




## Special Issue

*Education Technologies and COVID-19: Experiences and Lessons Learned*

## Seeking Equity, Agility, and Sustainability in the Provision of Emergency Remote Teaching During the COVID-19 Pandemic: A Center for Teaching and Learning Takes an Expanded Role

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### Abstract

**Objectives:** The purpose of the study was to illuminate and assess the experiences and feelings of the staff of a center for teaching and learning at one South African university during the early months (April–June 2020) of the COVID-19 pandemic lockdowns when it switched from face-to-face teaching to emergency remote teaching (ERT). It explores the practical, operational, ethical, cultural, and emotional questions that the staff of this center dealt with as they supported the university in ERT provision.

**Method:** This paper draws on in-depth interviews with 23 staff members of the Centre for Innovation in Learning and Teaching (CILT) who revealed not only the logistical, technical, and administrative challenges faced during the ERT rollout period but the efforts they made to ensure that their efforts promoted equity (for students), agility (for the university), and psychological sustainability (for themselves).

**Findings:** Using cultural historical activity theory as a lens to assess CILT staff activities, findings indicate that a number of contradictions and tensions emerged during this period—concerning exacerbated inequities, pedagogical compromises, cultural anxieties, and psychological pressures—that could not be fully resolved but only managed.

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**Implications for Research:** CILT staff are interested not only in providing logistical, technical, and practical support to a university but also in dealing effectively with the ethical, cultural, and emotional concerns that arise in times of crisis and transition, such as the current one. Understanding what happened during COVID-19 may offer insights into how other centers for teaching and learning can adjust to what will likely remain an unstable future in higher education.

**Conclusion:** The pandemic ruptured the previously organic change and growth that characterized CILT development, transforming it as the staff responded to this South African university's need to provide support to academics and students engaging with ERT.

**Keywords:** *centers for teaching and learning, COVID-19, emergency remote teaching, higher education*

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## Introduction

When the COVID-19 pandemic struck South Africa in early 2020, most universities tried to make the switch from face-to-face learning to emergency remote teaching (ERT). One of the region's more research-intensive and highly ranked universities in Africa (hereafter referred to as the university) did this to ensure the academic year could proceed during the lockdown and so it could complete most of its normal teaching and assessment obligations within the standard academic year timeframe. However, even though some courses included supplemental online activities (resembling a “blended learning” approach), and the University itself planned to gradually incorporate more online teaching through its Vision 2030 plans (UCT, 2020a), the speed at which it had to adopt a fully online learning approach was both unprecedented and unanticipated. The university faced numerous challenges in this regard. Its digital infrastructure was not optimized for remote learning, most academics had limited online teaching experience (if any), and many students had neither technological access nor a conducive environment for online learning at home.

Indeed, it was this last issue that prompted some academics and students to argue that the university should pause its ERT rollout. The Black Academic Caucus (BAC) argued:

It is absolutely crucial that we are able to guarantee digital equity for all, before any rollout is carried out. The rush to roll out remote learning without addressing these issues is going to cause more harm and create more chaos than will be created by losing a term.... We propose that the current break be extended until it is suitable for students and staff to return to face-to-face teaching. (Black Academic Caucus UCT, 2020, pp. 2–4)

The South African Students Congress (SASCO) agreed and called for a “complete boycott of e-learning services” at all South African universities (South African Students Congress, 2020). Similar sentiments were echoed by concerned students and parents on social media.<sup>1</sup>

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<sup>1</sup> The authors conducted research on the university students' social media reactions to the rollout of ERT during April–June 2020, sharing results with university faculty members via unpublished reports. One hashtag used by students to protest ERT was #SuspendOnlineLearning.

Nevertheless, this university—and later all universities—went forward with some form of ERT and were supported by the government. As the university developed its ERT approach, it took steps to assess student technology needs (UCT, 2020b) and then deliver a loaned laptop for home use and free data that included 30–40 gigabytes per month (depending on provider) to every student who required them. When these technologies were distributed to the students, the calls for a boycott receded; once ERT began in earnest, students and staff turned their attention to dealing with the practical challenges associated with it.

The University's Centre for Innovation in Learning and Teaching (CILT) was tasked with ensuring that the institution could enable ERT in a timely and effective manner. As at other universities, this represented an expansion of the Centre's role and responsibilities as well as increased visibility for its work. Typically, centers of teaching and learning tend to play one of three roles: to provide services, partner with academic faculties, and lead in terms of future directions (Czerniewicz, 2021). While most centers consciously prioritize one of these roles, CILT had experience with all three (Centre for Innovation in Learning and Teaching, 2020). First, the learning management system (LMS)—together with other key learning and teaching technologies—is located in CILT; thus, it had more than a decade of experience offering essential services. Second, the Centre had developed faculty partnerships and was well placed to formalize them when the dramatic shift online occurred. Third, prior to the pandemic, senior staff in CILT were already in leading positions developing online education policies and strategies institutionally. CILT was the home of the university's massive open online course (MOOC) project, producing the most MOOCs in the country. In addition, CILT had raised project funding to produce fully online programs and courses. It also had some experience during the 2015–2017 #FeesMustFall student protests of supporting blended/online learning, although this was erratic, uneven, and contested (Czerniewicz et al., 2019).

Despite this relative preparedness, the arrival of ERT came as much as a shock to CILT as it did to everyone else. Work that had been peripheral to supporting traditional face-to-face provision suddenly became central. In addition to all the expertise needed now at scale, staff had little time to prepare—pedagogically and mentally—for providing specialist advice to so many in such a condensed timeframe. CILT staff not only had to rapidly improve their own abilities but had to be ready for the emotional demands of assisting educators in crisis mode as well. In addition to the practical and cognitive adjustments to be made as roles changed, there was also a great deal of affective and community work to be done. At the best of times, educators find changing modes stressful, but this was the worst of times. Thus, panic was a common response. CILT staff had to manage their own anxieties in order to allay the anxieties of academics. Indeed, “whether CTLs [centers for teaching and learning] found themselves at the margins or in the center of higher education's countless pivots, the shared crisis underscored the emotional labor and community building” to be undertaken (Tassoni, 2020a, p. 2).

The swift change to ERT—by the institution, the academics, the students, and everyone in CILT—demanded significant sacrifices, not only because of the nature of the change but because of the scale involved. Yet, of the many concerns held by CILT members, the ones that most preoccupied the staff we interviewed were the ethical, cultural, and emotional ones. Ethically, members wondered how they might support ERT in a way that did not exacerbate the digital divide between students. Culturally, they questioned how they might be able to act quickly and decisively in a context that was geared towards deliberative consensus building. Emotionally, members pondered how they could engage in this monumental effort without diminishing the prospects of their mental well-being.

These were questions faced by centers for teaching and learning at universities in South Africa (Czerniewicz et al., 2020), as well as globally. In this study, we explore how CILT members answered these questions during the first 3 months of the transition to ERT between April and June 2020. This case study provides a snapshot of the Centre's activity during this fraught period and discusses the many challenges it faced in filling its new roles and responsibilities. This paper shows how CILT attended to these ethical, cultural, and emotional issues

in addition to the urgent logistical, technical, and practical ones and illuminates how members managed to cope with the many tensions and contradictions that emerged during this intense early period of transition.

## Literature Review

The COVID-19 pandemic and its attendant lockdowns have created numerous opportunities to study the effects of ERT on educational systems around the world. With findings that contain both exciting possibilities (such as expanding the reach of education) and troubling concerns (including exacerbating digital divides), the impact of this globally simultaneous—and unwanted—experiment with ERT will be felt for generations to come. For teaching and learning staff members in higher education—who are often at the forefront of university efforts to implement ERT strategies (Schlesselman, 2020)—many of their ethical, cultural, and emotional concerns about ERT are coming into sharper relief in the literature (Aebersold et al., 2020; L. C. Hodges et al., 2020; Horan & Kim, 2020), although studies to date have largely focused on the impact ERT has had on students and academics (Stewart, 2021).

Ethically, the switch to ERT has highlighted longstanding concerns about student access to appropriate digital technologies (Brooks & Grajek, 2020; Stelitano et al., 2020), especially in the Global South (Adnan & Anwar, 2020; Dutta & Smita, 2020; Khlaif & Salha, 2020; Ramij & Sultana, 2020; Xhelili et al., 2021). As is often described as first- and second-order digital divides (Aissaoui, 2021; van Dijk & Hacker, 2003), research has established that physical access is necessary but insufficient for learning. Even in cases where technology is provided to students, many have not had access to the cultural capital that would allow them to make full use of that access (Tienken, 2020). Oftentimes, this is correlated with students' socioeconomic status and whether their parents were highly educated or not (Azubuikie et al., 2020). Indications, to date, are that many students in different contexts were able to make the switch to ERT (Amir et al., 2020; Bączek et al., 2020; Bawa, 2020; Hussein et al., 2020; Khan et al., 2020; Shim & Lee, 2020). However, addressing these divides and inequities has been a major consideration in the global south (Czerniewicz et al., 2020).

Culturally, the shift to ERT has often required far-reaching changes within institutions. The defining feature of most traditional universities, face-to-face interaction, has been transformed into virtual engagements—a change that many feel diminishes not only the relationship between students and lecturers (Alqurshi, 2020) but also between students and other students, their co-learning peers (Jeffery & Bauer, 2020). When this happens, questions emerge about whether the quality of the educational experience remains intact (Schultz & DeMers, 2020) or whether there might be some technological or pedagogical adjustments that can be made in ERT to replicate certain features of in-person learning (Craig et al., 2020; Gao, 2020). Initially, student perceptions of ERT are often colored by whether they have prior exposure to online learning (Roy & Covelli, 2021), but considering the important differences between traditional teaching and ERT (Shisley, 2020; Türkan et al., 2020), most agree that pedagogical cultures of lecturers must change for their teaching enterprise to remain successful (Mukhtar et al., 2020).

Emotionally, the arrival of this deadly pandemic into educational contexts has meant that not only have students and faculty been worried about their physical health as it relates to the virus (Cao et al., 2020; Tang et al., 2020; Yang et al., 2020), but they have also had to deal with mental health challenges associated with lockdown isolation and containment (Husky et al., 2020; Islam et al., 2020; Marelli et al., 2020; Rono & Waithera, 2021). The blurring of boundaries between home and work created stress for everyone across the higher education sector (Marinoni et al., 2020; Messacar et al., 2020). This compounds the experience that many have had with ERT, with some relieved that such an innovation could be implemented during this time (Bolatov et al., 2021), while others struggled with stress, anxiety, depression, and lack of motivation while studying via ERT (Aguilera-Hermida, 2020; De Michele, 2020; Petillion & McNeil, 2020).

## Purpose of the Study and Research Question

With rare exceptions, studies about the impact of ERT during the pandemic have focused on student and lecturer perspectives (as shown above), but here we want to contribute to a growing conversation about how staff members at university centers for teaching and learning themselves responded to—and experienced—the switch to online learning during the pandemic (Aebersold et al., 2020; Naffi et al., 2020; Tassoni, 2020b; Xie et al., 2021). In this study, our findings are drawn from research that sought to understand CILT staff experiences with the switch to ERT (April–June 2020) during the pandemic and how they felt about it. To this end, the research question guiding this paper is: How did CILT staff experience the process of enabling ERT at the university?

## Methods

### Procedures and Participants

After receiving ethical clearance from the Research Ethics Committee of the Centre for Higher Education Development at the university, we obtained signed informed consent from 23 members of CILT. Participants were then interviewed (sometimes more than once) by one of the authors during the first 3 months of the pandemic lockdown—April, May, and June 2020—when ERT was proposed and implemented at the institution. This comprises 50% of the academic, professional, administrative, and support staff who are employed on a permanent and contract basis at CILT. Thus, the participant pool excluded staff who are employed on short-term contracts.

It is important to also note that the three authors have close ties to CILT. Each of us works with the Centre in some capacity. Two of us are researchers for various projects hosted by it, and one of us is its former director. These different positionings allowed us to enjoy insider and outsider perspectives of the Centre's work. At the time of the research, none of us were directly involved in the ERT response.

### Instrumentation

The interviews involved open-ended questions that focused on understanding staff experience of change at the university during ERT. The instrumentation questions entailed the following direct questions, which often led to long exploratory conversations between the interviewees and the interviewer:

1. How have teaching and learning changed (or going to change) since the start of ERT?
2. What has changed at the university?
3. What is worrying you at the moment?
4. What have you observed in general regarding teaching and learning remotely?
5. What opportunities have you seen/do you see?
6. What has surprised you?

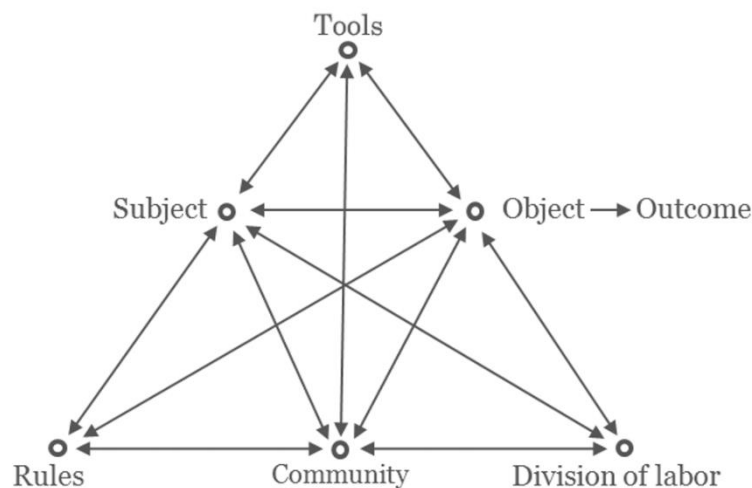
### Analytical Framework

Cultural-historical activity theory (CHAT; Engeström, 1987) serves as the analytical framework for the study. The authors used it to delineate and assess key elements of the CILT activity system during the early phase of the university's transition to ERT. This elaboration allowed us to assess the tensions and contradictions that emerged within the system and were dealt with by CILT staff. In brief, consistent with CHAT, an activity system

represents how a subject's action towards a specific object, to achieve a given outcome, is mediated by tools (physical and symbolic), rules (formal and informal), communities (participants and stakeholders), and a division of labor (Engeström, 1987). It helps identify where contradictions (significant system threatening obstacles) and tensions (less significant hindrances) occur in an activity system.<sup>2</sup>

Figure 1 shows a CHAT activity system, expressed visually as a triangle. The diagram shows how the various nodes (tools, rules, community, and division of labor) mediate a subject's action towards an object and outcome.

**Figure 1.** CHAT Triangle Representing an Activity System



The power of this approach is that it assumes activity systems to be dynamic so that when any element of a node changes (e.g., a new technology is introduced as a tool), new contradictions will emerge (or old ones will be resolved) based on those changes. In many cases, the contradictions that comprise part of every activity system require specific interventions to resolve them (e.g., a new policy, assistance from a third party)—a fact that often helps make sense of what animates the development of new rules or efforts by different agents to help make an activity system operate more effectively and efficiently.

Figure 2 provides a summary of the results using the CHAT triangle diagram as an organizing principle for the present study. The subject node comprises the CILT staff. Their object is to help the university provide ERT that is equitable to its students during the pandemic lockdown. This is to help reach the university's desired outcome of completing most of the teaching and assessment requirements within the standard academic year timeframe despite the disruptions caused by the pandemic. Their activities are mediated by the digital and technological tools (such as computers, internet, videoconferencing software, and PDF documents) necessary for students and academics to engage in ERT together and for CILT to support them.

<sup>2</sup> In this paper, CHAT was used purely as an analytical framework to understand CILT staff activities during the early ERT rollout period. However, some organizations use CHAT not only as an analytical device but as part of a program for organizational change (conducted through regular "change labs"), where activity system subjects and stakeholders engage in an iterative, participatory action research process in which they identify contradictions, propose solutions, enact experimental proposals, assess the results, and then repeat the process over the course of months until the system becomes reasonably effective and efficient. Throughout this paper, however, it should be understood that the authors have used the CHAT framework as a helpful analytical device, though this was not used by CILT or the university for understanding its own engagement with ERT.



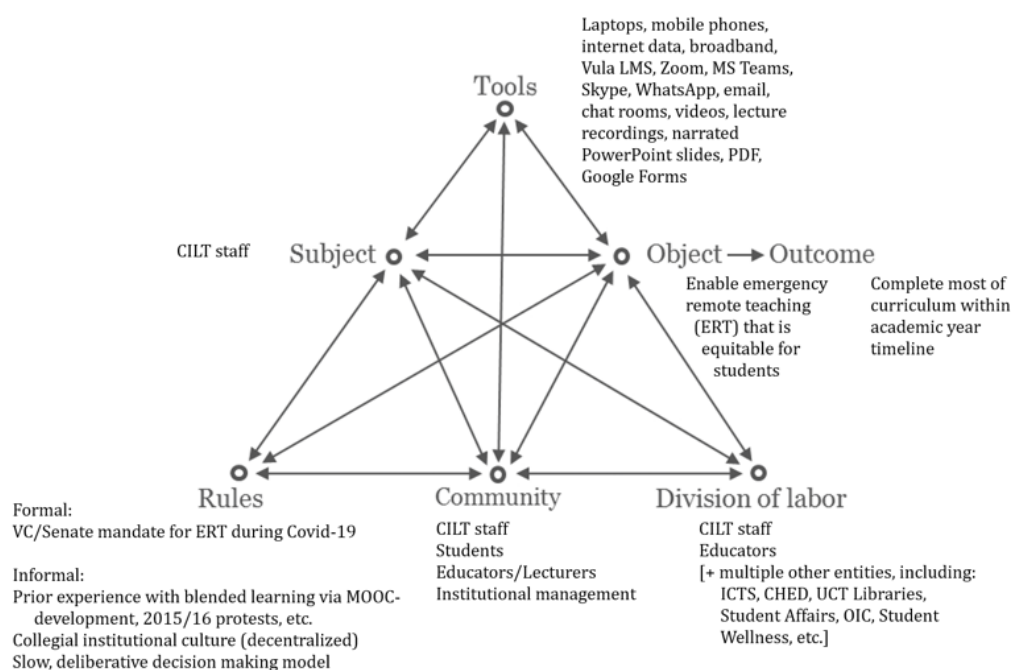
CILT activities are also shaped by various formal and informal rules, including the university's ERT mandate—its framework for remote teaching under COVID-19—which explained that the university “is switching to ‘emergency remote teaching’ (as different from online teaching) in order to save the academic year and to do so for as many students as possible” (UCT, 2020c). Rules were developed at different levels, including the senior leadership group (SLG), the vice chancellor's office, the University Senate and its associated committees, departmental committees, and newly created “task teams” formed to enable quick, focused decisions within and between typically disaggregated departments and faculties to respond to the COVID-19 crisis. This node also consists of three informal norms that shape the parameters of the activity system that CILT members work in: the prior introduction of blended learning by some academics, the collegial institutional culture that abides at the university, and the slow and deliberate decision-making model that had characterized its dispersed, decentralized power structure prior to the pandemic.

The community node comprises the primary agents involved in ERT at the university. For the purposes of this discussion, these agents are the CILT staff members, university students, university academics, and institutional managers.

The division of labor node comprises CILT staff who provide ERT support to academics and students who engage in ERT. There are many other important parties that contributed to the ERT effort, including the university libraries; information and communication technology services; the Department of Student Affairs; student wellness; departments in the Centre for Higher Education and Development; external service providers; and others. However, in this study, we focus only on the CILT staff and university academics.

The outcome sought in this ERT-focused activity system was to ensure that university students could finish their academic curriculum in the adjusted academic year. This would minimize the disruptive effects of the pandemic on student academic progress. It was an outcome desired by most at the university and was guided by the strategies and dictates of the university senior leadership. Engaging with ERT for what was believed would be a portion of the year—with the support of the CILT team—was central to achieving this outcome.

**Figure 2.** Centre for Innovative Learning and Teaching Emergency Remote Teaching Activity System



## Analysis

After interviews were transcribed, we analyzed the transcripts according to predetermined and emergent themes and categorized these according to the six nodes of the CHAT framework. To ensure that the experiences expressed accurately reflected those of the interviewees, we asked each person interviewed, along with other CILT staff members, to provide feedback on several drafts of this paper. They have done so, and their comments and suggestions have been incorporated into the analysis.

## Results

In this section, we analyze CILT member-reported experiences and reflections regarding the rollout of ERT at the University during the COVID-19 pandemic lockdown. We use the nodes of the activity system triangle to organize the analysis, which will help clarify tensions and contradictions in this system.

### Subject

The subject of the activity system is CILT staff members. It is relevant that while some of their pre-pandemic activities continued during the transition to ERT, the roles of most staff members changed dramatically to meet university needs. Some research in the Centre continued, but advocacy work was put on hold. Training activities were dramatically increased to help academics adjust to ERT; these activities were completed virtually rather than in person, as had been the norm prior to the pandemic. The provision of support for students and academics increased as both groups started using the LMS with more frequency and intensity. For some educators, this was their first time doing so. One staff member noted:

We all had to kind of jump in and help and many of us weren't very confident in some or other elements. We just had to learn. So, people found themselves doing things that they never thought they'd be doing. (Respondent 18)

For some CILT staff, this rapid change and expansion of roles allowed for unexpected benefits, such as personal growth. One staff member who had normally led small, face-to-face training sessions with academics said, "Previously, I wasn't that confident doing web conferencing, or webinars." But with the move to online training—where up to 150 academics attended each session—it "pushed me out of my comfort zone. The more I conduct these, my confidence has also grown to interact in a webinar state" (Respondent 7). This response was consistent across the Centre, as "everybody in our organization has responded and stepped up to the challenges.... And everybody's really pooled in and worked over and above requirements, and there's a lot of positive and caring energy around" (Respondent 10). They had a "shared sense of purpose" (Respondent 8).

At a pedagogical level, many staff stated that their relationships with the academics changed for the better because they felt the support and development work in which they were engaged had previously been too fragmented. As one staff member noted:

The new responsibilities ERT placed on CILT offered opportunities for us to develop and really tap into creating meaningful work and creating content for [academics] that is valuable and helps them in their teaching and learning going forward. And there is so many avenues we can grow in, with providing skills training for academics, and creating new options for them to create content, which we didn't have previously. We had people coming to us and we just implemented what they want, but now we are teaching people easy and simple and cost-effective ways to change their mindset of how they've been creating lessons and plans for their students. (Respondent 21)

The shift to ERT meant that, in an institution that is usually focused as much on academic research as on teaching, the institution focused heavily on teaching during those initial months. This is where CILT's



strategic and professional work was essential. The concentrated engagement between CILT and the academics increased CILT visibility, which was welcomed by the staff. As one CILT member noted:

[This was] an opportunity for CILT to show the University what we're made of and to showcase technologies in a way that we wouldn't have otherwise. I suspect it's going to affect how we are viewed and resourced going forward in a positive way. I think every [executive communique] that I read either names CILT or implies the work that we're doing in what they are talking about. CILT's role has been massive, and I think that has been appreciated. (Respondent 2)

However, despite the benefits of some of these changes, many noted the downsides as well, especially at a personal level. Some staff members—and academics across the university—felt a loss of personal control over their work. As one CILT staff stated, “A lot of people, they feel their agency has been taken away by this situation, so they are just finding it difficult to imagine what the next phase will be like” (Respondent 8).

Thus, as we can see, the various nodes of this activity system appear highly dynamic even at the subject level. The transition to ERT changed the roles of the CILT staff, creating interesting new opportunities that many were keen to embrace as well as inevitable challenges that required significant effort and adjustment.

## Object

The object of this activity system is to help the University provide ERT that is equitable to its students. The logistical, technical, and pedagogical issues involved in going online are considerable, but it is the ethical challenge of making ERT equitable for as many students as possible that animated some CILT staff the most. In making the rapid shift to ERT during a global health and economic crisis, staff members understood the risks this transition could pose for students who come from marginalized communities. It could deepen an educational divide that already exists at the University.

The drive for equity in ERT stems from the perspective of the varying challenges facing students systemically and in relation to ERT. One key pre-pandemic challenge exacerbated by the switch to ERT was the fact that many students didn't “have access to data and laptops” (Respondent 4). Overcoming that problem (discussed below) was a minimum requirement for ensuring equity in ERT, but it was far from the only issue students faced.

First, the staff knew that many students came from challenging home situations that would likely reinforce inequity. These challenges were identified in a student survey taken early in the pandemic (Marquard et al., 2020). They were also felt by many CILT staff. One member said that she understood students' situation firsthand:

I live in the townships and know life in the township for a student is not easy. It is much more than [just about needing a] laptop and data. When my boys were studying, there were many days we only had one meal for the day. My sons also had to share a laptop, my son had to copy many of their books. (Respondent 22)

She highlighted further issues around theft, drug use in the home, and lack of electricity as shaping some students' home environments in the poorer communities.

Second, historical linguistic inequities would likely be intensified by ERT as online writing tends to privilege middle-class English speakers who already have good facility with writing English clearly and quickly. As one staff member noted, in the LMS chat rooms:

It's the confident, English-speaking students who first go in there and post these beautiful posts. I'm just not sure how easy it's going to be for the others [whose first language is not English] to express

themselves in written language, which is largely what's going to be done through chat rooms and forums. (Respondent 11)

These observations point to the new capabilities required at speed from all students.

Third, with the loss of in-person support on campus, many “students are completely unprepared of what is expected from them. And they are sitting [at home] in isolation. And some of them who don't have access like others will feel even more lost when they come back” (Respondent 4).

In response, CILT staff—and the university in general—put a “very strong emphasis trying to look at inequity and its impact on what plans can be made” (Respondent 10). Philosophically, this was largely mediated by a tension between what one staffer posed as “what is best and what is fair” (Respondent 3). That is, “In choosing to design for those without [good technological and infrastructural] access, are we unnecessarily disadvantaging those with access? Do we lower the standard across the board for the sake of fairness?” (Respondent 3). Many staff had similar questions about whether “you cater for as many who can manage and then try and support those who can't, or whether that's unfair? How do you design learning when you're not sure whether a section of the class can't partake of it?” (Respondent 10).

CILT staff grappled with these issues internally, as well as through newly established “task teams” that had been rapidly formed within and across faculties. They engaged with university-level agreements regarding what to do, how to mediate inequities, and how to offer multimodal online solutions. Senior CILT members were able to contribute to these decision-making processes through participation in new and existing governance structures. Others grappled with interpreting these decisions and enacting them in practice.

From the outset, there was senior-level commitment to planning for inequitable circumstances. This was expressed most concretely by CILT promoting a low-tech, low-bandwidth approach to online engagement: “A low-tech option means—to an extent—that all our students, regardless of their diversity of their background, would have access to [online materials]” (Respondent 4).

In practical terms, this meant making use of prerecorded videos and offering these in a low-resolution format for easier downloading, providing captions and transcripts for videos in case they cannot be downloaded, using screencasts as an alternative to videos, compressing larger files into smaller ones, and placing as many materials onto zero-rated websites so that the students incur lower data charges.

For the most part, this low-tech approach was viewed as a practical strategy for dealing with the inequities inherent in ERT in the South African context. However, there was a recognition that this approach also had its limitations. One limitation is that many faculties and disciplines might have a different understanding of what “low-tech” means based on their conventional teaching methods: “I'm not sure whether some departments are giving very clear directives about what low-tech means, or whether there has been some mixed messaging along the way” (Respondent 3).

In addition, CILT members understood that the low-tech approach was a stop-gap measure to minimize an escalation of inequity during ERT. It did not overcome the problem of inequity. Many staff anticipated that previously marginalized students would be further disadvantaged by this experience. As one worried staff member shared:

[A lot of university students] have access to the internet, and have laptops, and resources where they are comfortable to switch over to this new teaching method. And then you have a lot of students who don't have access at all and this period is really just putting them further back than where they were. (Respondent 21)

Furthermore, by having to study from home rather than on campus, students lacked access to the “resources that they would have used, say the library, or the computer labs, or having one-on-one sessions with the academic face-to-face or tutoring sessions or study partners in person” (Respondent 21). Summing up many staff members’ fears, one stated, “In terms of addressing inequity, it remains to be seen. I think it’s going to deepen inequity” (Respondent 9). But this will go beyond the university. “We’re going to see it nationally, writ large” (Respondent 9).

## Tools

The tools node of this activity system comprises the digital and technological tools necessary for students and academics to engage in ERT together and for the CILT team to support them. For students, this primarily centered on them having access to laptops and the internet to learn at home. While many students had their own laptops and home connectivity (89.5%, according to an internal student access survey), a 10th did not. Thus, the university had to step in to provide students with laptops prior to the start of ERT.

Faculty needed access to a facility with a number of digital tools to help them with teaching remotely. To organize their courses and share materials, they had to use the university online LMS (called Vula). Most faculty were already acquainted with the LMS, but many required further training through CILT to be able to use it optimally for ERT. To engage with their students, many academics also used Zoom for virtual meetings with their students (though the low-tech guidelines discouraged live video interactions). They also created videos, screencasts, narrated PowerPoint slides, PDFs, and other materials to share with their students, especially for asynchronous learning. In addition, many created communication channels through email, Vula chat rooms, and social media platforms, such as WhatsApp.

For the CILT team, members used Zoom or Microsoft Teams (MS Teams) to conduct webinars with faculty. From the outset, topics for discussion included the challenges of engaging students remotely and alternative forms of assessment. The most popular events were those concerned with design for teaching with digital tools, such as the LMS. To get faculty feedback on training sessions, CILT sent out surveys via Google Forms. A team within CILT continued to manage the LMS and assist academics and students with any queries or issues they had. CILT also scaled up video production and captioning for academics.

It is important to note that these tools are not neutral technologies. They all have educational, social, and political implications for their use. For instance, while the simplicity, availability, and popularity of Zoom made it a useful choice for many academics doing synchronous online sessions, CILT had to field “lots of questions about privacy” by academics and students who were worried about their class meetings getting “hacked” or compromised by “Zoom-bombing, where a bunch of other people come in and disrupt the meeting” (Respondent 6).

The use of prerecorded videos seemed like a practical choice for delivering lectures within this context, but their use also brought about some technical and pedagogical issues. Although the university had managed to negotiate zero-rating for its websites (i.e., browsing and downloading from them incurred no data charges) through cellphone providers, there were issues with poor internet access that hindered access to video materials. Furthermore, academics were not necessarily knowledgeable in how best to make use of prerecorded videos for pedagogical purposes, for example:

You have a large amount of academics who are repurposing the videos that they’ve previously recorded. We’ve been getting videos anything from 5 minutes to up to 2 hours. And lecturers are expecting their students to watch a 2-hour video and dissect and retain all that information. (Respondent 21)

Recording long videos that replicated the traditional lecture impacted students' ability to concentrate and retain knowledge.

One surprising technological input that positively shaped CILT was the increased use of—and dependency on—MS Teams. As one manager said, prior to the pandemic:

We tried it and no one knew how to use it and we gave up because there wasn't a use case. [Now], I can't see us not using it even when we go back onto campus. The Teams channels are being used to simulate a kind of virtual department, virtual building. I mean, you could see the channels represent teams or clusters or departments. (Respondent 8)

This realization has opened up possibilities for understanding how to use virtual synchronous tools, such as MS Teams, as part of a more mixed-work environment in the future, in addition to its use in teaching spaces.

Thus, although CILT staff were familiar with some ERT-related technologies, the speed, intensity, and scale required to enable ERT across the university had no precedent. This meant that it did not allow for the considered planning which fully online programs require. This would have been a major challenge for CILT, but as one staff member noted, "If we had not embarked on doing 22 MOOCs, and unbundling and understanding this landscape of online learning, we would not have been prepared to be in a position to support our academics and our lecturers going forward" (Respondent 4).

## Rules

These changes took place in a university that was characterized by its collegial institutional culture in which governance is relatively decentralized, change occurs slowly, and academics enjoy great autonomy over their pedagogical decisions (Czerniewicz & Brown, 2009; Trotter et al., 2014). Because of this prevailing collegial culture, the quick decision by the university to initiate ERT in the face of the pandemic lockdown marked a departure from traditional norms. For some, this was an unwelcome change of practice. One CILT staffer felt that it was "very quick and very top-down. I'm worried about the fact that there's been insufficient consultation with students, insufficient feedback from students, insufficient sense of where students are acting, how they're feeling" (Respondent 11). Another felt that this kind of approach "doesn't work" at the university (Respondent 9).

But most other CILT staff interviewed felt it was necessary. As one summarized:

The institution did something quite unexpected and came out very fast with their early decision to close residences early [and] suspend face-to-face teaching. I think those first decisions came out fast, which I think is great. Anything else would have been a disaster. (Respondent 6)

Another CILT member agreed: The university "made a decision and then they carried through with it, so I think that's important. They didn't hesitate. That's a strength. So, that's where I think I have to say where leadership was brave" (Respondent 14).

Lastly, this decisive action was followed by other forms of engagement that went against the normal decentralized model where time and consensus building are essential for effective governance. With the exigencies imposed by the pandemic, additional institutional governance structures were speedily instituted: "There's been these other bodies set up like these task teams to try and bring about proposals and solutions. It's introduced a more agile layer" (Respondent 10).

Compare that to before the pandemic:

You'd have the meeting, then you'd circulate the minutes, and then you have to agree to the minutes. And then everything would be raised outside of the meeting, and then you'd have to have an online discussion.... Then you'd have to come back the next day, and then everyone.... it would take forever! And now it seems like these task teams meet, decide, and move on. (Respondent 2)

This consultative enhancement was matched by the growing collaboration across departments and disciplines, especially for CILT, which was positioned prominently in relation to the university's ERT efforts. Though traditionally academics at the university have enjoyed great autonomy, the needs of ERT led to greater collaboration where "any responses need to be coordinated across all faculties, across all [heads of departments] (HoDs) and deans" (Respondent 4).

## Community

For the CILT team, the university's decision to adopt ERT focused a spotlight on its activities during this moment of crisis. According to one staff member:

Before, CILT was like a small group of people that were interested in doing these types of alternative teaching and learning methods. Now everyone is forced to come up with an alternative teaching method and CILT is stepping in that space, and everyone is forced to get to know CILT. It's coming from the DVC [deputy vice-chancellor]. They are promoting us. (Respondent 1)

Thus, while the switch to ERT has put CILT "on the map" (Respondent 16), the Centre had already built credibility with many academics because of the support work, outreach, and webinars it had long provided and the partnerships which had been developed with them. The groundwork had been laid for this moment of heightened responsibility and scrutiny. As one staff member noted:

I think that through the direct contact with faculty members, or HoDs, having webinars continuously on a day-to-day basis, CILT's profile has been raised. People's awareness of who we are is definitely now possible and has become a mainstream part of the university's correspondence. (Respondent 4)

This legacy, and the quick response that CILT made to help with switching to ERT, meant that "people have noticed the role of CILT, and they trust us with the kind of solutions that we provide and support" (Respondent 7). As a result, CILT members believe that their status as an important unit at the university will remain going forward.

For university students, the abrupt shift to ERT had a massive impact on them and their learning potential for the year. Some students come from low-income backgrounds, lack personal computers or internet connectivity at home, and often cannot afford internet data even if they do have the necessary hardware. Even those with better-resourced circumstances would face challenges. Trying to imagine their circumstances, one noted, "Learning for our students, who are often in very crowded difficult conditions anyway, is going to be close to impossible" (Respondent 11). One CILT staffer mused, "I foresee that we might be fielding a lot of calls from the students' side" (Respondent 7).

When ERT was rolled out, some CILT members worried that a lot of students might drop out because they were not able to cope with the change. "I am concerned about the students for whom it doesn't work well and don't have a choice right now. I am concerned that we are going to lose some students no matter how hard we're trying" (Respondent 2). This CILT member held this sentiment even after ERT had been in place for weeks:

The pressures that the remote teaching is placing on vulnerable students and on vulnerable staff is going to have a bad impact long term. And I am concerned that we are going to lose some students who might have made it through otherwise. But I am worried about the students who I think are

going to miss out on a university education as a result of this. I don't think we can say we're going to be successful at this without losing some, and that is devastating to that individual person and probably their family. (Respondent 2)

Just as concerning, a lot of "the students who drop out in good [academic] standing" (Respondent 9) will not do so just because of connectivity issues, but mental health ones as well, said one CILT member. "The student could connect, but they have just lost heart. They have just thought, 'I can't do this. Let me start again next year,' you know" (Respondent 9).

Yet, for all of the challenges ushered in by ERT, some CILT members thought there was a hidden upside from the distance imposed on student/lecturer relations in that it ironically allowed them to connect more authentically in the teaching and learning space. As one member noted:

It's easier to ask a question when not everybody sees the response, or not everybody can sort of judge you on the question. I think it makes it easier to approach lecturers, especially for first-year students who are overwhelmed or, like, it's too much for them to ask it in the venue. (Respondent 20)

In addition, academics engaged with CILT in unprecedented numbers to attend webinars so as to increase their online teaching skills or to catch up with what they should have already known. As one CILT member commented, "It's quite astounding that all the staff who are reaching out to CILT or coming to webinars are now obviously trying to look at the affordances of the old LMS that we have and that's never been noticed before" (Respondent 10). While "people have been very technophobic" in the past, they're now "finding it quite OK" (Respondent 10), allowing academics to see that the "idea of this flexibility between face-to-face and online is possible, [and] that it doesn't have to be one or the other. It can be a combination of the two" (Respondent 17).

Lastly, for the institutional management, while university senior leadership was quick to embrace ERT, they were wading into uncharted waters themselves, never knowing the full consequences in advance of their decisions, and opening themselves up to criticism and concern from staff and students. This was often conveyed via frustrations with CILT's own assistance with the rollout of ERT across the faculties. Because of academics' concerns that going digital meant that their teaching was opened up to managerial surveillance, one CILT member related:

I've had a couple of academics go off at me and lose their sh\*t entirely because they feel like they've been watched. There are people who believe that site analytics shouldn't exist because we shouldn't be monitoring what students do. And some people will be like, "Hi, how can you serve us?" And other people were like, "What are you doing here? You're agents of the institution!" A lot of it is about the fact that people feel like the walls of your classroom just got folded down and everyone's standing around the edges going, "Hmmm, how interesting." Of course, no one's got time to do this, but people feel watched even when they're not watched. It's like class Foucauldian panopticon kind of stuff. (Respondent 12)

Yet the more assertive posture by the institutional management has also created new opportunities for engagement across faculties and disciplines. As one CILT member noted:

There has been a remarkable coming together across organizational boundaries to get a job done. It's as though the crisis forced us to set aside whatever organizational divisions that might have prevented people from working together, and precipitated collaboration, not because collaboration is a "good thing" but because it was essential. (Respondent 9)



The benefits of this have been noticed by people across the university, including CILT where, as one manager summed up, “[T]he way we work, the way we collaborate, the way courses are seen, you know, that might have longer term impact on working practices going forward” (Respondent 8).

## Division of Labor

Some CILT staffers expressed enthusiasm at the outset of the ERT roll-out, relishing the opportunity to learn and to share skills and knowledge with the broader academic community. At the same time, they were also keenly aware of the risks, especially at a personal level. While the unit would receive increased institutional support to carry out its work, it still had to be done by individuals who themselves were coping with the exigencies of the pandemic and the lockdown.

One of the first things to change for CILT staff was their work/life balance. One CILT member described a common scenario for CILT staffers:

It is really hard to do this stuff when the family setup means that you’ve got little kids, or dependent partners, or a baby. I mean, babies don’t like you putting them in the snug-and-safe seat and saying, “Right, just sit there for an hour while I do a spreadsheet,” you know. (Respondent 2)

Like so many others across the country, CILT staff had to perform their work from home in conditions that were not designed for working comfort or efficiency.

The shift to online work also altered how people in the broader community felt about each other’s time and accessibility, departing from in-person norms. Essentially, going digital at home meant that the usual work boundaries were often compromised, as one CILT staffer complained:

When you’re at work, normally in the offices, if you start at 7 [a.m.] you can leave at 3 [p.m.], and you can make sure your time is respected because you can leave and physically switch off. Now we can’t physically switch off. We’ve got our cell phones linked and our laptops linked. So, it’s always there. You always have this information that you have to respond to. So, even if you do want to ignore it, it’s still on your mind because it’s something you have to access, or something you have to process tomorrow. So yeah, it’s draining, a lot more draining than working at the office. (Respondent 20)

It is not surprising that, even after many weeks of supporting ERT during the pandemic, some CILT members felt that:

The expectation is that you need to be available almost all the time, reply immediately. You need to handle situations fast. There is no excuse. Like, your home is your work space, so now your stress is in your workspace and there’s no real separation of like personal life and work life. (Respondent 21)

The constancy of the pressure led many CILT members to discuss mental health issues more openly, “concerned that after this initial burst that burnout will become an increasingly important factor” (Respondent 6). Indeed, many concurred that, “We’ve been so focused on helping students that we’ve forgotten about ourselves to a certain extent” (Respondent 21). This led the CILT team to try to pay more attention to the “long-term cost of that emotional burden for staff” (Respondent 12).

While university academics were also under a similar strain, for the CILT staff who engage with the academics on a regular basis, the relationship between them changed with ERT. Before the pandemic, CILT knowledge was accessed when and if needed by academics. But, after the switch, their dependence on CILT radically increased. It gave CILT more leverage and shifted the power dynamic between academics and learning designers that was there before the pandemic.

[Prior to the pandemic], learning designers [were made to feel] like they were doing academics a favor by assisting with online teaching [and] that the academic held all the power as the content expert. Since the university had to go online [though], all of that changed overnight. Learning designers can now freely associate with academics. As online learning experts, our knowledge becomes more important in the conversation. (Respondent 23)

This change required that staff development and support was scaled up and intensified for ERT, as more academics accessed CILT services, including from CILT staff who had previously worked in bespoke media and course production roles, as one shared:

Our role shifted from video creators to video creating teachers. So, we would teach the lecturers how to make videos now and also how to use the LMS for what they need and for what the students need. We shifted into a consulting and teaching role. (Respondent 20)

This empowered the academics to take greater responsibility in the creation of their own ERT materials.

## Discussion

The elaboration of CILT's ERT activity system has revealed a dynamic space—both agile and scrambling—under new and increasing pressures. It has also detailed how CILT staff members responded to the changes brought on by ERT and how they felt about them. In this section, the discussion will use CHAT (cultural-historical activity theory) to help untangle the complexities facing CILT staff members during this early ERT rollout phase, focusing on the key tensions and contradictions that emerged within that activity system. It will also consider how these experiences integrate and align (or not) with relevant scholarship to date.

### **Contradiction: ERT Viewed as Likely to Increase Inequity Despite CILT Efforts**

The goal of this activity system was for CILT to enable lecturers to provide ERT that is as equitable as possible for students. Yet in the South African context—characterized by high levels of structural inequity between students of different backgrounds—such an outcome is not truly possible. It was an ideal to strive toward, but not a reality that could be reached.

Because of this, many students and academics argued that, rather than trying to save the academic year through ERT (which seemed more likely to exacerbate rather than mitigate inequity), the university should stop teaching until it could guarantee that every single student would enjoy the exact same level of educational provision as everyone else during the lockdown. Most CILT staff interviewed also worried about how ERT might increase inequity. But rather than protest in response, staff focused on how they could ensure that the ERT strategies they themselves promoted would create the highest likelihood of equitable learning opportunities for students. This meant that staff had to start with the most vulnerable students in mind, the ones with the least secure technological (computer, data, electricity) access.

Thus, early on, CILT developed ERT guidelines that encouraged academics to engage with students in ways that were low-tech (using standard digital applications), low data (using small file sizes and text rather than video), and asynchronous (allowing for temporal flexibility). These strategies did not—and could not—erase the digital divide that university students experienced during the pandemic, but they minimized ERT's potentially inequitable impact. The contradiction was not “resolved” but “managed.”

The fact that COVID-19 made visible social and educational inequalities is widely agreed (World Bank, 2020) from contexts as divergent as rural Ethiopia (Belay, 2020) and the urban United States (Aucejo et al., 2020). Yet the scholarship to date on inequality is largely focused on students (as described earlier) and, to a more limited extent, on educators. Concerns about inequalities are not yet to be found in the limited research about

teaching and learning centers. It is unlikely that this concern is unique, but perhaps it is starker at a university located in one of the most unequal countries in the world.

### **Tension: Pedagogical Quality is a Concern Due to Initial “Translation” of In-Class Materials to ERT**

Because the university is a face-to-face educational institution, the large majority of academics had never taught fully online prior to the pandemic, thus they faced a steep learning curve in their first months of adjusting to their new teaching reality from home. To cope with this change, most academics did not have the time or inclination to rework their course materials in line with pedagogies more suitable for the online environment. Initially, many tried to replicate their usual teaching approach with some sort of online equivalent, producing video lectures or narrated PowerPoint slides. Thus, the technologies that created the best approximation of what was already familiar were often embraced first. This was an expedient approach based in part on the fact that it was initially unknown how long the lockdown would last, with the leadership initially assuming normal classes would resume before the end of the year.

However, many of the CILT staff mentioned that this wasn't ideal. Indeed, the longer that ERT continued, the more likely that this translation approach would impact the quality of student learning. Thus, face-to-face pedagogy was mismatched with the ERT reality. Many CILT staff and academics were uncomfortable with the trade-offs they were making, yet given the timescale and rapid shift to ERT, it was difficult to achieve optimal online course design. They were acutely aware that ERT was not the same as carefully designed courses, which take time (C. B. Hodges et al., 2020).

### **Tension: Collegial Institutional Culture Takes a Managerial Turn, Seeking Agility Over Consensus**

Due to the unprecedented nature of the COVID-19 crisis, the university management took bold and decisive steps to commence with ERT while securing laptops and data for students who needed them. At a university known for its collegial institutional culture, this was a stark change from the norm. Many applauded the top leadership for taking such quick action, but others worried that this could signal a move towards a more powerful and interventionist executive. Essentially, the question of power—who has it and how it operates—came to the fore as the university, with its gradualist approach to most actions, started to move very quickly with regards to responding to the pandemic.

Similarly, at CILT, the slower consultative consensus-building model of the Centre had to transform to allow for greater agility in the face of crisis. CILT staff realized that it did not have the luxury of time to deliberate as extensively over matters as it had in the past. It was not just responsible to itself, but to the entire university, which was relying on it to help with ERT. A particular feature of this period was the development of rapid, open information flow to mitigate the quick decision-making processes. The weekly COVID coordinating meetings allowed regular feedback and ongoing discussions. In addition, the ongoing updates from university-level task teams, which impacted CILT work, were posted in open CILT Microsoft Teams channels. As discussed above, this was discomfiting for some CILT staff, but they understood that they had to adjust to meet the needs of the moment.

The consequences of this experimentation with a more agile decision-making model cannot yet be assessed. The urgency of the situation made it necessary, and it remains to be seen what its consequences might be structurally and culturally. It is of interest, though, that a U.S. survey of CTL staff found that a negative aspect expressed by some respondents was that they did not feel involved in decision-making processes and were unhappy with what they experienced as top-down demands (Aebersold et al., 2020).

## Tension: Rapid Change in Roles Brings Mental Health Issues to the Fore

Almost all of the CILT members became acutely aware of the mental health challenges involved in the transition to ERT as they adjusted themselves to expanded roles and responsibilities while working remotely from home. Thus, on the one hand, they faced a new set of larger and more urgent challenges than they had previously faced at work, and they had to do so without the face-to-face support they could expect at the office. Many described it as surreal and disconcerting. Initially, there was such pressure to simply make as much progress as possible with their work that they ploughed ahead without worrying how it was affecting their mental health. But as the pandemic raged on, and as the emotional costs of such non-stop remote work became clearer, CILT members began to speak up about it in virtual meetings and to develop personal strategies for coping.

Some started to insist on only checking emails during work hours. Others turned off email notifications on their phones. Yet more insisted that their meetings include a sensitivity and accommodation for the various types of emotional stress this was taking on everyone. And, of course, many others reached out privately to each other to check on how they were doing.

While the scholarship to date has revealed the mental health costs on educators and students (Aguilera-Hermida, 2020; De Michele, 2020; Husky et al., 2020; Islam et al., 2020; Marelli et al., 2021; Marinoni et al., 2020; Messacar et al., 2020; Petillion & McNeil, 2020; Rono & Waithera, 2021), the costs for CTL staff have received little attention. One rare exception acknowledges that:

[The] affective labor [that] exists at work, is integral to our work. Despite the chaos and uncertainty, faculty developers were called upon to maintain a level of professionalism, to deliver not only “service with a smile” but also service in the name of compassion. (Bessette & McGowan, 2020, p. 146)

## Limitations of the Study

This study has revealed how the responsibilities, demands, and emotional burdens for individual staff members were quite significant to their experience of the ERT rollout. These considerations have received some detail here, but they call for more substantial investigation, especially since the pandemic has (at the time of writing) continued to shape teaching and learning interactions at universities. In addition, the research here was tightly delineated to the 3-month initial timeframe of the ERT rollout, and it was unable to grapple with other crucial structural conditions, including casualized staff members’ experiences, an altered funding environment, and how CILT (and likely other CTLs) will likely be reimagined in the post-pandemic era. Lastly, while this research took place in the global south, the experience of ERT at the university cannot be said to be representative of all institutions in the global south, let alone Southern Africa or South Africa. It should only be understood as one of many types of ERT experiences within the region.

## Implications for Research

This spotlight on the activity system of one CTL offers an insight into an educational activity—teaching and learning support—that has proven to be of immense value to university activities during the pandemic lockdowns and which deserves greater research attention now that its role is more understood and appreciated within the academy. But the research here suggests that a CTL’s world revolves around far more than simply how its staff members can provide logistical, technical, and practical support to the university. It reveals that CTL staff are just as preoccupied with ethical, cultural, and emotional concerns—many of which arise because of their deep desire to support academics and students in the educational enterprise. In a time of crisis, such as the one we are in, these questions will continue to loom large. Further research will help

create a greater understanding of how CTLs in different contexts—operating in quite diverse national, cultural, linguistic, and resource environments—have adapted due to the exigencies imposed by the COVID-19 pandemic.

## Conclusion

This paper has detailed and analyzed the many changes that one CTL in the global south experienced when the COVID-19 pandemic hit and the university switched to ERT to ensure learning could continue despite a national lockdown. It shows how the pandemic ruptured the previously organic change and growth that had characterized the Centre's growth and development, transforming it (in a still open and undetermined way) as the staff responded to the urgent need to provide support to academics and students engaging with ERT.

To reveal this process, CHAT was deployed as a lens through which to view not only the practical, cognitive and affective dimensions of the Centre's work, but to surface the contradictions and tensions that sprang up as a result of it. The use of CHAT here is relatively unique in the CTL literature, but it offers a fresh way of framing a complex situation. In this instance, CHAT provided a useful frame for looking beyond the strictly logistical, technical, and practical challenges faced by the staff so as to deal with issues associated with their ethical, cultural, and emotional experiences. It also offered a mechanism for identifying—and therefore potentially resolving—problems inhibiting the optimal functioning of the activity system.

However, in an era of general uncertainty—including from disturbances due to climate change and social unrest—this is unlikely to be the last time that modes of educational provision will have to transform at speed. Understanding what happened during COVID-19 can offer insights into how similar CTLs can adjust in an unstable future in higher education.

In this case, the “innovation” in CILT's name turned out to be an unanticipated advantage for the Centre, given that it had been exploring online possibilities in various modes prior to the pandemic. This suggests that such centers should extend their focus beyond the “here and now” to explore and anticipate future needs. Many such activities may feel speculative and unjustified when a current set of operations appears to be working fine, but the experiences that those “marginal” exploratory activities provide can allow staff to pivot quickly and with relative competence and confidence when unanticipated crises emerge (again).

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