12:32	I finished schooling after my matric I di...	I finished school...	RLabs1.docx	feeling lost after...	1	
11:1	So that's why I started GLA because I h...	So that's why I s...	RLabs2.doc	feeling lost after...	3	
10:1	I actually wasn't sure about what I want...	I actually wasn't...	RLabs3.docx	feeling lost after...	1	
10:40	When I came out of school I was more...	When I came ou...	RLabs3.docx	feeling lost after...	1	
20:1	I was unemployed, I didn't know what I...	I was unemploye...	RLabs4.doc	feeling lost after...	1	
20:26	I was unemployed the beginning of the...	I was unemploye...	RLabs4.doc	challenges, feeli...	2	
13:52	Didn't think my marks were good enou...	Didn't think my...	UCT Student 1...	feeling lost after...	1	
15:19	Well, the fact that it's online, is very hel...	Well, the fact th...	UCT Student 2.d...	Accessibility, fe...	3	
15:24	When you in matric you don't really kno...	When you in ma...	UCT Student 2.d...	feeling lost after...	1	
17:2	Yeah, I really struggled during matric a...	Yeah, I really str...	UCT Student 3.d...	feeling lost after...	1	
16:5	Because at the time, I didn't know what...	Because at the t...	UCT Student 4...	feeling lost after...	1	
16:38	think having education really enlighten...	think having edu...	UCT Student 4...	Accessibility, fe...	2	
14:30	I also didnt know. I wanted to study law...	I also didnt kno...	UCTStudent 5.d...	feeling lost after...	1	
Result: 15 of 406 Quotation(s)						

Figure 10: Representation of the coded theme of 'Feeling lost'

Illustrated in the coding process is the feeling of being lost referenced in 15 quotes (Figure 8). The finding indicates students in both case studies had no direction, did not identify with what they wanted to become in the world or have hope or ambition about their future as successful contributors to the future of this country.

The significance of this finding is that these students in both case studies had no direction, did not identify with what they wanted to become in the world or have hope or ambition about their future as successful contributors to the future of this country. The researcher had managed to explore the students' feelings of exclusion, marginalisation and lack of access to HEI.

The university students reported not knowing what to do or study after leaving high school in a very similar way to the RLabs students. They also did not recognise their own experience and knowledge as having any value despite having been in school and living in impoverished areas. This is an indication of an internalised deficit view of their abilities, identity and feelings about their future. Therefore, a sense of not knowing what they want to do with their lives but feel that they did not belong in HEI was evident amongst the students before taking the wrapped MOOC. The students in RLabs voiced a lack of ambition, hope and aspiration for their future. In the focus group, a participant spoke about her lack of confidence and inability to speak out in a group.

#RLabs1 who powerfully articulates this said, "I didn't know what I wanted to do. I didn't know anything. I was lost, lost, lost." The lack of clarity is also an indication that career guidance at a high school level was possibly inadequate to prepare young people to engage in society. If they do not have the necessary marks to attend HEI or the funding, there are no other options. RLabs1 student explained that "I finished schooling after my matric I didn't know what I wanted to do." He also said no one in his family had ever enrolled into an HEI.

When I came out of school, I was more blank than anything. I constantly thought I should do that; then no, I should do something else. I could not actually make up my mind.

#RLabs3 (13:54)

Three of the five RLabs students attributed the feelings of being lost or having no direction as the reason they enrolled in the GLA programme.

It's why I started GLA because I had no idea what I wanted to do. In all my years of school, I went through phases. So, my mother, she looked on Facebook for courses I could do, which she heard about RLabs. I came in, and I was going to do a coding course, and I heard about GLA. They told me it helps youth to give them direction. To discover themselves, maybe like what they want to do in the world. So they signed me up to GLA.#RLabs1(05:20).

The organisation of RLabs provides alternatives to students from marginalised communities with alternative and free access to education that aligns to the workplace and self-development. Another RLabs4 student reported that signing up for the GLA programme was his lifeline, as he was unemployed and his parents disowned him.

#RLabs3 student said her father encouraged her to enrol in GLA, "*He told me to go for it. It's not going to hurt you. If you do this now, you can always do something again next year. So he pushed me into it.*" She had an ally in her father to encourage her to try another option to go to university. The presence of a partner is essential for students to feel a sense of validation or self-belief, to embark on a journey to accessing HE.

The university students also reported a sense of being lost or having no clear path to success. Despite being enrolled in an HEI, this tension arose in the lack of career path after graduation. The context of #University2 did not prepare her for life at university. She struggled with English at university, stating that it was her second language at home. She also felt lost at university because she came from a rural area where she did not have any experience of university. This lack of epistemological and social access that #University2 felt exacerbated by her sense of not knowing who she was in this new environment and coming from a background where very few of her classmates get access into HEI. This feeling of being lost did not go away even as she got accepted into university when she realised how different she was to other more affluent students.

This finding highlights that the boundaries that exist are not only physical but tie into Wenger-Trayner et al.'s (2015) mode of imagination where the students did not have a sense of their location in the world, where they fit in or saw themselves in the future and how they could participate in a landscape (p.21).

- Digital exclusion

The lack of Internet connectivity and digital technologies was referred to by both sets of students as the most significant barrier to accessing MOOCs. This is a crucial finding because the lack of physical access prevents epistemological access as the content or knowledge of the MOOC is inaccessible. Providing computer laboratories to overcome this lack of alignment to the MOOC platform was how the two case studies gave students digital access. According to King et al. (2018, p.4), this is an "obvious barrier to online learning", and MOOCs require a large amount of bandwidth that is not available to global south learners. This lack of digital access could have repercussions for students from poorly resources backgrounds for a future that requires a highly skilled and digital-savvy workforce. Therefore, exposure to MOOCs and experience of an online community means they learn skills outside of HE where these students could find their path to the workplace.

#RLabs1 summed it up:

Many people don't have the internet at home which is a major problem. The findings from the Introductory course students revealed their digital exclusion because of their context. "I don't think I would have done it because of data. I didn't have a laptop. I don't think I would have known about it. (MOOCs)#University3

#University3 is from the northern province of South Africa and only used a laptop for the first time in her gap year at the age of 17. She discovered social media platforms like YouTube when she attended the university. "I never used a laptop until I got to university." She only gained digital access when she was given a laptop at her HEI and taught how to use it. The vast difference between her exposure to digital infrastructure, and students from wealthy backgrounds creates a feeling of exclusion from the student community.

During the Covid-19 pandemic in 2020, the lack of Internet connectivity for students to move into remote learning from home was a significant barrier for universities, with some having to purchase millions of Rands worth of data for their students. (University of Cape Town, 2020).

4.5 Students impressions of wrapped MOOCs

Findings revealed an initial lack of awareness about MOOCs and did not know the MOOCs were wrapped into the course. They enjoyed the experience and preferred the wrapped process when asked if they would prefer taking the MOOC alone or in a blended approach. They enjoyed the engagement with peers while being able to learn how to take a MOOC online. Both groups of students did not realise that the MOOC was a separate online course that was added into the GLA or Introductory course. The overarching impression of wrapped MOOCs was that they would take it in the future but it should not replace attending a HEI but rather be provided as an option for more access to HE.

This finding links to the theme of imagination, which opens up the identity work in the wrapped MOOC. Students are able to experience self-development where they saw themselves as employed in the future and aspired to run their own business. As mentioned in previous chapters, imagination is one of the three modes of identification (Wenger-Trayner's et al., 2015, p.20), that signals the ability to create a picture of themselves accessing more online courses, having the experience of taking a MOOC and finding topics that interest them. They imagined their path through a HE landscape taking MOOCs and moving towards employment or entrepreneurship.

The students learnt about the phenomenon of MOOCs as part of the programme, and it is unlikely they would have found it or completed a MOOC on their own.

The MOOC was my first online course, though. At first, I was a bit like, how will this work out? #University4 (9:07).

Three of the five RLab students reported having little or no knowledge of what a MOOC was before enrolling into the GLA programme. Two RLabs students explained they would not have known how to sign onto the platform, and one of them was emphatic that they did not realise MOOCs existed.

No [I didn't know what it was]. At first, I didn't. Nevertheless, then they brought it to us. They gave us the content of everything. Then we had to apply for financial aid. #RLabs5

The implications for existing MOOCs is that they are relatively still an unknown phenomenon amongst students from both case studies who, given a choice, could not imagine

themselves taking more online courses in the future without the support of the programme. The wrapped MOOC, therefore, creates general awareness and knowledge about MOOCs. It also gives students access to the social world of MOOCs, where doing more MOOCs can lead to self-development, career opportunities and crucially greater ease in navigating learning platforms like Coursera. The wrapped MOOC, therefore, acts as a bridging or introduction to taking MOOCs, which is also ensuring that marginalised groups of students are not excluded from the 4IR or using digital technologies.

I think I would do it, especially now with university. I think it's LinkedIn or something where you have online courses and all that, which I do occasionally when I have time.#University4 (8:43).

This finding highlights that the poorer or marginalised groups, who would benefit from accessing free online courses, are the last to be aware of it. It also emphasises the criticism that MOOCs made the gap between the "haves and have-nots" (Lee, 2017, 16) wider. The participants in the focus group spoke about how the lack of awareness of MOOCs and their exclusion from MOOCs was unfair, and MOOCs should be made online and offline for all.

4.5.1 Flexible structure

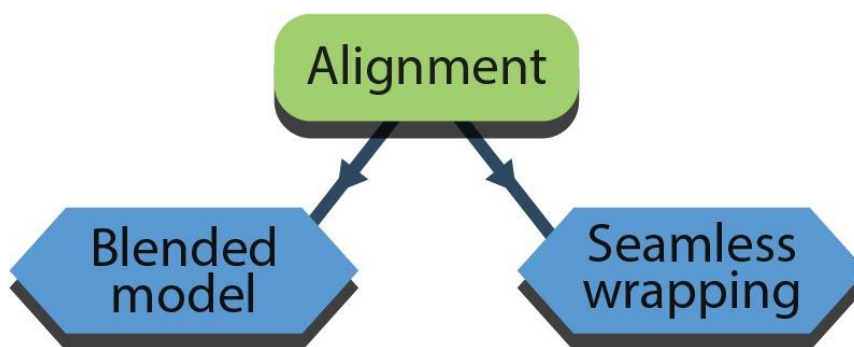


Figure 11: Findings related to alignment (© Deane, 2020)

- The appeal of the blended model

An interesting finding was that all the students from both case studies did not view MOOCs as a solution to accessing higher education. Instead, they saw it as a learning tool or resource that was part of multiple ways of learning and gaining access to HE. This is a crucial finding, as the wrapped MOOC was described in ways that would make it a possible boundary object (Star & Griesemer, 1989). As mentioned in Chapter 2, if the wrapped MOOC can cross

over the HE boundary and enable participants access to particular experiences of the practice, then it can be called a boundary object. RLabs2 summed it up by acknowledging the paradox that young people from poor backgrounds may not want MOOCs, but they do not wish to be excluded from taking a MOOC.

Young people today are a breed of their own, and they are very technologically advanced. So I think online learning would be a boost within the youth of today. But I wouldn't necessarily just go to say that it's for everyone. #RLabs2 (23:45)

I think face-to-face is better because you get personal interaction with people. If you ask questions directly with the online course then you might have a comment or a question. Then you might have to wait. #RLabs (12:08)

#RLabs2 explained that despite doing the wrapped MOOC as part of the GLA programme, he would not want to do a free MOOC alone online but rather preferred the alternation between the face-to-face interaction and online content. During Covid-19 pandemic shutdown of HEI residential campus and moving into online learning, this finding could indicate that students from marginalised areas prefer blended models of learning.

#University5 raised the idea that social learning at a university occurs in classrooms where face-to-face interactions and interactions amongst peers are not replicated in a MOOC experience. In the RLabs case study, two of the five students said, given the choice they would not want to take an online MOOC alone.

Because then you have (both) online and then face-to-face, which is ideal and where you can ask questions and all that. #University2 (27:01)

I feel like the physical space is important. This is where you get to meet people. And create connections and contest ideas. It's really good, physically, apart from getting the degree itself. Now when you leave university and you have your degree. There's so many other things like new friends. I think the physical matters more, I don't think you can gain as much online as you can on campus. #University5 (23:44)

They all valued and preferred face-to-face interaction as opposed to taking an online course or MOOC alone. Therefore, the wrapped MOOC model was an appropriately adaptive model to traditional MOOCs for young people from poorly resourced areas. The university

students preferred the face-to-face component of the Introductory course to discuss the content of what they learnt online. This can be applied in HEI where blended models of teaching and learning is being introduced in response to the Covid-19 pandemic shutdown. The flexibility and adaptability of blended models are preferred by students from marginalised areas as it takes into account their context.

These findings illustrate that a blended model can overcome the alignment of the MOOC platform with face-to-face (f2f) discussions where students can work with educators to manage the rules and adhere to the outputs. They can also negotiate the alignment in a two-way process by contacting the platform through a broker. This is discussed in the next chapter. The blended approach impacts on engagement by providing experiences of learning where students are talking about the content, doing assignments, writing and presenting their work in the class and on the platform. This is done with two modes of identification (Wenger-Trayner et al., 2015) in the online space and the f2f sessions. The data reflects that given a choice, the students from marginalised communities would not want to take a MOOC in isolation, nor do they want MOOCs offered to them as a replacement for access to HEI. They saw the value in the wrapped model more than in the existing MOOC model.

- [Seamless wrapping](#)

Initially, none of the students from both case studies thought that the MOOC was separate from the programme or course. This is worth pointing out because wrapped MOOCs should complement the content on the course and be used to enhance the learning outcomes. RLabs students reported that the wrapped Changemaker MOOC was in line with the GLA content and the presenters included the founder Dr Marlon Parker from RLabs so this enhanced the perception that the MOOC was part of the programme. It is rare to find a situation where the presenter on the MOOC is also part of the programme. In most instances of wrapping, the existing MOOC will not have content that is so aligned to the context. This will affect how the students perceive the wrapping. The GLA programme ran over eight months, and the online MOOC was presented to the students in a six-week block on the platform, with little to no help in completing the MOOC. This was explained by #RLab5 students, "I did it in our digital sessions and formed part of our programme. The social innovation programme."

I would say GLA had a definite effect on me (and) then (MOOC) Coursera did. What I learned in Coursera, I implemented in GLA because in the GLA, I did an

entrepreneurship course and what I learned there I used during my entrepreneurship course. So, it's kind of interlinked. It worked for hand in hand. #RLabs2 (11:14)

This meant that from the perspective of the RLabs students the GLA programme successfully wrapped the MOOC by adapting the concepts and theoretical components of MOOC with practical and face-to-face sessions in the programme. Another RLabs student explained the process of taking the course and used the word "they" to refer to the MOOC and not distinguishing between who 'they' was.

Of course, there was a test. Each week, they give you a test, and you have three chances to pass the test, you can fail between one and twice after the third time you have to wait a while. But the question I failed once or twice.#RLabs3 (09:41)

The assumption here is that “they” pointed both to the RLabs facilitators and the presenters on the MOOC. By not distinguishing who “they” referred to in this context, is also indicative of the success of the wrapping of the MOOC.

Two of the five university students thought the MOOC and the Introductory course were two separate educational processes.

They were separate things. Because in class, we have the lecturer. You can interact with other people. With MOOC, you are alone, and there is your perspective only and what you watch in MOOCs. But in class, you get different perspectives, and then challenge other ideas.#University3 (07:38).

For the first while, it felt like one. But then towards the end, it felt like two separate courses. Because on the online course we had submissions on that. And then we had our actual submissions as well. And then only then did feel like too much. But it started as one, and then after a while, it felt like a burden.#University5 (03:59)

While this finding represents the perception of the students, it is essential to highlight that the wrapping was far more complicated for the educators of both case studies. The lack of flexibility of Coursera meant the wrapped Writing MOOC educators had to compromise around issues of pacing and sequencing of the content. Nevertheless, the wrapping was also more accessible by the nature of these MOOCs made in the global south. The complication of

wrapping a MOOC from the global north for a global south target audience is discussed in the praxis chapter (Appendix F).

4.5.2 More accessible content

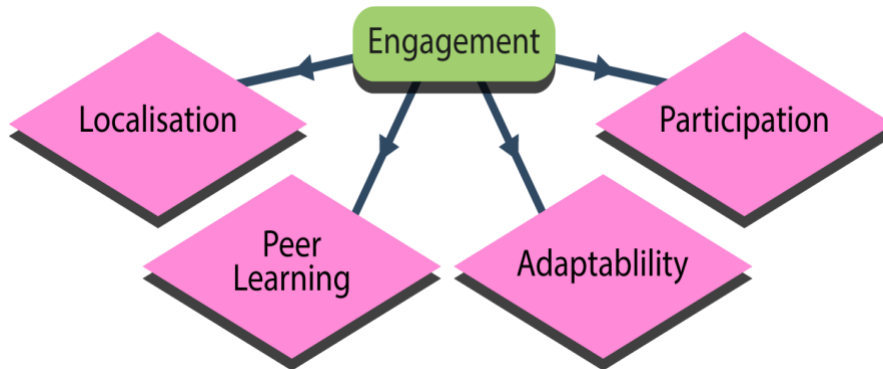


Figure 12: Findings related to engagement (© Deane, 2020)

- The localisation of the content

The diagram (Figure 12) presents how the findings configured links to the analytical framework (Figure 9). In this section, the codes linked to engagement themes connect to the concept of knowledgeability (Wenger-Trayner et al., 2015). Both sets of students in the data collection felt more included in the wrapped MOOC when they had relatable content, familiar presenters and tools like captions and transcripts that made the content context-sensitive.

The educators of the wrapped Writing MOOC also insisted on using animated characters in the MOOC that were personas or had relatable identities. One of the students found the animation of the characters relatable, but two others reported that they were indifferent to them.



Figure 13: Illustrations of localising animated characters in the Writing wrapped MOOC (© University of Cape Town, 2016)

I did find that they were believable, and they were real people. That was nice about the whole thing. #University2 (7:41)

The student evaluation reported that the class did appreciate the stories of the characters because some had Afrocentric stories similar to the students' own or to someone they come across in their lives.

The researcher insights here are from her work in the video production process that utilised animation to create characters that were sensitively depicted and would not be too stereotypical. The inclusion of these characters was a learning design decision by the Writing educators and a core part of the video production process. The use of animation bypassed issues of copyright and consent when filming young students. The debate about characters was extensive to ensure they were localised and representations of diverse identities that included their nationalities, sexuality and positionality. These characters also engaged with the content and wrote a paragraph or understood concepts of migration, mobility and identity. If the characters were from a global north context, then issues of the MOOC projecting western ideology and knowledge systems that were not inclusive of an African perspective would be present. Therefore, wrapping a global north MOOC would be more complicated, and these characters, in theory, would need to be scaffolded with other context-sensitive personas through face-to-face discussions or using only some videos from a MOOC.

Some of the students spoke and appreciated the educators in the MOOCs that were familiar and understood their context. In the Introductory course, the two educators from the university were also the presenters on the wrapped Writing MOOC. This meant that the students in the Introductory class were able to watch videos made by the educators and then interact face-to-face with the same educators.

It showed that it relates to them, having them understand our backgrounds. How we see things and stuff. So, I think it did help Having them understand our backgrounds. How we see things and stuff. So I think it did help." #University2 (05:04)

I remember watching one of them (lecturer) on video. And then, I think I had a question about what he said. And he was right there. So I could ask him in person, unlike email." #University4 (9:34)

Instructors



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Marlon Parker

Founder
RLabs

Figure 14: Instructors of the wrapped Changemaker MOOC

The story of Dr Marlon Parker (Figure 14) as the founder of RLabs and some members of the organisation included in the content of the wrapped Changemaker MOOC, enhanced the localisation aspect. This meant that RLabs students taking the GLA programme were able to learn about the background of the organisation and founder while taking the wrapped MOOC. The integration of this local content into the global MOOC is rare but can be a lesson learnt for wrapping future MOOCs from the global north. To be sensitive to content that is not relatable and to aim to make it more inclusive could mean including more local case studies.

Students reported that this inclusion of local content made the academic content more relatable. *"I think it did help because when you learn from someone you are familiar with, it's better to retain information and when it's not just like a stranger you are listening to."* #RLabs2 (5:31)

When you saw Marlon's story on the videos, it did make a difference (and) you were seeing our RLabs on the videos. It made an impact; if he started out so rough and became so successful, others can do that as well. #RLabs3 (11:37)

The other two presenters are from UCT's Graduate School of Business and correctly fall under a demographic that is white, and one of them is American. The marginalised group at RLabs reported that they found these two presenters to be "boring" and the videos to be "too

long". However, the reputation of the Graduate School of Business that these two educators represent did enhance the MOOC's value and credibility for one RLab student.

Because university has a lot of weight to the name. So when I started GLA, my daddy was not for it...But when I said I'm getting a university certificate at the end of the year. His mindset changed a little, and you could see that shift. Because it weighed so much.
#RLabs2 (10:.06)

- [Adaptability \(transcriptions and subtitling\)](#)

Both wrapped MOOCs included subtitling and transcriptions, which were enabled by an automated application on the Coursera platform. This aspect of the finding becomes relevant when taking the MOOC off the platform because the subtitles are generated on it. The use of the transcripts and subtitling in other languages is a critical finding in providing epistemological access, discussed in the next chapter. Students from backgrounds where English is not their mother tongue, use the transcripts as a secondary or primary resource to understand the content.

The researcher is aware of the role of transcripts and subtitles as part of the video production role she has in making MOOCs. Thus far, African languages are unavailable on MOOC platforms, but when capturing the data, a university student imagined if MOOCs are translated with subtitles in indigenous languages. R Labs students did not mention the subtitles, but R Labs5 used the transcripts to understand difficult concepts and work off of them to complete her assignments.

Two university students reported that the use of vernacular language would benefit students from backgrounds where English is a second language.

Maybe they could put a bit of a vernacular (in the MOOC) because some words, especially in English, you couldn't understand them, because that's out of my grasp.#University4 (15:54)

For some of the students in the Introductory course, the use of English as the primary language made access to the content challenging. Their mother-tongue was not English and therefore University4 requested MOOCs with subtitles using indigenous African languages. This would increase epistemological access to students in the global south. The enormity of

attending university and trying to understand the content that is mostly English, as well as the level of complexity and the pace at which HEI teaches course work, is a vital example of the debate that access to HEI does not equate to success or throughput. Therefore in her opinion, the idea of having MOOCs translated to an indigenous African language is directly linked to her "survival" or identity as a university student.

4.5.3 Promoting Engagement

The data revealed that the experience of engagement was coded across four specific components. These engagement components are: localisation, peer learning, adaptability and participation. The students valued the engagement as it is the aspect of the wrapped MOOC that overcame the isolation of taking a MOOC at home and also enhanced the content through making it relatable, enhancing the shelf-life and giving students resilience. Engagement as one of the themes from the modes of identification (Wenger-Trayner et al., 2015) could occur in both online and face-to-face sessions.

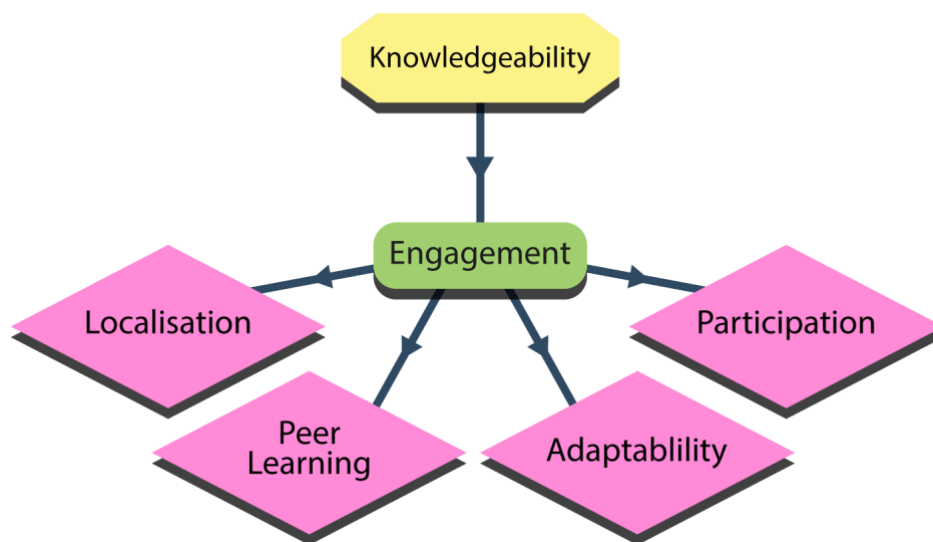


Figure 15: Diagram of Knowledgeability connected to modes of engagement (© Deane, 2020)

- Participation

Students acquired knowledge through participation in the field, which Wenger-Trayner et al. (2015) refer to as 'engagement'. The data was coded as participation, but the essence of it

was around how the students engaged with knowledge of programmes and the MOOC platform. In a wrapped MOOC context, the findings indicated that in both case studies, the students experienced learning as engagement on two levels. The first was to navigate and become knowledgeable about using MOOC platform, and the second level was learning how to engage with the content, the forums online, and their peers in the class.

In both case studies, the students had to go through the process of signing up for the MOOC - watching the videos and doing the assignments. This practice of taking the MOOC each week in the computer laboratory became part of the experience.

This finding is not assuming that they gained competence. Therefore, the researcher did not focus on any assignments, assessments or completion rates. The researcher instead explored how students felt about the experience of taking the MOOC and whether it provided social access to MOOCs so that they can do more online courses in the future. The positive response from participants suggests exposure to MOOCs opens up the opportunities for students from marginalised communities to enrol in online and blended courses in future. #University1 confirmed this and said he would use *LinkedIn* because the university offered free courses to students. The Introductory course has given him the tools to sign up for other courses.

I think so (doing an online course) I think it's better than sitting at home and doing nothing. And because people have limited information. I think with online courses, it is someone, it's eye-opening, you learn new things, and you gain a new skill. #University1 (12:25)

However, not all students wanted to learn online. RLabs1 student said: "I don't think so. I think you have to have a reason. Like an end goal". Nevertheless, for the RLabs4 student becoming a MOOC taker has opened up a new journey in online learning. This indicates that these students preferred engaging and learning in different ways. Providing only face-to-face classes or only online was limiting. This information also feeds into the finding of the preference for a blended model as it provides diversity and opportunities to learn in different ways.

I have done another online course. It's a Naspers flow course; I did that. I am currently signed up for another course for Coursera for my art. #RLabs4 (5:27)

The other aspect of engagement was in the actual content that the students completed in the wrapped MOOC. The Introductory students learnt about how to write academically. These findings indicate they did learn the content of the wrapped MOOC.

I learnt about cohesion. What I learnt you just have to be straightforward with essays...But with the MOOC, I learnt you have to link everything so that it can sound like one thing and not just this point and then run and go to the next point, and then they don't link together. #University3 (11:32)

I think what I learned most importantly, essay writing for me, because I struggled with essay writings, especially with the introduction and the body, and to articulate a thesis statement. And I struggled so hard. And so every day, we had to write something for the writing process. The more I wrote, and the more I read other people's work, the more I kind of understood. And I took that practice and put it on to my other courses, and I got 70 per cent from there.#University4 (10:11)

RLabs students reported that participating in the GLA programme was relevant and linked to the problems in Bridgetown as they could apply their learning to the complex problems that exist in their community. A key learning outcome of the wrapped Changemaker MOOC was to incorporate the practice into social innovation theory.

GLA students used the resources around them and reframed their perspectives to create sustainable solutions to become changemakers in their communities. The opportunity that RLabs used in wrapping the MOOC was to use the theory in the MOOC, the videos and lecturers to teach concepts the students could apply practically. This design thinking approach "is a process for innovation that prioritises the needs and values of the people most affected" (Vechakul, Shrimali & Sandhu, 2015, p.2). It is also an example of an organisation not having the resources to make their own content or online course and using the MOOC to supplement their content.

This engagement with the content is what Wenger-Trayner et al. (2015) said gives the students an experience of taking a course from HEI and describes the process as the visiting the practice but not spending a lifetime in it. "There is no substitute for direct engagement in practice as a vehicle for learning the competence of a community" (p.20).

- Peer Learning

All of the university students preferred learning from peers, and four of the five RLabs students spoke about the value of peer learning. They preferred to take the wrapped MOOC where there was a blended approach to peer sessions rather than taking an online course in isolation. The value of peer learning brought a diversity of opinions in both face-to-face sessions and forums on the platforms.

In the comments, you get to see a lot of comments from a lot of people that aren't at university. And then it really gives you an idea of how people all around the world feel about the same issue... It is a nice platform for engagement. #University5 (5:07)

RLabs students spoke about how the GLA programme created opportunities for deep engagement and peer-to-peer learning in classroom sessions. Peer learning was built into the programme as a form of support for the students to feel less isolated and to rely on each other and value everyone's contribution. This peer learning also resulted in the students building resilience where they learnt about each other through coaching sessions, and this resulted in the “ability to forge a sense of continuous identity” that is learned but can be different for various groups (Fenton-O'Creevy et al., 2015a, p. 52).

We learnt about each other, and actually spoke to each other. There is a common denominator. Everyone was lost. They didn't know where to go. So a lost person can't help a lost person find their way. So what we have done with RLabs, they made us appreciate what we have in front of us and what we are able to go through. My peers (invested) a lot in the person that I am now. They changed the way I speak, the way I act, the way I look at life. #RLabs4 (11:32)

We use a simple principle. We broke down each and everyone's box. What keeps them inside from not speaking or interacting with anyone. We had a peer coaching session. And that's actually what helped us. #RLabs3 (12:11).

This finding is significant in how existing MOOCs can be wrapped to include peer learning in face-to-face sessions that can promote a sense of solidarity and resilience in the students to move across boundaries. This is an example of a process of engagement where participation with peers led two of the RLabs students to become facilitators or peer coaches (Wenger-Trayner et al., 2015, p.20).

- Knowledgeability

The code of knowledgeability was taken from Wenger-Trayner's et al. (2015) LoP as discussed in the previous chapters. In the diagram (Figure 15) knowledgeability is used as a predetermined code. This code was used because the research was not measuring competence but rather knowledgeability as discussed in previous chapters. In LoP, knowledgeability is referred to information that is experienced not necessarily to gain mastery of the content, but rather to become informed. The focus sought to understand the personal journey they took through the landscape and the insights they gained about the different contexts they straddled (p.19).

This became particularly evident as they crossed a boundary in the community to gain knowledgeability in the practices made available by the HE academic community. They were able to move back to their communities with those skills to address some of their problems. In the process, they may have acquired aspects of academic or entrepreneurial identities, discussed in the next section. The opportunity to engage with their identity and how they are involved in multi membership (Fenton-O' Creevy et al., 2015a) arose as they crossed through the boundary of HE where they gained knowledgeability about their problems and solutions as well as moved between academic practice and members of their communities (p. 44).

What I really learned was about different backgrounds. And then different cultures. And also in humanities, you only work with humans and things like that. I've learned to respect other people's perspectives, and then respect other people's cultures and how people identify as. Because back at home, people can't express themselves as being gay or lesbian. But now being at university in a different environment, and then learning about identity. #University3 (10:12).

With Coursera I learned like wicked problems, the five whys, the how-to analyse certain issues, using available resources, not just looking for finances, not just always looking for money, because money isn't the solution to all problems. So with Coursera, you learn to look at things differently. And then with GLA entrepreneurship, there it was like Coursera, but at a lesser scale, so we just learned how to put the business plan together. So without Coursera, I think I wouldn't have known how to figure out the answers to the questions in the entrepreneurship course. #RLabs2 (12:13)

In these two quotes, both the University3 and RLabs2 students refer to content in the wrapped MOOCs they became familiar with but do not claim to be experts or have competence. University3 student is referring to content beyond the acquisition of information but rather how the access to the wrapped MOOC opened up and changed the way she perceived others.

Doing the wrapped MOOC also gave them an experience of the content. Though they did not claim competence in all areas related to MOOCs and did not identify themselves as expert MOOC takers, they had enough knowledgeability on the periphery of the HE practice to feel confident to take more online and blended courses in the future. Farnsworth et al. (2016) states that a learner cannot be competent in all practices in a landscape, but they can still be knowledgeable about them (p.5). As such, while the participant gains knowledgeability about a practice, he is not accountable for his performance in it. While the students were assessed in the overall course, they were not assessed for their participation in the online MOOC component.

4.5.4 Feeling of inclusion

The students from both case studies expressed feelings of being lost and then took the wrapped MOOC and expressed feelings of belonging, becoming and feeling included in the HE and RLabs community. These findings are linked to the identity work that was found to be a key component in both wrapped MOOCs. They were required to "modulate their identities" and juggle the "strength or nature of their identification to the various practices they belong to" (Kubiak et al., 2015, p.64).

The participants had multiple roles and identities by their multi membership in communities across the landscape. This became particularly evident as they crossed the boundary from their community to gain knowledgeability in the practice made available by the HE academic community. They were able to move back to their communities with those skills to address some of their problems. In the process, they may have acquired aspects of academic or entrepreneurial identities as well, discussed in the next section.

In the Introductory course, the students imagined how their degrees would give them an identity as a practitioner in their chosen field. The RLabs students imagined their future where they set up their own business (RLabs2), worked as coaches for (RLabs1) or studied psychology in an HEI (RLabs5). The identity work they experienced is linked to (Wenger-Trayner et al., 2015) imagination mode.

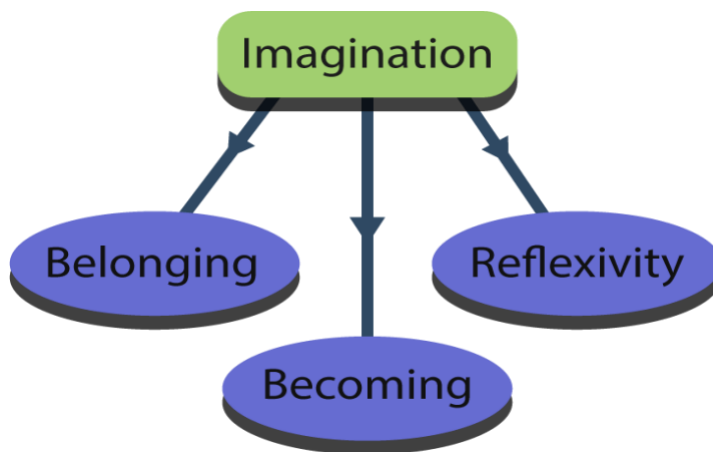


Figure 16: Findings related to imagination (© Deane, 2020)

The diagram illustrates the configuration of the identity work (Figure 16) as it relates to the theme of imagination. The following codes of belonging, becoming and reflexivity was found in the data of both wrapped MOOCs.

- **Becoming**

#	Name	Text Content	Document	Codes	Number of Codes	Comment	Start
18:4	I actually took it more into Novio, findin...	I actually took it...	RLabs 5. doc	learning as beco...	3		1380
18:12	So there is a lot of skills I learnt. How t...	So there is a lot...	RLabs 5. doc	gateway wrappe...	2		4516
18:28	I think that I found myself here, knowin...	I think that I fou...	RLabs 5. doc	identity change...	2		10243
18:31	Because you must know what you want in life and how you want things to be done. You can't let people...				2		11243
12:13	It does because they inspire you. They...	It does because...	RLabs1.docx	learning as beco...	1		7451
12:16	maybe a course that focus on the futur...	maybe a course...	RLabs1.docx	learning as beco...	1		9552
12:19	I want to do counselling now because I...	I want to do cou...	RLabs1.docx	learning as beco...	1		11503
12:26	Because maybe at the university some...	Because maybe...	RLabs1.docx	competence, lea...	3		16852
11:18	When I learnt the things on coursera in...	When I learnt th...	RLabs2.doc	identity, learnin...	2		8030
11:21	It helped me figure out what I wanted t...	It helped me fig...	RLabs2.doc	Accessibility, g...	3		10548
11:22	when I spoke to one of my facilitators a...	when I spoke to...	RLabs2.doc	learning as beco...	1		11073
11:23	I want to study psychology. So because...	I want to study...	RLabs2.doc	learning as beco...	1		11360
10:3	Basically determination, perseverance...	Basically determ...	RLabs3.docx	learning as beco...	2		645
10:19	There was a few moments that actualy...	There was a few...	RLabs3.docx	learning as beco...	1		4768
10:22	No, I had a few months experience. Lik...	No, I had a few...	RLabs3.docx	learning as beco...	2		5872
10:24	I didn't know a method to becoming an...	I didn't know a...	RLabs3.docx	learning as beco...	1		6712
10:27	It brought awareness to me. At first, lik...	It brought aware...	RLabs3.docx	learning as beco...	1		7615
10:33	Basically like the helping, caring, show...	Basically like th...	RLabs3.docx	learning as beco...	1		9476
10:39	I hopefully want to start my own compa...	I hopefully want...	RLabs3.docx	content of value...	2		11441
10:45	want qualified. Its about the team I wo...	want qualified...	RLabs3.docx	competence, e...	3		13077
20:7	A lot of skills especially for a corporat...	A lot of skills es...	RLabs4.doc	gateway wrappe...	3		1351
20:12	I saw that as a problem and kinda brok...	I saw that as a p...	RLabs4.doc	gateway wrappe...	3		2947
20:16	Ok, I am not going in full animation righ...	Ok, I am not goi...	RLabs4.doc	learning as beco...	1		3983
20:27	When I went to RLabs, they helped me...	When I went to...	RLabs4.doc	identity change...	2		7312
13:32	I want to work with them, so the gover...	I want to work...	UCT Student 1...	learning as beco...	1		10349
17:33	About identity, what I really learned ab...	About identity...	UCT Student 3.d...	identity, identity...	4		9701
17:35	I want to do law so I can become a hum...	I want to do law...	UCT Student 3.d...	aspirations of H...	2		11483
16:29	eah, I think, plans, okay, maybe in 10 ye...	eah, I think, plan...	UCT Student 4...	learning as beco...	1		15642
16:37	But being open, like in a new environm...	But being open...	UCT Student 4...	Accessibility, gi...	4		16092
16:44	I think having education really enlighte...	I think having ed...	UCT Student 4...	learning as beco...	1		16626

Figure 17: Diagram representing 30 codes related to 'becoming'

The code of becoming came up around 30 times. All five RLabs students realised what they want to become after completing the GLA programme. The feelings of being lost or having no direction dispelled after being on the programme and taking the wrapped MOOC. They did not distinguish whether it was the MOOC or the GLA programme that was

responsible for the change they felt, and this can be seen as a success of the wrapping process. The #RLabs4 student saw himself as becoming a changemaker.

I learnt to become a changemaker where I physically placed myself into a community issue and from there I broke down the issue and saw where the pros and cons were, what I can do in order to build a better future for our youth. I learnt various skills that I take into my everyday life, such as communication skills. I learnt to be a critical thinker, to break down problems not just for face value but to go deeper into it. (02:22)

#RLabs5 said she found herself through doing the course but also explains that the GLA programme was more than attending a university or college. The integration of practical skills and self-development work provided these students with lifelong skills they can use to move out of an identity linked to poverty and victimhood. However, this does not mean she is claiming to be a practitioner as a social innovator. This is an example of how Wenger-Trayner et al. (2015) talks about how we view practitioners who are competent and knowledgeable in their particular field. However, in the case of LoP and claims to becoming this does not need to be defined by competence. The applied theory to RLabs5 is that she can be a reliable source of information and a legitimate 'changemaker' in her community (2015, p.23).

People always ask me what you do at that college. No, we don't call it a college because when you go there you are not learning subjects like history, they are not putting a lot of sums in your head. You are actually reflecting about yourself. #RLabs5

The leadership skills that are taught in the wrapped Changemaker MOOC empowered students to engage in self-reflection. #RLabs3 described this, "Basically determination, perseverance, a lot of hard skills and soft skills as well." It is part of becoming a social entrepreneur, to move beyond being a victim of their circumstance and wait for jobs or free education, to become an entrepreneur and become agents of change. The content taught them that resources exist in their communities and within themselves.

However, for #RLabs2, she saw the course as a bridging course and realised during the programme that she wants to become a psychologist. "I want to study psychology. I learned about being a changemaker. And I think there are so many social issues in the world that go unnoticed." The aim of this research was not to critique the dreams and aspirations of the participants but rather explore how they felt about themselves and their lives after participating in a program that included a MOOC. Therefore whether #RLabs2 becomes a psychologist or

the barriers that may prevent her from achieving this dream is outside of the scope of this research. This finding illustrates that prior to the programme, #RLabs2 did not believe she could be a psychologist and after completing it, she now looks forward to her future.

Her point was further reinforced by #RLabs1, who said the GLA programme allows students first to confront who they are and deal with their role in the world while teaching them practical and theoretical content.

Many matriculants in my community don't know what they want to study after their schooling. So, like RLabs just gives them the focus. To sit back and think, is this really what you want to do and if you want to do it, you have to with full determination to get that at the end of the day. #RLabs1 (23:05)

From the name of the wrapped MOOC, the learning outcome was clear: "Becoming a Changemaker" meant that the instructors specifically aimed for participants to have an experience and identify with becoming a changemaker.

#RLabs4 explained how the GLA's holistic approach allowed him to empower himself and be financially independent. It is significant to note that identity work provided in the wrapped MOOC allowed the RLabs students to become "sojourners" (Fenton-O' Creevy et al., 2015a). They immersed themselves in the practice where they had high levels of participation but did not assimilate but instead moved beyond the practice to enter other contexts (p. 44). In the case of RLabs students, HE is not a practice they want to immerse themselves in for long but rather use it as a pitstop to the workplace.

When I went to RLabs, they helped me emotionally, mentally, physically. They made me appreciate what I have and want to get more. #RLabs4 (9:51)

As for the wrapped Writing MOOC, its content was about identity as well. These findings are not including the content that was taught in the classroom and the MOOC about the theme of identity but rather what the students reported about their transformation around their identity. #University4 spoke about his growth concerning how epistemological access to HE changed him and gave him a sense of identity after feeling like he did not belong in university.

I think having an education enlightens me. It opens me to a world that I could only view from other people or maybe the news or something, a world that I thought I would never

even come across. A world that would never ever come to me. Because, especially for me, being the first in my generation to ever go to university. It was a big thing. #University4 (23:51)

This finding is vital in illustrating how epistemological access was facilitated by the wrapped Writing MOOC, in allowing students to view their journey through the landscape and plan for a future where they have options; to graduate with a degree in their chosen field, to find a job or run a business. This access to the Introductory course specifically focussed on content and knowledge that allowed them to reflect on who they are and where they want to go. #University3 student said that the course taught her to see herself in relation to others and what career path she wanted to follow.

I want to do law so I can become a human rights activist. I think it taught me to respect people's rights." #University3 (12:18)

The secondary data reinforces how the emphasis on the theme of 'becoming' is key to how MOOCs can be wrapped successfully. One participant verbalised how the wrapped Changemaker MOOC changed her perception of waiting for hand-outs or opportunities and made her see resources and the non-monetary resources in their community in a new way.

It has helped me to see things in different aspects, see things that I didn't think matter, like people, friends, space around me etc. Before the course I had this stereotypical mindset that tells me that in order to start a business you need a lump sum, large numbers of money, but through this course I have learned that you can actually start a business with what you have either money, experience or qualification. Anonymous MOOC taker from Coursera Forum (13 October 2016)

Because of this course many doors have opened up for me. I have always had a yearning to make a difference in a concrete way. This course has given me the know-how as to how I can concretely have a positive impact in some way. I am a teacher in Japan and over the years have become disillusioned with the gap between what's happening out there in the world and what goes on in the classroom. Anonymous MOOC taker from Coursera Forum, 24 January 2019

However, my intention for studying social innovation is to make a difference in my community. I want to make a positive and meaningful impact in people's lives. To be

frank, this course has helped me a lot to start thinking outside of the box the little I can offer to my community and how to start it.(22 December 2017).

The finding illustrates that one cannot "separate learning from the becoming of the learner" (Farnsworth et al., 2016, p.8). He said that learning is not just about receiving content but includes a process of becoming (Wenger, 2010, p.2). That is why knowledgeability is linked to identity work. Here the RLabs students reported on how the experience of the wrapped MOOC shaped their identity to "become" changemakers in their community. This represents a "meaningful way of being" (Farnsworth et al., 2016, p.8) where they gained the confidence to make a difference and a belief that they have the agency to support others. This shift from victims of their circumstance to entrepreneurial and social agents of change is where they have identified with the knowledge they received in RLabs and how it became a living experience for them (p.9).

- [Becoming - Employability](#)

The findings illustrated that wrapped MOOCs cannot directly lead to employment, especially in poor communities. Two of the RLabs students were employed as animators at the time of the semi-structured interviews being conducted. Their employment was not a result of them completing the GLA programme. Nevertheless, they do add to the findings in how the wrapped MOOCs provided them with the soft skills to operate and be successful in the workplace. The RLabs students, in particular, did not view access to an HEI as the only path out of poverty. They viewed it as a pitstop to the workplace. This is also an indication that RLabs students' trajectory across the landscape is not to make HE the destination, but rather pass through it as a sojourner (Fenton-O'Creevy, 2015a, p.44). They aim to become employed or run their own business rather than aspire to attend a HEI.

They were more inclined to think about how to become entrepreneurs or be successful in their lives and employed, rather than getting a university degree. This finding is significant when the government and non-profits are considering how to provide interventions for the youth bulge. The landscape of practices for youth includes multiple communities where HEI is just one together with the workplace, online courses and non-formal programmes like RLabs (Figure 7).

We were taught a lot of skills, especially for a corporate environment and a workspace environment. They taught us how to be a good employee, the skills you need in order to

make it out in the world wherever you may be. Basically skills, hard and soft skills that can help. #RLabs4 (20:07)

#University1 did not specifically talk about employment but was sceptical that online courses or MOOCs could lead to employability without being wrapped in a credible HEI.

To do the online courses? You just told them they'll get a certificate. And because I think people are more concerned about employment. So it wouldn't help if they just do the online courses, just for the fun of it. #University1 (13:35)

The research does not aim to focus on the impact of MOOCs in finding employment for marginalised youth and therefore, did not explore this finding in any depth. Nevertheless, it does point towards future research on how wrapping a MOOC can potentially provide skills that facilitate employability.

- **Belonging**

In both case studies, participants crossed specific boundaries to enter practices where they initially felt they did not belong. The boundary between the Introductory course and the broader student community was highlighted by the students. They spoke about feelings of being excluded from unfamiliar university practices. Thus, despite being at the university, there was a still boundary that they needed to cross over to feel like they belonged. This was expressed by #University4: "None of us thought, from my matric group, that we could actually make it to university."

Another university student reported that the course started to trigger shifts in his identity. This quote below reveals the student becoming aware of himself and how he engaged on the periphery of the university or immerse himself in it, so it began to change him.

I'm trying to find myself more. Because I mean, in a small space, you don't grow as a person, you only grow in that small community, and you're kind of limited. #University4 (23:13)

Another university student spoke about how her identity started changing when she learnt more about gender issues and became more socially and politically aware of other students' gender identification at university. She felt a sense of belonging to the university community, thereby overcoming the boundary of being from a rural community. However,

ironically, her sense of belonging to the university community made her feel more isolated or "different" from her rural community, where she could no longer relate to how her family and friends thought about gender issues.

Because at home, I feel like I'm a different person when I get there. And also because people back at home are not from university. So we're not on the same page. When I talk about this, they don't even understand what I'm talking about. #University3 (13:24).

The concept of 'belonging' discussed in Wenger's (1998) CoP as modes of belonging (Solomon, 2007, p. 4) evolved into modes of identification (Wenger-Trayner et al., 2015, p. 20) in LoP. However, it is worth mentioning that this feeling of belonging from the data is significant as learning impacts on identity. The LoP does not focus explicitly on belonging compared to CoP. Among R Labs students through the wrapping process they were able to align to the MOOC platform and engage with content that opened up their self-development to feel a sense of inclusion and belonging. They also imagined themselves as changemakers to solve the problems facing Bridgetown. This is an excellent example of the three modes working in balance to affect identity work.

The Introductory university students also learnt by activating the three modes. Through the engagement with the content of identity and with peers, they grew confident and were able to perceive themselves as belonging to the wider student community. They were able to debate and also complete assignments that met aligned with the rules of academia. Through this process, they were able to pass onto their second semester and when interviewed were all in their second year in the university. They simultaneously belonged to the broader community, the EDP and their home community. Belonging also impacts on the multi membership students experience where they are part of various communities and have to modulate their identities to manage the different practices (Kubiak et al., 2015, p. 65). Tension can exist between them, and their different identities and be negotiated. This crossing over from the EDP community to the HEI community did not negate the belonging that the students experienced. University2 negotiated her identity when she felt less able to relate to her community at home and when she felt a sense of belonging to the university community. The epistemological access she gained from being part of the wrapped Writing MOOC and was evident in how she spoke about her identity concerning a future where she could imagine herself graduating and having a career.

The student evaluation report from the Introductory course confirmed these findings. The majority of a class of 130 students reported how difficult it was to adjust to university life and how this course helped with the adjustment. Some of these comments were as follows,

Honestly it has, because I had a difficult time adapting to university life and if it wasn't for this course I would have probably dropped out or even failed. Anonymous student from evaluation report.

It helped me with coping mechanism skills in my transition from high school to university and linked it to most of my other courses and put more clarity on things I have learnt.#University2 (20:20)

Belonging is linked to the identity of becoming a changemaker in the RLabs case study group. #RLabs5 reported that she engaged with her community as an insider and not as a bystander by wanting to focus on the problems they faced. Before the programme, she would walk past homeless people without greeting them. After the programme, she saw how her attitude towards these people changed. This is also a way the dismantling of hierarchy takes place where she sees herself as part of her community, no better or worse than the people in the street.

It made me care for other people. I would just walk pass and they would ask me (for something) and I wouldn't answer them. Now I greet everyone. It showed me how to be with other people and how to care for other people.#RLabs5 (20:30)

What I learned from that was considering other people's views as your own. Willing to imagine how to be in someone else's shoes as well. Firstly, I never really took note of people. What they've been through and our lives has impacted themselves. So basically I took the initiative and got more deeper into other people's lives like where can I help them.#RLabs3 (01:02)

- **Reflexivity**

In both case studies, the students were given reflexive tasks that were integrated into the learning design of the wrapped MOOC and the program. The reflexive learning focused on themes of identity, aspirations and the ability to inspire agency and allow students to explore their role in the world. The RLabs students spoke about being transformed by the GLA

programme. They found a stronger sense of self, especially after feeling lost with limited ideas of what they wanted to do or how their future will look.

"I think that I found myself here, knowing who I am, knowing whom I want to be, how I want things to be done. I found so much stuff about myself...because we have done a lot of reflection. #RLabs5 (18:05)

#RLabs5 is pointing to the idea that access to higher education should include both social and epistemological knowledge. For students from RLabs, before taking the programme, the marginalisation they experienced was not only economic; neither had they received the knowledge of reflexive processes to build their self-confidence. In the program they received soft skills allowing them to critically think about their future and imagine their career paths or the role they can play in their community. RLabs ethos is built on hope, and it includes reflexive teaching that is integrated into the technical skills the students are taught.

RLabs, the whole programme, helped me become the person I am now. I am employed, I'm able to provide for myself. #RLabs4 (9:51)

It also illustrates that employment is not always linked to a higher education degree, but rather that the processes of agency and reflexivity built into the course can shift the way young people see themselves, from searching for a job to creating their jobs. This could be a solution to the complex problem of access to HE.

Because maybe at the university some might discover that this is not what they wanted to do. Where RLabs covers your passion and goals. What do you face? What do you face in your life? Maybe what you want to study. Many matriculants in my community don't know what they want to study after their schooling. So like RLabs just gives them the focus. To sit back and think, is this really what you want to do? And if you want to do it, you have to be full of determination to get that at the end of the day. #RLabs1 (23:05)

This comment by #RLabs1 also shows the failure of career guidance in secondary school to provide aspirational or youth development programmes that would allow them to have hope and confidence that they can move out of the cycle of poverty. They are not given the tools or knowledge at secondary school to understand the world, how to navigate around the challenge of the high cost of fees, and the soft skills to feel confident to apply for jobs, a tax number, open a bank account and be enrolled in trying to find pathways to the workplace. RLabs

recognises the shortcomings of the education system to meet the needs of the marginalised youth in areas like Bridgetown. "We are also currently working on a new model of equipping youth from the Cape Flats and townships with skills for the 4th Industrial Revolution", according to Dr Marlon Parker (Vallie, 2016).

In the Introductory course, a student reported feeling more empowered and enlightened to see the world in a different way.

But being open, like in a new environment, with so many people from different countries, other places, you kind of interact and learn from one another, and kind of this kind of growth in it, too. #University4 (23:13)

These two university students point out that attending the Introductory course provided access to learning and allowed them to transform their identity and look forward to a future where they complete their degrees. #University4 also realised how she changed. She explained that the journey through the landscape of HE from her rural area where she grew up, fundamentally changed her, so she was no longer able to connect in the same way with her family and friends from home. This is a clear indication that the wrapped MOOC had become an effective boundary object for this student in particular. The impact on her identity was evident in feeling a more profound sense of belonging to the new university but less as she belongs to the community where her family lives.

4.6 Summary

This chapter set out the key findings of how two sets of marginalised students experienced wrapped MOOCs. The key findings revealed that MOOCs were mostly an unknown phenomenon, but after experiencing taking the wrapped MOOC, the knowledgeability gained by students impacted on how they viewed themselves and contributed to the landscape. The findings point to identity work included in the wrapping to ensure students experienced a sense of belonging and an opportunity for becoming when engaging in a practice. The critical finding is discussed in the next chapter in relation to the characteristics that were evident that enabled social and epistemological access. The themes will be linked to Wenger-Trayner et al. (2015) Landscapes of Practice (LoP) and analysed to determine if the wrapped MOOCs were successful in becoming boundary objects that promoted access to HE.

5. Discussion

5.1 Introduction

The chapter derives and discusses the characteristics found in the two wrapped MOOCs that made them successful boundary objects. Wenger-Trayner's et al., (2015) Landscapes of Practice (LoP) is used in the analysis to explore how the two wrapped MOOCs provided both social and epistemological access. Finally, the basis of this discussion chapter will feed into the praxis section (Appendix F) to recycle existing MOOCs as inclusive educational resources for youth in the global south.

5.2 Responding to the problem

"The problem MOOCs are actually solving, therefore, is how to provide free education to highly qualified professionals - not a problem anyone had previously thought to identify" (Laurillard, 2016, p.2). The researcher was motivated to explore the potential of existing MOOCs to benefit not only the educated and wealthy but those in society who need it more because of their context and lack of access to HE. The research is not calling for digital technology to solve the problem of access to HE but rather provides a context-sensitive approach to repurposing educational resources for learners in the global south. MOOCs made and wrapped in the global south can provide lessons learnt for global north educators and non-profit organisations wanting to extend learning to non-traditional MOOC takers.

The findings of the chapter aim to answer the research questions:

RQ1: What are the characteristics can make a wrapped MOOC an effective boundary object?

RQ2: To what extent can a wrapped MOOC give social and epistemological access to higher education in South Africa?

5.3 Boundary object

As mentioned in Chapter 2, a boundary object (Star & Griesemer, 1989; Wenger, 2000) is an object or artefact support connection between multiple communities and can adapt to the contexts with constraints and be part of the several parties employing them. Boundary objects are robust to maintain a collective identity across sites but can also hinder or support the functioning of the MOOC (Wenger, 2000). In this research, wrapped MOOCs are adapted to

be accessible to poorly resourced groups in RLabs and to students in a South African university yet still able to maintain its identity as a MOOC in various sites. The research study also incorporates Wenger's (1998) description of a boundary object, as an entity that can link communities together as they allow different groups to collaborate on a common task.

As discussed in Chapter 2, most existing MOOCs can be boundary objects as they bring participants together across multiple communities and regions. However, these MOOCs made in the global north may behave more like boundary fortifications than spaces of entry. The configuration of existing MOOCs on global north platforms can be described as inefficient boundary objects, whereas the two MOOCs in this research are effective boundary objects.

5.4 Characteristics of the wrapped MOOCs as boundary objects

The two wrapped MOOCs are boundary objects and the data revealed eight characteristics that were present in both case studies. These will be analysed with concepts from Wenger-Trayner et al. (2015) *Landscapes of Practice (LoP)*.

The characteristics found in the data are:

1. Challenging the configuration of the MOOC platform
2. Providing brokers
3. Adapting the content
4. Student-driven approach
5. Foregrounding identity and reflexivity
6. Enabling new forms of peer engagement
7. Valuing knowledgeability over competence
8. Context-sensitive technology

The findings indicate the two wrapped MOOCs were partially successful boundary objects as they were able to move across the HE sector to the marginalised communities. Not all boundary objects are successful in playing this bridging role, but these two cases were boundary objects with varying degrees of effectiveness. The chapter will explore to what extent

the two MOOCs were successful, as they both had room for improvement. Specific characteristics emerged from the data collected from the students and were found when the MOOCs were wrapped in these particular case studies. These characteristics can then be transferred, used and further adapted to wrap other global south MOOCs to make them more accessible.

The wrapped MOOCs were useful in overcoming the constraints of a lack of social access to the MOOCs platforms. They adapted their content to be relatable to a local context, yet still maintain its identity as a MOOC across the various practices (Stoytcheva, 2015).

The research explored how the wrapped MOOCs allowed various marginalised groups to collaborate on a common task or in this case an academic writing and social innovation course which is exclusive to a HE community. This resulted in the students from both case studies experiencing both social and epistemological access which will be discussed in this chapter. The research uses the characteristics to create two artefacts: a deck of cards and a checklist (Appendix F) for distribution to all youth programmes, HEI and secondary schools to guide them on how they can take existing MOOCs and wrap them for local students. The research thus aims to restore the ethos of the 5R's framework, mentioned in Chapter 2, where MOOCs can be reused, retained, revised, remixed and redistributed (Adam, 2019).

The chapter is organised into characteristics that challenge the rigidity of the platform and overcome it to provide social access. It then covers the characteristics that provide epistemological access under the section that deals with how the wrapped MOOCs adapted the content to the context. The characteristics that were linked to epistemological access is set out in the table in Appendix F.

5.5 Challenging the configuration of existing MOOCs

Thrun, the founder of Udacity, admitted that youth from marginalised or impoverished backgrounds was not a 'good fit' for MOOCs (Adam, 2019, p.374). The section points out how existing MOOCs block social (digital) which in turn blocks epistemological access. The use of the LoP as an analytical framework to view the findings also resonates with the social learning theory that practices are flat and participants bring their own experiences, knowledge, beliefs and engage to share and create new knowledge.

Even though students from marginalised or impoverished backgrounds are not the target group for existing MOOCs, their viewpoint should not be disregarded. They bring their agency, thoughts, beliefs, experience and knowledge into the HE landscape. The research found they want more choices to engage in the HE landscape. Existing MOOCs limit these students' choices by including them.

The research aimed to ask students their opinion about MOOCs and if they were given MOOCs for free, would they want them as a way of gaining access to HE. The students in both case studies did not want MOOCs to replace attending a HEI. They felt it was an injustice that MOOCs by its design are exclusionary towards them and wanted to have the choice to take a MOOC or not. This is because they wanted to decide on their own path through the various practices in the HE landscape on their way to the workplace. They also did not view HEI as the only path to the workplace. But wrapping MOOCs gave them experience of learning through a blended approach where they experienced the best of online and face-to-face classes. Their views on MOOCs and wrapped MOOCs discussed in this chapter are significant in designing or wrapping MOOCs for youth from marginalised areas.

The research aimed to provide guidelines to revisit the configuration of existing MOOCs by wrapping them to make them accessible. The research study looked at this configuration through the lens of Wenger-Trayner et al. (2015) modes of identification by using it to explain how one constructs identity to find yourself in the landscape (Wenger-Trayner et al., 2015, p.21). AS discussed these are engagement, alignment and imagination and are distinctly used in a balanced combination are most effective (p.21). In existing MOOCs, taken online, alignment seems to be dominant. Unless a learner can sign-up for the course and have continuous Internet connectivity, the other two modes do not come in effect. Therefore, there is a lack of social access in MOOCs, which plays a part in blocking epistemological access.

Once the two wrapped MOOC overcame the alignment issue, they included activities that supported engagement and imagination. In the Changemaker MOOC, the use of face-to-face peer engagement grew resilience in the students. Its learning design in the GLA programme was to teach students how to take the MOOC online as part of a digital technologies module in the programme. They participated in processes to reflect on their various identities. The theme of engagement reconfigured the existing Changemaker MOOC to make it inclusive of RLabs students. They also received assignments to engage with the community of Bridgetown which allowed for an inclusion of their context that aligned with the content of the

Changemaker wrapped MOOC. The students used the theory of social innovation and applied it in direct experience as a vehicle for learning (p. 20). They could imagine themselves as changemakers by completing a business plan responding to the problems facing their community. They journeyed through the HE landscapes from their poorly resourced community and constructed an image of where they want to be (p.21). In the modes of identification, this is an example of how imagination provides an opportunity for students to see themselves differently but would not be possible if they did not engage in the content of the wrapped MOOC or be provided with digital access to negotiate alignment of the platform (p.22). All three needed to be present and balanced for the learning to occur.

This could be why existing MOOCs failed because they do not leverage the three modes: alignment, imagination and engagement, to the same extent, which could be a reason for the high drop-out rates. Moser-Mercer (2014) reiterates that existing MOOCs rarely give a period of confidence-building for learners in fragile contexts (p.115). These learners do not regularly engage in online forums or with learning materials, and such the learning outcomes are not reached (p.115). These students from both case studies gained the confidence to take MOOCs and online courses in the future. Therefore, when wrapping a MOOC, these three modes should be considered and equally balanced as an overarching learning design approach to make a wrapped MOOC transition into a boundary object.

- [Revisiting the rigidity of the platform](#)

The Coursera platform was found to be rigid because both groups of case study students found it hard to sign up on the platform without the support of the facilitators or educators. Foundational digital technology has not been taught to them prior to taking the wrapped MOOC. In the case of RLabs students they needed to be taught how to first set up an email address before being able to sign up on the platform. This is an example of the gap between marginalised students without access to digital technologies and learners in the global north that take MOOCs. Therefore their context and level of digital technology needs to be considered when designing for groups from marginalised backgrounds.

The other barrier was the lack of alignment of the platform to the students' schedule and the pacing of the content. The Introductory course students experienced an interruption to taking the MOOC because they went on vacation. The misalignment was discussed by Bruff

et al. (2013) where they recommended that content covered in the class should be complemented by the material in the video lectures (p.193).

However, even though the wrapping in these two case studies was better aligned it was still limited and could at best be described as scaffolding or ‘add ’ model (Deacon et al., 2018), as mentioned in Chapter 2. Add on meant the two MOOCs were taken inside the two courses with no adjustment to the sequencing and taken online. The researcher’s insider knowledge made her privy to the wrapping of the Writing MOOC in the 2019 cohort. She observed that the add-in model (Deacon et al., 2018) was more effective in making wrapped MOOCs into a successful boundary object as it allowed for the resources of the MOOCs to be used within a course. This is the reason for the finding that both wrapped MOOCs were not entirely successful boundary objects but could have been more effective if the wrapping did not entirely overcome the rigidity of the platform because of using it in its entirety.

Abiding by these registration rules and adhering to the sequence to engage on the MOOC platform relates to what Wenger-Trayner et al. (2015) refers to as alignment. Nevertheless, alignment is not just a one-way process but can be negotiated, discussed and reconfigured with the help of a broker. The role of the broker will be discussed later in the chapter.

Repurposing the MOOCs means educators and facilitators need to acknowledge the rigidity of these platforms and the infrastructure impediments (King et al., 2018, p.9). The rigidity requires upskilling students on how to take a MOOC. The option of taking the MOOC offline is also a way of overcoming the rigidity of the platform. But taking the MOOC offline means that the loss of functionality of the platform will need to be included in the classroom activities.

- [Inclusion of transcriptions and subtitling](#)

Students in both case studies mentioned how they engaged with transcriptions and subtitles to understand and retain the knowledge. They found these two resources, generated by the platform, valuable to buffer the first-time experience of trying to follow a video with a learning outcome. A student from the Introductory course asked for the provision of MOOCs to have African language subtitling to overcome the language barrier issues.

Adam (2019) argues that because the majority of the MOOCs made globally are in English, there is a danger global learners are forced to leave their local forms of inquiry and

their local languages and culture become endangered (Adam, 2019, p. 373). Transcriptions and subtitles are not easy aspects of the MOOC platform to include when they are wrapped as ‘add-in’ models (Deacon et al., 2017) if MOOC resources are taken offline. This would mean the educator or organisation wrapping the MOOC would need to include translated written material in students’ local language. The significance of this finding is related to the way students from these backgrounds used transcriptions and subtitles to gain epistemological access to the content. The media affordances of the transcription and subtitling from the MOOC platform cannot be underestimated as it allows for the adaptability of the content for different types of students.

The researcher used her emic perspective to point out during the Covid-19 pandemic that the low technology approach adopted by the university meant all videos would include transcriptions and subtitles. This created both social and epistemological access allowing students with limited Internet connectivity to watch videos and to use the transcripts for revision of the content. Therefore transcriptions and subtitles for future wrapping of MOOCs for global south students is a characteristic that should be included.

5.5.2 Providing brokers

The concept of brokers has been discussed by Wenger (2000) in Communities of Practice (CoP). The findings showed how brokers were influential for making wrapped MOOCs into boundary objects. As mentioned in Chapter 2, brokers are people who can have legitimacy or knowledge of different communities and introduce elements from one community to another (p. 235). The findings revealed the educators and facilitators of both case studies are brokers as they provided the digital technologies and Internet connectivity and designed the programmes around the MOOCs being taken online.

For clarity, the difference between brokers and boundary objects is that brokers are human beings, and boundary objects are artefacts (p.235). These brokers are individuals familiar to both contexts they are mediating and tend to have legitimacy in more than one practice. The researcher includes her own experience working in the field to explain that participants would not know aspects of the brokering. She also applied the theory from Kubiak et al. (2015) to recognise her role as a broker in this journey.

In the case of the university students, the brokers were the educators from the Writing MOOC and the learning designer attached to the MOOC. In this way, they had legitimacy and

were perceived as "one of us", where the university students recognised their teachers in the Introductory course as the presenters on the MOOC (Kubiak et al., 2015, p. 82).

The learning designer attached to the Writing MOOC negotiated with the platform to grant the students private course after their vacation disrupted the sequence of taking the MOOC on the platform's schedule (p. 82). The learning designer in this instance was knowledgeable about the Coursera platform and the needs of the wrapped Writing MOOC and therefore was able to find the 'points of connection' (p. 82) to ask for this group to take the rest of the MOOC according to their semester schedule. This indicates the negotiation of the alignment of the platform where it is a two-way process and can be adjusted so learners can engage on the platform (Wenger-Trayner et al., 2015, p. 21).

In the RLabs case study, the brokering was done so seamlessly that the students were unaware that the Changemaker MOOC was separate from the programme. The RLabs students saw that the wrapped Changemaker MOOC provided the theory and content, whereas the GLA provided the opportunity to implement the knowledge. They also localised the content and made the wrapped MOOC more of a boundary object. By brokering the content in this way, the GLA course managed to provide flexibility in the MOOC, to be interpreted and implemented to the specific needs of this group. Designing the learning in the GLA to respond to problems in the community related to gang violence, unemployment and poverty was a key focus of the RLabs students, and students saw themselves as changemakers willing to impact on this community.

A challenge to brokering in the GLA programme is that it cannot be done superficially by just providing the MOOC online to the students but it requires careful planning and proper learning design to allow for the content in the programme to complement the content in a MOOC. The MOOC being taken online in the middle of the programme was experienced as an add on model that could have been brokered more effectively by taking different videos or assignments of the MOOCs into the larger programme as an 'add in' model. The broker would be a key characteristic to include if an 'add in' model for wrapping is chosen.

5.5.3 Adaptability to extend the relevance and provide epistemological access

- Relevance

In both cases, the wrapped MOOCs made the existing MOOCs accessible and relevant by adapting the content to their context and making it relatable to the students. This extended its shelf-life. The characteristic of adapting or making context-sensitive content extends the shelf-life of an existing MOOC by adding and taking away from it to fit into a different course. Both case study MOOCs were made and wrapped in South Africa. The inclusion in the learning design of African case studies, stories and readings from African writers made for the relevant content that impacted on the seamlessness of the wrapping and the reusability of the content. This is an exception to how existing MOOCs are made. Most MOOCs made in the global north will not have these local case studies that are relatable in an African context. Therefore this made the two MOOCs relevant before they were even wrapped.

The adaptability characteristic cannot be easily mimicked to wrap MOOCs made in the global north. The MOOC content would need to be localised in the face-to-face sessions where the inclusion of local case studies, readings or assignments can be context sensitive. In the Changemaker wrapped MOOC, the inclusion of the founder, Dr Marlon Parker, as a presenter on the course is a local story and relatable to MOOC takers in other parts of the world. In other data sources from forums on the Coursera platform, a student in India acknowledged he/she had learnt many concepts from the global south social innovation MOOC that were relevant to their work in public health.

MOOCs made in the global north with commercial licenses have been criticised for failing to have open education resources (OER) included to make sharing and adaptation easier. Czerniewicz et al. (2014) found the limitation of existing MOOCs designed for consumption and not for adaptation. They said MOOC platforms demand the copyright be kept in the user-generated content, and some include commercial rights (p.124). This complicates the wrapping process as the reuse of educational resources that do not have free to use licences means the brokers will have to negotiate with the MOOC platforms or find alternative open educational resources to supplement the content.

5.5.4 Student-centred approach

When the phenomenon of MOOCs arose, it would appear the fundamental ideas of design thinking were not considered. According to Brown & Wyatt (2010) design thinking looks at a problem from a human-centred approach and does not focus on creating products removed from this approach (p.33). To design and make MOOCs in Africa without considering

that the vast majority of people have little or no Internet access or digital technologies to access these MOOCs, creates an exclusive product that benefits participants from a well-resourced context (Laurillard, 2016, p.2).

"Social challenges requiring systemic solutions that are grounded in the client's or customer's needs" Brown & Wyatt (2010, p.32). This quote epitomises how the organisation of R Labs built as a social enterprise includes the ethos of design thinking where they do not provide solutions but facilitate and co-create the solutions with members of the community. The educators of the Introductory course also created student-centred characters that were relatable, and when wrapping the MOOC, they used the approach in the way they generally teach. The educators and presenters on both these MOOCs had the willingness and aim to make these two MOOCs more inclusive. However, this is not the norm and therefore wrapping other MOOCs into effective boundary objects may not be as easy.

Their willingness to be inclusive reinforces Lambert's (2020) findings that MOOCs can be used by organisations and educators who have the passion and willingness to widen participation in disadvantaged communities by incorporating inclusive pedagogy in its programs.

"Profitable, business-like MOOCs are the detriment of free offerings to disadvantaged learners" (Lambert, 2020, p.4). The cost of making MOOCs for free is not sustainable for the universities nor for the platforms, therefore this research argues for taking existing MOOCs to repurpose them to be more inclusive rather than unrealistically arguing for new inclusive MOOCs to be made. However it does not mean the characteristics of this research cannot be adapted to future blended and online courses for marginalised youth.

- [Students' perspective on MOOCs](#)

This research consciously strove to include the opinions of students from marginalised backgrounds, what their lived experiences were and how they would like to engage with MOOCs, and by default, online learning. As mentioned, it was clear they did not want MOOCs in isolation or as a replacement to HEI. However, on the contrary they did not want to be excluded from taking MOOCs. But the research found that students did not want MOOCs dumped on them. They did not enjoy the isolation of taking a MOOC alone on their mobile phones. They liked MOOCs, but because they were part of a face-to-face course where they could engage with peers and be part of a programme.

In creating a student-driven approach one of the characteristics is for educators to imagine personas or ask students they intend wrapping the MOOC for to be included in the learning design process. This will ensure they do not make assumptions about these students' contexts.

The value of the feedback from these specific students was that they indicated wrapped MOOCs would benefit secondary school learners who are confused or lost regarding their place in the world. Secondary schools find it hard to provide online resources for learners and MOOCs being used in the wrapped format could provide bridging or gateway courses for HE.

Another finding was they did not think poorly resourced communities could use MOOCs independently. Students reported that people in these areas should be incentivised to complete a wrapped MOOC. They also said that employment is the focus of what young people search for, and HE is a springboard to the workplace. They did not believe MOOCs replaced accessing HEI but rather represented another opportunity for them to experience part of a future where online learning is the norm.

5.5.5 Foregrounding identity and reflexivity

I produce knowledge not by telling people things they do not know, but by providing tools to make sense of what they already know through personal experience and hence know it anew.(Wenger-Trayner, 2013, p.2).

The research resonates with the value Wenger-Trayner (2013) places in people's lived experience as the knowledge that already resides within them.

- **Belonging**

Initially, students spoke about feelings of exclusion, whether from HE, or their community or an imagined future. However, after taking the wrapped MOOCs, they articulated a sense of belonging within various practices. The inclusion of identity work as a characteristic is part of what Wenger (2000) describes as belonging to social learning systems.

Wenger-Trayner et al. (2015) explain this sense of belonging to a community by identifying with some, staying on the periphery of others and exploring in depth or exiting some in the landscape (p.20). One Introductory student disidentified with her family after being

exposed to content and knowledgeability in the university that changed her identity where she no longer felt distant from her rural community (p. 20).

This finding is also relevant when considering the HE context in South Africa, where students from previously disadvantaged backgrounds enter university and do not feel included in its institutional culture. Wrapping a MOOC by including activities that promote identity work with a focus on belonging could respond to Costandius, Blackie, Nell, Malgas, Alexander, Setati & Mckay (2018) recommendation that HE needs to increase cultural access to students who are Black, Coloured and Indian to provide a sense of belonging in spaces of teaching and learning (Mbembe, 2016).

The #FeesMustFall of 2015/2016 protests was a "cry for help" according to Costandius et al., (2018) in order for Black and Coloured students to be able to take their place confidently and structurally in spaces of learning and teaching. RLabs and the Introductory programmes provide the spaces and content to engage with identity work focused on belonging. For educators looking to repurpose global north MOOCs for impoverished youth in the global south, the inclusion of reflexive activities to engage with themes of belonging and identity is a crucial characteristic for the learning design of wrapped MOOCs that can operate as boundary objects. Inevitably this would be more difficult with MOOCs outside of the social sciences where mathematics, science or computer programming is taught. However, the research recommends that if the content of the MOOC does not lend itself to constructing identity, then the learning design in the course should include identity work. An example of this is if an educator wants to wrap a Science or Engineering MOOC then including identity written work or discussions in group sessions to talk about where they belong, the multi memberships they hold and where they imagine themselves to be in the future.

- [Becoming](#)

As mentioned in Chapter 2, learning shapes identity, then part of that learning is not separate from how that learner uses the knowledge to 'become' someone in the landscape. (Farnsworth et al., 2016, p.8). It was only when the students imagined whom they would become in society and incorporated hope, aspiration and ambition into their identity they experienced epistemological knowledge. This knowledge gave them critical insight into their place in the world and the self-confidence to map their trajectory in the landscape.

Both sets of students reflected on being lost and then taking the course and moving to become the person they imagined. Being exposed to the knowledge in the wrapped MOOCs was what Fanon, (1961) defines as the type of knowledge that opens their minds, awakens them, and allows the birth of their intelligence (p.159). They could see themselves as having careers in chosen industries or running businesses or working in their community.

In the primary data and multiple sources, the findings illustrated the wrapped Changemaker MOOC reached its intentional learning outcome captured in the title: 'Becoming a Changemaker'. The GLA students reported being lost before taking the wrapped MOOC. After the MOOC, they saw themselves as changemakers wanting to make a difference in their community. Some said they wanted to set up organisations or businesses to operate in their communities and give back. Global MOOC takers reinforced this finding by posting on forums about wanting to 'make a difference', and this relates to the aspiration of becoming a social activist.

The Introductory course gave them a degree of epistemological access, through relevant content that made the transition easier into academic life. This included reflexive activities fostered a sense of self-belief and confidence. At the time of the data collection, the university students interviewed were all in their second year. They reported knowing what their career choices would be after they graduated. This sense of becoming linked to aspects of belonging to the workplace and where they internalised their identity as future participants in the active workforce.

- [Reflexivity](#)

Reflexive processes were found to be a central characteristic in both wrapped MOOCs. This is reflected by Ryan (2013) who cites Mezirow (2006) : "When students are provided with opportunities to examine and reflect upon their beliefs, philosophies and practices in relation to the contextual conditions of their field: they are more likely to see themselves as active change agents and lifelong learners within their professions" (p.146). Incorporating reflexive practices of the wrapped MOOC can be transformative but needs to be included in the pedagogy where students can reflect on themselves and the content they learnt on a deeper level than just repeating facts (p.154).

Reflexivity is a context-dependent process with a mental and self-referential bending back upon oneself (Ryan, 2013). He explains that it allows a person to decide how to act in any

given situation (Ryan, 2013). The learning design of the wrapped MOOC incorporated aspects where learners reflected about themselves in their context. The RLabs students reported they had peer coaching sessions where they shared aspects of themselves and were supported by others. It triggered a mental shift in the GLA students from being victims of their context to becoming changemakers in their community and seeing themselves as being part of a workplace or HE community.

This relates to Adam's (2019) argument that unless teaching in HE includes skills such as critical thinking, epistemological access will not be provided because "the aftermath of colonialism left a legacy of confused identities and cultures" (Adam, 2019). Blind acceptance of the knowledge in a MOOC is not recommended, regardless of where the MOOC is made. The characteristic of reflexivity in wrapping a MOOC is an opportunity to take on the criticism of Adam (2019) and make the MOOC inclusive for a student who grew up in the global south where indigenous knowledge and experience are still meaningful and cannot be negated.

However, wrapped MOOCs can work, as Czerniewicz et al.(2015) predicted, as providing students with exposure and skills to enter the workplace, and also gain certificates that can be used on CVs and job applications (p. 6). This could allow them to overcome the barrier of access to HE for unemployed youth as illustrated by RLabs, where the HE institutions are not viewed as the only solution to this problem.

5.5.6 Enabling new forms of peer engagement

Wenger-Trayner et al. (2015) found peer groups were organically formed and students used each other as a resource to make sense of their world and tell each other their stories, in their voices in the academic learning spaces (p. 58). This was evident in the findings where RLabs students all spoke about the value of the group work and how they became closer and learning took place. "We use a simple principle. We broke down each and everyone's box. What keeps them inside from not speaking or interacting with anyone. We had a peer coaching session. And that's actually what helped us." #RLabs3. The GLA programme had incorporated peer learning as a model for coaching each other and created an environment conducive for peer learning.

For the Introductory course students, being on this programme made some students feel excluded and ghettoed from the traditional university student community. Nevertheless, they built resilience through face-to-face discussions in the classrooms and peer engagement. All

five of the university students spoke about how they learnt from their peers in the class, and it was a richer experience for having interaction. "When interacting with other people you learn more", said #University3.

Peer engagement in the wrapped MOOC from these two case studies is being referred to differently from peer engagement on the MOOC platforms. In this context, peer engagement refers to the physical or face-to-face engagement in a classroom, whereas in the literature, peer-to-peer learning is discussed in the context of online forums.

Wenger-Trayner et al. (2015) explain that in stressful learning environments, students often create transitional peer communities to meet their learning and emotional needs (Wenger-Trayner et al., 2015, p.57). This was evident in the findings of how important peers became to the Introductory and GLA students. The success of the wrapped MOOCs was attributed to the interaction of peers in the class. They also preferred to spend time in a classroom, rather than be alone, completing a MOOC in isolation. This finding is in alignment with Bruff et al. (2013), who found students taking a wrapped MOOC liked the structure of the wrapper format. He said it opened up space for class discussions about the content, and many preferred the classroom to online forums as they felt it generated new ideas (p.192).

A related theme to peer engagement is resilience, introduced by Wenger-Trayner et al. (2015) and linked to providing physical access. Masten et al.(1990) define resilience as the process or outcome of successful adaptation despite challenging or threatening circumstances (Masten et al. 1990, p.425). This resilience was incorporated into both case studies by successfully wrapping the MOOCs to include peer-to-peer processes, face-to-face interaction and reflective content. The engagement in peer learning also brought about a sense of accountability, where deadlines for assignments and discussion groups had to be met because students were aware that they were expected to interact in the classroom.

5.5.7 Valuing knowledgeability over competence

The characteristic of knowledgeability enables the wrapped MOOC to become a boundary object, and does not seek to measure students' competence. The research focuses on knowledgeability and its impact on identity. This is not to assume competence is not present in the landscape, but the wrapped MOOC is not trying to develop practitioners or experts that need acknowledgement in the field. Rather it is giving students an experience of HE knowledge through the MOOC, and an awareness of MOOCs themselves. "We cannot be competent in all

practices in a landscape, but we can still be knowledgeable about them (Wenger-Trayner et al., 2015, p.19). Not being competent in the practice also does not mean that the students were not reliable sources of information.

Key findings from the data confirmed that all students gained the confidence to take a MOOC on a platform. The MOOCs they took reflected their context and incorporated content that was relatable and provided epistemological access. The students became aware of the value of MOOCs and online courses to access HE courses. This study recommends further research to determine if students who took the wrapped MOOCs before the Covid-19 pandemic, felt more prepared and were able to cope with remote learning. If this is the case, then taking a wrapped MOOC does respond to the challenge facing marginalised youth to be part of a 4IR future where digital incorporation and AI will be part of our everyday life.

In this research, the competence was not assessed as this would have meant analysing tests or assignment results. In the two case studies, the students were asked if they could take a MOOC independently after having done the wrapped MOOC. It assessed what knowledge they gained and if access to the wrapped MOOC impacted on their identity.

The knowledgeability in the case of the Introductory students was reflected when they spoke about their experience and being part of the university community. They also experienced being part of a global community of MOOC takers. Therefore, the wrapped MOOC in the Introductory course was successful in extending a feeling of belonging to various communities within this landscape of academia.

Knowledgeability is a characteristic of making wrapped MOOCs into boundary objects and acknowledges students are co-creators of knowledge by bringing their own experience and history into the classroom. They can create new knowledge with the content being taught together with educators. Jaffer et al. (2017) refer to this as "the flattened hierarchies in the classroom (that) created opportunities for facilitator learning" (p.212). In the two case studies, students came with their own experiences, social backgrounds, identities and knowledge linked to their identity. This is where the characteristic of co-operative tasks fits in and why students must have self-awareness and try to flatten the power dynamic between educator and student, by providing a space for new knowledge to be created jointly.

5.7 Implications of the boundary object

The wrapped MOOCs are effective boundaries to some extent. In the case of the wrapped Writing MOOC, it could have provided a more seamless experience of the wrapping for the educators and students. The wrapped Writing MOOC was intended for the students to experience the global peer audience on the MOOC, but the lecturers were later forced to create a small private online course (SPOC) out of the MOOC, when the online content did not neatly align with their course schedule. This meant the rigidity of the platform was too problematic to overcome, and arrangements had to be made so that students could take the MOOC at their own pace while still being part of the global MOOC taker community. The lessons learnt is that the wrapped MOOCs were not entirely streamlined as boundary objects and were later made to be more effective by revisiting how they could be taken on the platform. In the case of the wrapped Writing MOOC, the educators decided to use a blended model in next semester with only some of the videos used as complementary resources in the face-to-face sessions. Nevertheless, it still provided a valuable characteristic about how to wrap MOOCs for the youth programmes in the future.

The implication of finding these characteristics present in the two case studies meant they are both boundary objects and able to move across various practices in the LoP. However, exploring whether these wrapped MOOCs were effective boundary objects without delving into the type of access these students experienced would only offer limited insight. It would not be able to offer detailed guidance around the educational interventions needed, including the value of wrapped MOOCs, to address the challenges faced by youth from marginalised communities.

The implications of the boundary object are central to the research as it would defeat the purpose if the wrapped MOOCs were merely able to cross over the boundary and provide social access in the form of physical and digital access. They would only be effective boundary objects if they interrogated the knowledge these MOOCs were providing. The research aimed to address the critique by Adam (2019) that MOOCs platforms have "embedded coloniality and promote a form of digital neo-colonialism" (p.376). It keeps in mind this criticism to ensure MOOCs are not blindly repurposed for the marginalised youth in the global south without addressing the need for epistemological access.

In Chapter 2, the issue of access was discussed where the literature pointed to two types of access - social and epistemological. Social access is further subdivided into digital and physical access (Sehoole & Adeyemo, 2016). Digital access refers to the means to provide technologies and the ICT connectivity required to operate on the platform. Sehoole & Adeyemo (2016) citing Cele and Brandt (2005) state physical access means to have the qualifications or admission requirements to enter higher education.

5.7.1 Social access

Social access is divided into digital and physical access as discussed in Chapter Two.

- Digital access

The inclusion of digital access in the wrapped MOOC was the most practical and easiest component to provide. Both case studies did this by providing computer laboratories with Internet connectivity and computers for the students to use. However, beyond the two wrapped MOOCs, this access is the most significant barrier to enrolling in MOOCs in the global south. This lack of infrastructure and digital access is widespread in Africa and a significant barrier to students accessing online learning (King et al., 2018).

The enormity of this lack of digital access in South Africa, results in 27 million people not having access to the Internet (TNW, January 2020). In this country, where the two MOOCs were made, there appeared to be a misalignment in creating online educational products that are inaccessible to half the population. Therefore, addressing the issue of digital access is significant to ensuring millions of students can enjoy the same free access that currently only those with the Internet can experience. MOOCs made by universities in South Africa, despite them being hosted on global north platforms, can be used as lessons learnt for recycling them for African youth programmes and governments refugee programmes. This also generates global south content by the global south for the global south.

The link to digital access is also about preparing youth who will be needed in the labour market for a future where Artificial Intelligence and the 4IR will require digital skills. "We are currently also working on a new model of equipping youth from the Cape Flats and townships with skills for the 4th Industrial Revolution", adds Parker (Vallie, 2016). The RLabs model recognises the experience on digital platforms: making apps or working in computer programming is providing youth from marginalised communities with skills that will make

them more employable. This sheds light on the type of student HEI is churning out now where some industries may be obsolete in the future while others are in demand. This ties into how access to MOOCs with the content on AI or programming can fill the gap and prepare youth for a future they can engage in. Therefore wrapping is currently viewed as the main alternative to overcoming this digital barrier and is the natural part of making MOOCs more accessible.

- **Physical access**

Physical access in the existing MOOC context is related to signing up on the platform and having Internet connectivity and digital technologies to complete the course. It also includes the ability to engage in the discussion forums. In the wrapped MOOC context, both the registration process and engagement were done in the classroom with facilitators. In this research study, physical access to a MOOC is referred to as the physical space where students can engage offline and have contact with peers. It also includes being qualified to be enrolled in the GLA programme and Introductory courses.

The students gained knowledgeability to engage on the platform and align with the rules of the MOOC platforms. These modes of identification were all present in the process of gaining physical access, with imagination coming in when students spoke about taking online courses in the future. This combination of all these modes in conjunction is the ideal: if one is out of balance or not present then this affects the other two and therefore "becoming productive within the landscape depends on one's ability to leverage the complementarity of these processes" (p.22).

The findings point out that the wrapped MOOCs could be boundary objects because both the GLA programme and Introductory course enabled engagement through face-to-face contact time, initiating peer support through the assignments and working groups. Physical access cannot be underestimated as participation in online forums is not taken up widely because students from marginalised backgrounds have limited experience in self-directed learning. The knowledgeability around engaging in an online learning space means they have the skills and opportunity to negotiate to sign-up for future courses. The students do not claim competence in taking wrapped MOOCs but can claim knowledgeability as it links to their identity. Students in both case studies were experiencing physical access and discussed content within their context, where they felt comfortable and accepted amongst their peers. This type of access is crucial to an experience of HE where the social engagement with peers and interaction in

classrooms is the difference between "passing through a practice" as a "visitor" or immersing themselves into it as a "sojourner" (Fenton-O' Creevy et al., 2015a, p. 44).

5.7.2 Epistemological access

"If a really important part of learning is the shaping of an identity, then one key implication for education is you cannot give people knowledge without inviting them into an identity for which this knowledge represents a meaningful way of being," (Farnsworth et al., 2016).

This quote positions the type of epistemological access that these two wrapped MOOCs provided to students. The students in both cases did not passively take in the content but instead immersed themselves in the wrapped MOOC that provided spaces of reflexivity, engagement, critical thinking and multiple identities when they travelled across the landscape of practices. The research is not arguing that taking an online course or doing a MOOC in isolation can provide students from marginalised areas with epistemological access. But rather it points to the knowledgeability that these students gain when doing a wrapped MOOC within a programme that is flexible and provides deep learning in a face-to-face setting where online learning is incorporated as part of the curriculum. This knowledgeability feeds into the epistemological access where students can take courses on various platforms and even participate in a future where digital literacies is part of the 4IR.

The epistemological access is linked to the identity work with students critically assessing their context in the case of the GLA programme and also imagined a future where they could make a difference in their community. The shift from seeing themselves as changemakers in their community, to co-creating solutions to problems facing their community, changed their trajectory and belief about themselves. They experienced meaning in their lives and saw themselves as having agency and value to participate in the upliftment of their community.

"Knowledgeability entails translating this complex experience of the landscape, both its practices and their boundaries, into a meaningful moment of service." However, this depends on one's level of competence in one or more of the practices. (Wenger-Trayner et al., 2015, p.23). Regarding this quote, the RLabs students taking the wrapped MOOC have a level of knowledgeability but little competence in working formally in the social innovation space. However, the content of both the MOOCs and the coursework in the classroom provided

epistemological access because students were able to use the knowledge to reflect on their multiple identities in various practices and also decide whom they want to become and how they want to belong to these practices. For the R Labs students, the most enlightening finding was the boundary between their community and the workplace was the one they wanted to overcome. They viewed the access to HE as just a pitstop to the workplace and not their destination. Fenton-O' Creevy et al. (2015a) explained that the motivation for students to engage in practice-based learning and different modes of peripheral engagement is not primarily about adopting an academic identity but a transition to a career path (p. 60).

In the case of the university students, they experienced learning from the African continent about migration, identity and mobility. This local content included African personas and educators they knew and could identify with and was inclusive of local content provided epistemological access.

The student feedback on MOOCs and their wanting to have choices in using various forms of online courses, not to replace their access to attending HEI, is a clear example of epistemological access. They had never heard or known of MOOCs before being enrolled on the two programmes. After going through it, they were able to assess the MOOCs critically and also have an opinion about the value of MOOCs in their communities. Wrapping a MOOC from the global north may require a very different approach to achieve epistemological access.

This research is not making an argument that taking one wrapped MOOC is similar to having access to an entire HEI experience. According to Adam (2019), MOOCs can only attempt to create a partial experience of HE while attending a physical university is still reserved for the privileged. However, the youth bulge exacerbates the pressure of HE and requires practical approaches where resources already exist and just need to be reused or adapted. The Covid-19 pandemic showed the value of MOOCs as educational resources that have the potential to be repurposed to overcome certain online platform limitations.

5.8 Researcher's reflections

The LoP was a theory that the researcher began to explore for the data but then saw the application of the theory for her own Master's journey. Reflecting on her trajectories as a master's student she was amazed at "how many practices we have engaged in, dabbled in, visited and encountered" (Wenger-Trayner et al., 2015, p.19). This journey changed how she viewed herself and the landscape of making MOOCs as well as access to HE.

The researcher experienced her own traversing across the landscape of practice (Wenger-Trayner et al., 2015) of HE. She was able to view herself as a broker (Kubiak et al., 2015) to facilitate cross-boundary learning experiences (p. 81) as part of the student community attending classes at the UCT Graduate School of Business, as someone working within a department that makes MOOCs, and a researcher investigating what a marginalised student would require from MOOCs. In the same way that the students experienced identity work by taking the wrapped MOOC, the researcher experienced identity work, where she was able to feel knowledgeable as an academic writer through the process of working on this dissertation and also becoming knowledgeable about the content of LoP. Through this process, she was a sojourner (Fenton-O' Creevy, 2015a) where she immersed herself in academic practice, like the students, not to become an academic but to travel along the landscape with the aim of specialising in making more blended and online courses that are inclusive towards those in the global south.

She also developed confidence in her insights as deep theorising (Lillis, 2008) mentioned in Chapter 3, as a way of making meaning of this research and giving meaning to the findings by restoring the integrity of how she views herself in her current workplace. The researcher experienced intense emotions of failure and success in the boundaries of practices when she moved from outside of academia as a practitioner in making MOOCs, to the practice of researching them (Fenton-O-Creevy et al., 2015b, p.41). The concepts she learnt in LoP applied to her journey through the engagement of researching and writing this dissertation. She also aligned with the rules of the Master's programme. She imagined a way to include the guidelines in the praxis chapter to co-create and teach others to make more inclusive educational resources in the global south. Ultimately, she viewed the MOOCs she has been part of co-creating as valuable resources that can be repurposed for thousands of marginalised students in South Africa. She also identified with learning designers through her understanding of the way content is reconfigured for online and blended learning. This identification will allow her to move beyond video production to working with educators to design content that can benefit and include local and global students.

5.9 Summary

This research study set out the essential characteristics required to wrap a MOOC to be a boundary object. However, the repurposing of MOOCs cannot be done just for the sake of providing access but is an opportunity to understand that wrapping for an African student

requires the interrogation of the content, the decolonisation of the pedagogy. This wrapping of MOOCs cannot be superficial as they would not pass the test of becoming valid boundary objects in African contexts. In this chapter, the findings were discussed to emphasise how the initial intention to make traditional MOOCs accessible, to democratise education and to include learners excluded from HEIs, could be restored particularly in a South African contexts through the process of wrapping.

6. Conclusion

6.1 Problem statement

The wicked problem of access to Higher Education (HE) traps youth from marginalised contexts in the vicious cycle of poverty. More so, it exacerbates youth unemployment rates in South Africa that resulted in a youth bulge (Thobejane & Thaba-Nkadimene, 2020) where the most significant proportion of the population is between the age of 15-24 and also the poorest group in the country. The response to this problem is varied and complexed but more often includes innovative and co-ordinated responses from multiple stakeholders. This research is not ambitiously trying to solve the problem of access to HE because as Mason et al. (2018) reminds us that wicked problems have many causes and notoriously lack clear solutions, and nor do they have a "right answer" (p.1). However, the research looks to a niche but essential part of HE called Massive Open Online Courses (MOOCs) as an opportunity to provide and extend learning to youth excluded from HEI.

Yuan & Powell (2013) described MOOCs as having the "ideals of openness in education" to overcome geographical, demographic, economic barriers to learning. Its most appealing characteristic is its scalability, in that a MOOC can have thousands of learners enrolled at the same time. However, the phenomenon of MOOCs touted as the solution to solve this educational problem of access for all (Laurillard, 2016) was revisited by this research, given that youth from marginalised backgrounds may have limited access to them.

The research aimed to restore some of the ideals of MOOCs by investigating how educators in a youth programme and an introductory course in a university made and repurposed MOOCs to be inclusive of a specific target group. In 2020, the Covid-19 pandemic shutdown residential HEI around the world and forced millions of students and educators to teach and learn online. The popularity of MOOCs skyrocketed with Class Central calling 2020 the "Second Year of the MOOC"⁷ (Shah, 2020) signing up 180 million learners excluding China. This meant that MOOCs were no longer obscure, niche courses and online learning became part of the norm. The research therefore viewed this as an opportunity to make the approximately 13 500 MOOCs more inclusive of students not traditionally included in HE sectors.

⁷ <https://www.classcentral.com/report/the-second-year-of-the-mooc/>

It is noteworthy that the research frames the discussion around youth from marginalised communities as having agency and not waiting for solutions to their problems. They have aspirations and want opportunities to plot their own journey in the landscape of HE, a sector that has been disrupted by the Covid-19 pandemic, new Edtech firms and the future of 4IR and AI.

Therefore, the research argued that existing MOOCs offered thousands of free, online courses that can provide educational resources to a massive number of learners in any part of the world. MOOCs wrapped specifically for non-traditional users can provide more opportunities to extend access to HE. The Covid-19 pandemic exacerbated the need for free and accessible, ready-made educational resources by the emergency move of shutting down residential campuses and schools while leaving educators in the global south searching for online resources. However, many educational institutions were not in a position to make expensive online resources and the argument is simply to repurpose thousands of MOOCs for those who need them.

However, making MOOCs inclusive for this youth bulge is not as simple as providing digital access or giving them MOOCs and expecting them to participate in HE. It is far more complex and requires a critical view of what type of MOOCs are wrapped and how the knowledge they extend is not exacerbating the imbalance of knowledge systems from the global north.

The research examined two MOOCs made in a South African university and wrapped in a formal and informal context to find the characteristics that made them into boundary objects. Through a qualitative case study methodology, it found that the two wrapped MOOCs were able to move across a landscape from a HEI into two other communities, but still maintain their identity despite having different programmes using them, becoming a boundary object (Star & Griesmer, 1989). The wrapped MOOCs needed to be boundary objects to provide the students with social and epistemological access to HE.

The findings indicated that both groups of students from the two case studies found that taking a MOOC for the first time made them knowledgeable about new technology that is accessible on their mobile phones. They preferred the wrapped MOOC format where they were able to have face-to-face classes and do online courses as part of the curriculum. They felt confident to take more online courses independently. These findings respond to the need

for the youth bulge to be exposed to digital technologies and online learning to give them the skills to become familiar with digital learning especially for a future where the 4IR and AI will be part of our everyday lives. Failing to include them in the latest advances in technology innovation could further exacerbate their marginalisation.

The key themes from the research were from Wenger-Trayner et al.'s (2015) LoP and were used to analyse the data. These were knowledgeability, modes of identification and concepts of identity, belonging, becoming and reflexivity. Knowledgeability was linked to their identity in a landscape, not to a specific practice (Omidvar & Kislov, 2014, p.9). They also did not claim competence, nor did they expect to be viewed as experts in their respective fields.

The theme of identity was explored through Wenger-Trayner et al.'s (2015) three modes of identification: engagement, alignment and imagination. Students experienced feelings of isolation and loss before taking the wrapped MOOCs and then experienced a sense of belonging to a HE community and discussed issues of becoming in relation to their future. Reflexivity was also found to be a significant theme in providing a process of critical thinking, questioning and opening up of the mind of the students to assess the knowledge they were receiving. This reflexive process is crucial in the global south context to address issues of coloniality and localisation of the content in the wrapped MOOC.

The opportunity to incorporate identity work into spaces of learning could provide the youth with a sense of self, to aspire to engage in society and have hope as agents of change to step out of the socio-economic inequality they are born into.

Young people remain remarkably optimistic about their prospects for upward mobility, and seemingly unable to acknowledge the structural violence they experience daily. The contradiction between these high hopes and harsh barriers results in the quiet violence of dreams" for many of South Africa's youth. (Burns, Jobson and Zuma, 2015, p.83).

Burns et al. (2015) highlight the importance of not discrediting young people by excluding them in the design of educational products and youth programmes that aim to solve their problems. Therefore, the research argues that any future online courses, digital technology or HE products should not exclude this group from the inception of the design process.

In order for the wrapped MOOC to be a boundary object that is relevant and effective in a South African context, it needed to provide both social and epistemic access. The wrapped MOOCs illustrated that overcoming the barrier to social access was mostly resolved through the provision of computer laboratories and Internet connectivity. The intrinsic design of MOOCs being online was not the only barrier but students had to do self-directed learning and overcome the rigidity of the platform. It also required negotiating the rules, and the facilitators and educators, as brokers in this wrapping process had to revisit their add-in model to allow for greater flexibility in the use of MOOC resources and a more effective learning experience. Also, MOOCs made in the global north have been criticised by Adam (2019) as eroding indigenous knowledge systems by perpetuating "Western-centric epistemologies" (p. 365). Therefore, the findings include how the wrapped MOOCs incorporated characteristics that aim to provide epistemological access through the relevance of content in the local context.

"MOOCs not only need to cater for difference in their conceptualisation of learners in terms of geographical and infrastructural contexts, but also create room for the inclusion of different ways of thinking, knowing, and being" (p.377). This insight highlights an opportunity to reinstate the ideals of the OER's concept of the 5Rs (reuse, retain, revise, remix, redistribute) into wrapping MOOCs to redress the barriers created by the commercialisation of MOOCs to benefit learners from predominantly privileged and educated backgrounds (Laurillard, 2016).

The research defined several characteristics that specifically made the two wrapped MOOCs into boundary objects and thus more inclusive for students in the global south. These characteristics are subdivided into two types of access: social and epistemological access. Characteristics that extended social access were: Internet access, face-to-face sessions, subtitling and transcriptions, replacing copyright materials with open educational resources, appointing a broker. The enablers of epistemological access include: a student-driven learning design, incorporation of identity work, making content adaptable to the context and peer engagement.

The researcher took these characteristics and derived guidelines (Appendix F) in the form of a deck of cards and a checklist for educators, teachers, non-profit organisations and government to use when wrapping MOOCs.

These can be transferred to different contexts and further adapted for marginalised youth, refugees, non-traditional MOOC takers, high school students or government community programmes to promote various forms of social and epistemological access.

6.2 Recommendations

The main recommendation of this study is to provide communication strategies around using MOOCs as part of open educational resources to support remote learning. Youth development organisations and MOOC platforms should also be made aware of the scalability of both the RLabs model and the Introductory programme to incorporate wrapped MOOCs as a resource to provide gateway courses to unemployed youth from marginalised communities with epistemological and social access to learning. The organisation of RLabs has already been recognised as a social enterprise that is succeeding in an inclusive and necessary tertiary education that is valuable to the students excluded from mainstream HEI. To some extent, the researcher would argue that the RLabs model could be scaled up for lower to poor income communities and provide learning that could potentially lead to employment and entrepreneurial impact. In the past decade, RLabs has trained in over 23 countries. Their innovation to include the wrapped MOOC into their offering and collaborate with university Graduate School of Business is indicative of an agile and adaptable model that requires accredited courses. It includes identity work to equip students who have limited options to find agency and multiple opportunities around them. Similarly, the wrapped Writing MOOC can be wrapped in every faculty in university for their first-year students regardless of whether they are from a marginalised background or not. This wrapped Writing MOOC provides reflexive processes that can build a strong foundation in the students to gain knowledge on how to write academically but also deal with issues of identity and transformation when first entering a HEI.

The research highlights the opportunities and pitfalls of using existing MOOCs for global south students when hosted on global north platforms, by exploring the extent to which epistemological access to knowledge becomes possible. This research also points to how we understand teaching and learning in the digital world and what type of world we are preparing young people for if we are not keeping up with the 4IR on our doorstep. The future that these marginalised youth need to engage in to become integrated, economically active citizens will require an understanding and capability of working in the digital space.

There has been research on African MOOC takers, also presented at a conference in 2018, looking at those seeking work opportunities, but not explicitly focusing on marginalised youth taking a wrapped MOOC (Deacon et al., 2018). The other research is from the perspective of educators who have made MOOCs and wrapped MOOCs in South Africa (Deacon et al., 2018).

This research incorporates a similar ethos as the study by Abdel-Maksoud (2019) who looked at how educators can integrate MOOCs into flipped learning interventions in the HE sector to maximise the benefit of using "high quality resources" provided by existing MOOCs (Abel-Maksoud, 2019). This research focuses on how organisations outside of the HE sector can benefit young people who have little to no access to the HE sector, such as refugees, unemployed youth and those who require gateway skills to be successful in completing a university degree.

The importance of including the voices of these students is for future MOOC makers to think of the characteristics that could make MOOCs more accessible to youth from marginalised communities. It can also provide insight for future wrapping of existing MOOCs to take the resources and recycle them to make the content localised and customised for those learners who have no experience with online or self-directed learning.

The researcher notes that during the Covid-19 pandemic, the education departments and HEI could possibly use MOOCs to recycle the videos, documents, PowerPoint slides for students and schools who were struggling to transition to remote learning. However, this recommendation is aimed at MOOCs being part of a coordinated response to share educational resources. The Covid-19 pandemic does create an opportunity and forced all schools and HEI to be innovative and move into online teaching. But access to these MOOCs are difficult as they cannot be easily wrapped by organisations that do not have experience in using MOOCs as part of their curriculum. How to access the MOOCs and overcome the copyright issues of downloading them is outside of the scope of this research. However, the research recommends that MOOC platforms are encouraged to provide and curate a central downloadable library of resources that are free for youth organisations, educators and HEI working with youth, refugees and people from marginalised areas.

The potential of the current 13 500 MOOCs are not being maximised and could provide hundreds of thousands of learners around the world with emergency educational resources.

These findings cannot be generalised to all young people who are unemployed and from marginalised communities because the sample size is small. However the characteristics can be transferred and recontextualised in other settings. The deck of cards and checklist that have been created from the research are tools that can be widely shared with youth programmes, government education departments, HEI in the global south to wrap MOOCs to provide free resources to support their courses. Khan et al. (2018) indicate that MOOCs represent a potentially stimulating opportunity to use technology to realise many of the long-promised benefits of universal higher education. The chief attraction of MOOCs is the free online learning, including accessibility, affordability, and open enrolment. Wrapped MOOCs could potentially allow the vision of accessibility to be realised for a larger cohort, previously not included as the traditional MOOC audience.

The enormity of the Covid-19 crisis and its impact on higher education (HE) has not been quantified or widely written about in journal articles. However, access to HE and the tension between online teaching, the lack of face-to-face interaction, assessments, barriers to the Internet and digital technologies are at the centre of the debates on the future of HEIs and their core business. The Covid-19 pandemic will go down in history as disrupting HE but in some ways could also be an opportunity to respond in innovative and inclusive ways to deal with problems facing HE and marginalised youth. The urgency for freely available educational resources that are open and easily adaptable has been at the epicentre of the emergency remote teaching model. The obvious choice has been to revisit existing MOOCs and revive their relevance as a valuable educational phenomenon in the sector.

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Appendix A : Participant Consent Form

MASTER OF PHILOSOPHY IN INCLUSIVE INNOVATION

INTERVIEW CONSENT FORM:

Participant name:

I volunteer to participate in a research project conducted by Nawaal Deane as partial fulfilment of the requirements for the MPhil Degree at the Graduate School of Business. I understand that the research is designed to gather information about “Wrapped MOOCs and how it extends learning in marginalised communities” and that I will be one of approximately 25 people interviewed for this research.

Background and purpose of the research

Massive Open Online Courses (MOOCs) has been at the forefront of higher education institutions agendas since 2011 when this phenomenon was touted as a “free-for-all” model that would tackle the global problem of access to higher education. This research aims to investigate whether these MOOCs with its characteristic of scalability and free can benefit people who were not the intended target audience but most need access to higher education.

Ethics approval

Ethical consent for the study has been approved by the *UCT Commerce Faculty Ethics in Research Committee*.

Participation and confidentiality

I understand that my participation in this research is voluntary, that I will not be compensated and that I may withdraw at any time.

The interview will take approximately 30 to 45 minutes to complete and will be audio recorded.

I understand that I will not be identified by name in any reports using information obtained from this interview and that my confidentiality as a participant in this study will remain

secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

Should you have any questions or concerns please contact me at nawaal.deane@uct.ac.za or my supervisor, Dr Aditi Humna a Lecturer at the University of Cape Town and co-supervisor Dr Badri Zolfaghari, Lecturer at the Graduate School of Business at the University of Cape Town on

aditi.humna@uct.ac.za

badri.zolfaghari@gsb.uct.ac.za

Consent

-

I consent to participate in this interview, based on the terms outlined above and subject to the following additional condition of my own (if any).

Signed by interviewee

Date

Appendix B: Semi-structured Questions for Participants

MASTER OF PHILOSOPHY IN INCLUSIVE INNOVATION

Student Name: NAWAAL DEANE

Student Number: DNXNAW001

Questions for Cohort of Participates

Student perception of online learning has been widely researched but very limited research has been done on student perceptions of a “wrapped MOOC” in a resource poor community. Therefore, the questions for these participants from RLabs and a group of students from South African university. These questions have been adapted from Song et al. (2004) study that focused on students’ perceptions of an online course from universities in the United States. Song et al. (2004) concluded the failure of online courses meant learners felt isolated. They need assistance to establish a sense of community in a learning environment as well as feelings of connection when using an online course. Wrapped MOOCs are an attempt to provide this sense of community, with this in mind – the questions will include issues of community and belonging.

Interviews Questions

1. Tell me about your background?
2. Tell me about why you were enrolled in this course?
3. Did you take a MOOC on this course?
4. How was it presented to you?
5. What were the ways it incorporated face-to-face aspects you participated in?
6. How did any discussion take place about the videos you watched?
7. What was familiar to you in the content?
8. How did you apply it to your life?
9. What worked for you?
10. What didn’t work for you?
11. What were some of the other ways you learnt in space?
12. How has this course impacted on your life?
13. Would you want more courses like this? Prompt: reasons
14. How do you think you changed after participating in this process?

15. What do you think of the MOOC being from a South African university?

Appendix C: Excerpts of Focus group

Researcher

What do you want to do with your life?

Speaker 7 (0:09)

I want to do the same thing that they do at RLabs. I want to start my own business. I want to do lots of stuff. I saw all of the skills development goals and stuff like that. And then all the problems that you can solve. If you do if you just like, get something going if you just start with something purposes, and I think you can do anything with the information that you get here and just the push that our labs gives you by giving you this course and you get information and they take you through the incubator, stuff like that. So I think with this knowledge, or this knowledge, of course, you can do anything you can, you can do anything. You can do anything to solve any problems.

Researcher 1:19

Tell me about your business

Speaker 6 (1:34)

I was a very nervous person doing presentations and with doing all the presentations every Friday with our class, my confidence level went up and I am more comfortable in front of crowd now. Whereas before I was introverted.

Speaker 3 (2:18)

I got my, what you call it, I check my prices and stuff and they are ready for what i need like my cutlery. I want to get me now into a job where I can actually save up to get me a venue where I can actually start the business.

Researcher 2:40

How did you find yourself?

Speaker 2 (3:24)

Yeah, I found many parts of myself. There was a business proposal that I also came up with and also found exactly what I want to do in my life. First things first, the business proposal was going to schools to teach them how to get the tax number, teaching them how to open up a bank account. Because nobody teaches them how to do that. And some of them fall pregnant in school and then they just drop out and they have nothing to fall back on. So by me giving them the resources to get a tax number and to get a bank account. They can actually start working and earn money at a young age. And the money can go into the bank account and like in savings, and it's either that or I just keep on persevering to become a fireman. Like, I've also

planned for an administration job and things like that. But my main goal is to actually find a proper job in coding so that I can at least get some money in the house. So that's just for me, number one.

Speaker 1 (4:56)

At first beginning of this year, I didn't know what I was going to do. And now I understand that I want to either do human resources, or go to the fire department, we both went together. Just to see that and we've been doing that and had four tries, and almost all of which is denied. Because at first we've made the requirement, we've done the test as well, but they never got back to us. Then the next, the next one I popped my shoulder. And then after that, the other one was that I didn't have the proper paperwork, which was really weird because I had the paperwork set up. And then the last one was that they needed pure math students and not that's it So that's why we couldn't do that.

Researcher 6:02

So do you think this course would have helped you have the confidence?

Speaker 1 (6:26)

At first and never use this, if there was a group like this and you wish to speak up because I always used to stutter a lot. So, yeah. And the GLA program helped me try and talk to groups and stuff and it really proved to me that I never had confidence in myself when they ask me to get my confidence back.

Appendix D: Excerpt from the Introductory course evaluation report

What aspects of this course do you appreciate or value and why?

The class time as everyone gets to give their opinion and share ideas. It allows those who don't understand, get a better understanding when someone else has the answer. Also, XXX is very helpful and patient with us and he is always encouraging us to give an answer as no answer is wrong.

that we are allowed to voice out our opinion on certain concepts, because it makes us to clearly understand the concept.

I appreciate how the lecturers care about students and their willingness to help whenever they can. I value all the topics covered in this course.

the content of the course, because it relates a lot to other courses.

learning beyond my knowledge

The course topics are pertinent to everyday life. By understanding these topics we gain a greater understanding of ourselves.

i appreciated every aspect of the course because it dealt with personal life, as regards to who i am and this course was like a guideline to my first few weeks on campus and it made adjusting much easier, knowing who i am as a person. it place my values and morals into perspective.

aspect of language and culture. because language is very important to culture

The course links concepts that people seem not to acknowledge, that is what I have learnt and going to use in the future, those concepts are very important in our daily lives.

The MOOC part of the course because it is very much effective to an individual as it makes it easier for one to understand more on the themes done in the class.

Gender, it really opened my eyes about the world we live in.

i value the identity topic because somehow i thought that identity doesn't change but when the topic was discussed in class i develop a new meaning that identity does change.

Mostly all. I have learned a lot through this course. It had taught me better writing skills.

Time management and great course content. I enjoyed learning about identity and the different aspects of it.

i valued the section on gender because it was things i didn't know very much about

I appreciated the topics that were covered as it broadened my view on the world, and gave me free range to voice my opinions.

I appreciated every aspect of the course as it was a new learning experience that broadened my understanding of society.

All the topics of the course, because they resonate with me and i feel they are necessary for helping first years in their journey of self-discovery and it helps with their transition

The content of identity because it is not something i thought about prior to this course.

I value and appreciate what I've learnt through the topics of identity, gender and race. it has taught be valuable lessons that I could not receive from another course. It has opened my eyes to the world around me and especially the kinds of people I am surrounded by.

I appreciate the broad topics covered and the information I was able to get from the lectures.

Identity because it has changed my view on what identity truly is.

There is no right or wrong answer. It makes us feel comfortable in order to engage rather than to be shut down because of opinions. It has also helped me with essay writing.

I appreciate how it has opened my eyes to society, wider than it was before and for working my mind into critical evaluation.

Appendix E: Information on the Coursera platform about the two case study MOOCs

<https://www.coursera.org/learn/social-innovation/reviews?query=writing+your+world+>

The screenshot shows the Coursera interface for the course 'Becoming a changemaker: Introduction to Social Innovation' by the University of Cape Town. At the top, there is a search bar with the text 'What do you want to learn?' and a search icon. To the right of the search bar are links for 'For Enterprise', 'For Students', 'Log In', and a 'Join for Free' button. Below the search bar, the course title is displayed in a large font. Underneath the title is a button that says 'Enroll for Free' and 'Starts Sep 11'. Below the button, there is a star rating of 4.8 out of 5, with '1,067 ratings • 429 reviews' next to it. The section is titled 'About the Course' and contains a paragraph of text describing the course's focus on social innovation and entrepreneurship, mentioning the Bertha Centre for Social Innovation and Entrepreneurship and the R Labs movement.

<https://www.coursera.org/learn/writing-your-world#about>

The screenshot shows the Coursera interface for the course 'Writing your World: Finding yourself in the academic space' by the University of Cape Town. At the top, there is a blue header with the University of Cape Town logo and the course title. Below the header, there is a navigation menu with links for 'About', 'Instructors', 'Syllabus', 'Reviews', 'Enrollment Options', and 'FAQ'. The main content area is titled 'About this Course' and features a sub-header '20,630 recent views'. Below this, there is a paragraph of text describing the course's focus on writing in academic spaces. At the end of the paragraph, there is a link that says 'SHOW ALL'. Below the paragraph, there is a section titled 'Instructors' with a sub-header 'Instructor rating' and a rating of 4.65/5 (24 Ratings) with an information icon.

Appendix F: Practical application (Praxis)

The section provides two artefacts: a deck of cards (adapted from the University of Cape Town) and a checklist for any organisation, youth programme, educator or government agency to support the process of finding existing MOOCs and wrapping them for their prospective students. These artefacts have been adapted from open resources, but the content has not been replicated, rather it is the format and framework being used to allow for easy distribution.

The idea of finding characteristics in wrapped MOOCs in the global south that can be used as boundary objects may not be applicable to every MOOC. Therefore, these artefacts aim to provide broad guidelines that could be used in a learning design process when MOOCs are being used in a similar way that textbooks have been used. These tools will work better with MOOCs made in the global south as they have resulted from this particular research.

The first artefact is a deck of cards that can be printed out and used to prompt educators or learning designers during the storyboarding process of wrapping a MOOC with their course to use as prompts to ensure that the MOOC they intend wrapping can provide both social and epistemological access to learners from marginalised backgrounds. These cards were created from the characteristics found in this research.

Characteristics that aim for social access in the wrapped MOOC:

- Providing computer laboratories and access to Internet connectivity and digital technologies
- Facilitation or face-to-face support in explaining the rules of the MOOC platform or providing training on how to take a MOOC.
- Providing transcriptions, subtitles or translations of the content and also open educational resources to overcome copyright issues when using resources
- Appointing a broker, an educator or facilitator to navigate the seamless wrapping of the MOOC and manage all the logistical administration in dealing with the MOOC platform.

Characteristics that aim for epistemological access in the wrapped MOOC

- Student driven approach - understanding the student who will be taking the MOOC and then work backwards. Find out what and how the students want to engage and learn from the content. Understand their context, challenges and their aspirations for wanting to participate in a wrapped MOOC. Students want flexibility and adaptability to ensure they can work within their context. Ensure the option of face-to-face and online learning is provided.
- Identity work - ensure that the learning outcomes have a number of reflexive processes where students imagine who they want to become and to what practice or community they want to belong. Include assessments, content that is relatable and inspire them to share their stories, experiences and context to critically assess the content they are receiving. Provide them with knowledge that provides the tools to question knowledge.
- Adaptability and localisation - in the global south it is crucial to take content made in the global north and redress the imbalance by making it relevant to the student. Therefore, taking examples from the context to enhance the learning or using local textbooks, videos and educational resources to wrap the MOOC.
- Peer engagement - ensure that opportunities are built into the learning design structure where students are given group work or peer review processes to engage with each other.

Student-driven approach

A student driven approach incorporates a context-sensitive wrapping process.

It requires the involvement and participation of students to incorporate feedback to conceptualise what would work for them.

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Student-driven plan:

- | | |
|--|---|
| <input type="checkbox"/> Who is your student? | <input type="checkbox"/> Interview students |
| <input type="checkbox"/> What is their context? | <input type="checkbox"/> Conduct a survey |
| <input type="checkbox"/> What are their learning objectives? | <input type="checkbox"/> Visit or go into their environment |
| <input type="checkbox"/> What content is of value to them? | <input type="checkbox"/> Focus group |
| <input type="checkbox"/> How would they take the course? | <input type="checkbox"/> Create personas |
| <input type="checkbox"/> What is their level of involvement in the design of the course? | <input type="checkbox"/> Give and receive feedback |
| <input type="checkbox"/> Why would they complete the course? | <input type="checkbox"/> Evaluation report |

Context-sensitive objective:

Description about the plan:

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Digital Access

The digital technologies and Internet connectivity is vital in the global south context to overcome the barrier to digital access which is the first step in the process of wrapping MOOCs.

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Plan:

Aim:

- Provide digital access through Internet connectivity and data, WIFI
- Mobile or computers labs
- Provide low tech resources
- Online learning tutorial
- Types of resources; videos, podcasts, resources and interactive tools

Activity

- Set up email addresses, sign-up on the platforms, familiarise students
- Applying for financial aid
- Face-to-face sessions
- Demonstration for self-directed learning
- Time management tips and guidelines

Objective:

Description about the plan:

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Physical Access

Access to the resources from MOOCs requires negotiation, agility and knowledge about the platforms and the wrapping process

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Plan:

Aim:

- Finding a MOOC
- Appointing a broker
- Copyright material vs open resources
- Plan if the MOOC resources are accessed online or offline
- Make it your own

Activity:

- Contact the MOOC platform, universities making MOOCs
- Broker activities to use resources
- Package various resources to support the course
- Resources are recycled, repurposed and reused

Objective:

Description about the plan:

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Epistemological Access

Knowledge is not acquired it is co-created.
Identity work is a crucial aspect of any course work. The ideas of belonging, becoming and reflexive discussions enhances any content to include the context of the learner.
It also to provides critical thinking processes.

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Plan:

- | | |
|--|--|
| <ul style="list-style-type: none"><input type="checkbox"/> Inclusion of local case studies<input type="checkbox"/> Identity work readings, videos, podcasts<input type="checkbox"/> Knowledge we bring into the space and new knowledge we create<input type="checkbox"/> Group work related to identity and content<input type="checkbox"/> Content adaptation to context | <ul style="list-style-type: none"><input type="checkbox"/> Reflective tasks, belonging, becoming<input type="checkbox"/> Mapping the journey in the landscape<input type="checkbox"/> Peer coaching sessions, discussions, interactive processes, role play<input type="checkbox"/> Writing exercises, peer review<input type="checkbox"/> Presentations by groups<input type="checkbox"/> Social networking, chats, forums |
|--|--|

Objective:

Description about the plan:

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This checklist was developed by the researcher to provide guidelines to educators working with NEETs or adults and youth from marginalised communities. It provides guidelines to wrap an existing MOOC for global south learners.

The checklist is based on the research where existing MOOCs are designed to be exclusionary towards cohorts that have no digital access (social) and in turn this prevents epistemological access. Therefore the checklist allows for the reconfiguration of existing MOOCs to be wrapped to aim for both social and epistemological access.

Section A - Enable digital access	Checklist
The MOOC can be taken offline or online. If taken online continue through this section. If taken offline, skip to section C of this checklist	
Understanding of student context and appropriate technological tools to include in the wrapping process	
Inclusion of computer laboratories and Internet connectivity	
Choose a MOOC from a platform that complements the learning objective of your course	
MOOCs can be sourced on various platforms. Quick links: https://www.classcentral.com/providers	
Enroll on the MOOC platform and take the course	
Section B - Enable physical access	
Appointment of the broker to negotiate with the MOOC platform	
Contact the MOOC platform or licensing agreement to use the MOOC for your course	
Request for the course to be taken off the platform schedule	

Alternatively request for permission to download the resources from the platform for use in the blended approach	
Copyright guidelines - check the link https://open.uct.ac.za/bitstream/handle/11427/15212/thesis_law_2_015_lamont_kim_tracy.pdf?sequence=1&isAllowed=y	
Decide on what resources or aspects of the MOOC to use in the blended courses	
Choose low tech resources like readings, podcasts or PowerPoints if there it is video heavy	
Provide sign-up emails training, facilitated session on teaching students how to work on the platform	
Ensure the transcription and subtitles are included in the resources being downloaded	
Section C - Enable Epistemological access	
Local case studies, papers, articles and videos have been included in the course and will be discussed in the face-to-face sessions	
Breakdown the content to be covered in the face-to-face session and to be covered in the MOOC	
Ensure the MOOC has been repurposed, repackaged and reused to enhance local knowledge system	
Inclusion of reflective assignment or writing prompts has been used to discuss identity and aspirations for the future	
Peer groups are facilitated to provide context sensitive discussion	

Identity work around race, gender, positionality within the specific area of focus is included in the reading, articles, videos and group work	
MOOC resources from the global north counter balanced by including local experts publishing on the topic	
Provide a strategy for communicating with students during this identity work	
Give one assignment in any format where students apply identity work to their context.	
Gather feedback through evaluation report from students to include in the next wrapping process	

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