

Emergency Remote Teaching in Unequal Contexts: Reflections on Student Feedback on Two Online Courses during the Covid-19 Lockdown in South Africa

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Abstract—The Covid-19 pandemic has caused many universities to move instruction online. For the most part, this move has not been based on sound principles and best practices of online teaching, but can instead be characterised as emergency remote teaching (ERT) that aims to continue instruction despite the substantial drawbacks of insufficient planning or training. Research has looked at challenges inherent in ERT, as well as considered the benefits of online instruction for flexible learning environments. However, little research has looked at the experiences of students from diverse socioeconomic backgrounds during ERT. This paper explores student feedback on two courses taught in 2020 at a South African university, collected during routine course evaluations. The two courses employed universal design for learning (UDL) principles in order to attempt to make the courses as accessible and equitable as possible for all students. Data were analysed using thematic content analysis. The themes comprised the various roles that lecturers are expected to adopt in online environments under four dimensions: pedagogical, technological, managerial and affective. Findings indicate that despite the lecturers' intentions to incorporate UDL, students from underresourced backgrounds faced unique challenges that exacerbated the problems in ERT. We thus conclude that ERT does not offer a good foundation for building effective, long-term online learning environments in unequal contexts, and that online learning needs to be reconceptualised if it is to become a long-term strategy for universities. Instructors in all contexts must be aware of the multiple ways that vulnerable students might be excluded from full participation in online courses in order to ensure socially just online pedagogies.

Index Terms—Emergency remote teaching, online learning, COVID-19, universal design for learning, inequality, South Africa.

I. INTRODUCTION

Like most universities worldwide, the University of the Witwatersrand in South Africa was abruptly forced into online teaching in April 2020 due to the Covid-19 pandemic. This university, in normal circumstances, provides full contact teaching. On 15 March 2020, a national state of disaster was declared [1], and the South African government

instituted a hard lockdown that forced students living in residences to return to their homes, thus scattering students across the country. Inter-provincial travel was prohibited until August 2020 [2], and university residences and campuses were still closed to the majority of students at the time this article was written.

Students and instructors' experiences of this move to online teaching were impacted by the South African socio-economic landscape, which is one of extreme inequality at various levels [3], including unequal access to technology and online resources. It has been argued that there is a divide in information and communication technology (ICT) access between urban, peri-urban and rural areas [4]. Three constraints exist that lead to this divide, namely constraints in material resources, in cognitive resources and in social resources [4]. Firstly, students do not possess the necessary material resources, including computer and internet access. Secondly, students often do not possess the necessary cognitive resources to interact with online learning; these include literacy, numeracy and information literacy skills. We have indicated in a previous paper how problematic the assumption of the "digital native" is in relation to vulnerable students [5]. Finally, students often lack the necessary social resources to effectively engage with online learning; this includes having social connections with individuals from similar social settings who have access to, and interact with, ICTs. Geographical divides exacerbate the above constraints, posing particular ethical issues in moving towards online education.

This paper reflects on the attempts of two courses to provide meaningful learning opportunities to students during emergency remote teaching (ERT), using principles of universal design for learning. It considers the best practices recommended in literature for delivering effective online teaching, and how these best practices might be challenging to implement given the realities of an unequal socioeconomic context. By examining student feedback, the paper considers how emergency remote teaching affected the way students related to lecturers, the successes of these courses despite the challenging circumstances, and what still needs to change to move to more inclusive and effective models of online teaching. This research is relevant to educators teaching online in unequal contexts worldwide. In a global higher education setting that is increasingly characterised by massification, all universities should be conscious of vulnerable students with socioeconomic disadvantages. Thus, the successes and challenges we highlight in our courses here could inform course design that is cognisant of and responsive to diversity in all contexts.

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II. LITERATURE REVIEW

The review below considers two pertinent aspects of online learning; firstly, it considers best practices with regard to online teaching, and secondly, it considers emergency remote teaching as a specific type of online teaching

A. *Best Practices in Online Teaching*

Various difficulties exist to listing the best practices to online teaching, including that best practices can differ depending on the theory they are based on, the fact that online learning does not have a unified theory of learning, that research in the field is regularly fragmented, and that the terms used to describe similar constructs in research often vary significantly [6]. This article follows Martin et al.'s [6] lead in considering best practices in three categories, namely design, assessment and evaluation, as well as facilitation (see Fig. 2). Specifically, they state that effective online courses should be “carefully designed before, facilitated with intention during, systematically evaluated after, and revised accordingly to support learning objectives” [6].

1) *Design*

The design of online courses is pertinent to a discussion of best practices. There is not a single approach which is superior for all online courses; yet, “it is clear that the use of instructional design processes to guide the design and development of online courses is an effective practice” [6]. This can be referred to as a development phase [7], which includes building curriculum materials, designing methods for repurposing traditional course material, designing a balance between group and individual activities, and organising the course. Additional best practices in the designing process include formulating well-written learning outcomes, “chunking” (delivering course material in manageable “chunks”, or smaller sections) and effectively sequencing online courses [6]. Characteristics of effective online course design include “an easy-to-use and powerful navigation system”, “links to thought-provoking sources” and learning units that are “self-paced to suit the individual needs of each student” [8]. Additionally, instructors need to understand that simply providing content for students to study will not be sufficient in online learning, but that particular types of interaction are important in scaffolding the learning of this content, as “learning (is) both a social and a cognitive process, not merely a matter of information transmission” [9]. Discussion groups, email communication or group tasks are social elements that can add to effective online course design.

Not all lecturers can “be expected to know intuitively how to design and deliver an effective online course ... seasoned instructors have not been exposed to the techniques and methods needed to make online work successful” [10]. Thus, a pre-development phase might be necessary to firstly train and guide lecturers in how to deliver effective online courses before expecting them to embark on the development phase [7]. Lecturers need clear and well-planned guidance on how to deliver effective online courses [6]. It is thus not enough to simply train lecturers in using the new technology; pedagogical and instructional support is also vital for a move towards online teaching [11].

2) *Assessment and evaluation*

During the delivery/ facilitation phase of online teaching, interactions between students, content and technology should be monitored [7]. This includes assessing students' achievement of learning outcomes as well as assessing the course itself. Important aspects to keep in mind here are that the criteria for evaluating learners' work is consistent with a grading policy, ensuring that assessments align with course objectives, various self-assessment opportunities, and a variety of assessments that are sequenced [6], [12]. Ideally, there should be “careful attention to student and group progress with frequent check-points and opportunities for both peer- and instructor- feedback cycles” [6]. Online discussion forums are also still widely considered effective in both formally and informally assessing student understanding and learning [6]. A big challenge to online learning is the quality and validity of online assessment methods [13]. Since it is very difficult to assess students under controlled conditions, qualitative assessments that allow for, or are even planned around, open-book (or internet-assisted) situations, are better options. Alternatively, question pools can be set up for more quantitative assessments. Both options, however, require significantly more work on the part of the lecturer. Information gathered from assessments can be used to inform revisions to the online course [6]. This can be triangulated with student or peer evaluations to ultimately enhance the online course's quality [6].

3) *Facilitation*

The delivery phase of online learning follows the developmental phase [7]. This delivery phase can be compared to what other authors have termed “facilitation” [6]. To a large extent, effective online facilitation depends on the lecturer successfully adapting to a variety of roles. Fig. 1 summarises the main roles for which lecturers become responsible in an online learning environment. Although many of these roles focus on the facilitation category, several also fall in the design and assessment categories. This visual representation draws heavily on the discussion by Keengwe and Kidd [7], but also on discussions by others [6], [10], [11] [14], [15]. We categorise the roles a lecturer needs to assume in online learning into four dimensions, namely pedagogical, technological, affective and managerial dimensions. Though some of these roles might spill over into the design as well as assessment and evaluation dimensions discussed previously, it is still useful to consider these roles holistically.

It should be noted that lectures are usually expected to take on various roles even in contact teaching, including those of “facilitator, teacher, organizer, assessor, mentor, role model, counselor, coach, supervisor, problem solver, and liaison” [7], while ideally, several of these roles should be shared by multidisciplinary teams, rather than being shouldered by lecturers alone [6], [7]. In online learning, these multidisciplinary teams could consist of ICT-specialists, lecturers, and instructional designers, developers and technologists [6], [7]. We take account of this aspect of best practices in online learning by indicating roles which lectures often take on in online environments, but which should ideally be shared between multidisciplinary team-members,

in black font in relevant blocks in Fig. 1. Furthermore, we use gradient colour coding to indicate where two dimensions overlap for the same roles.

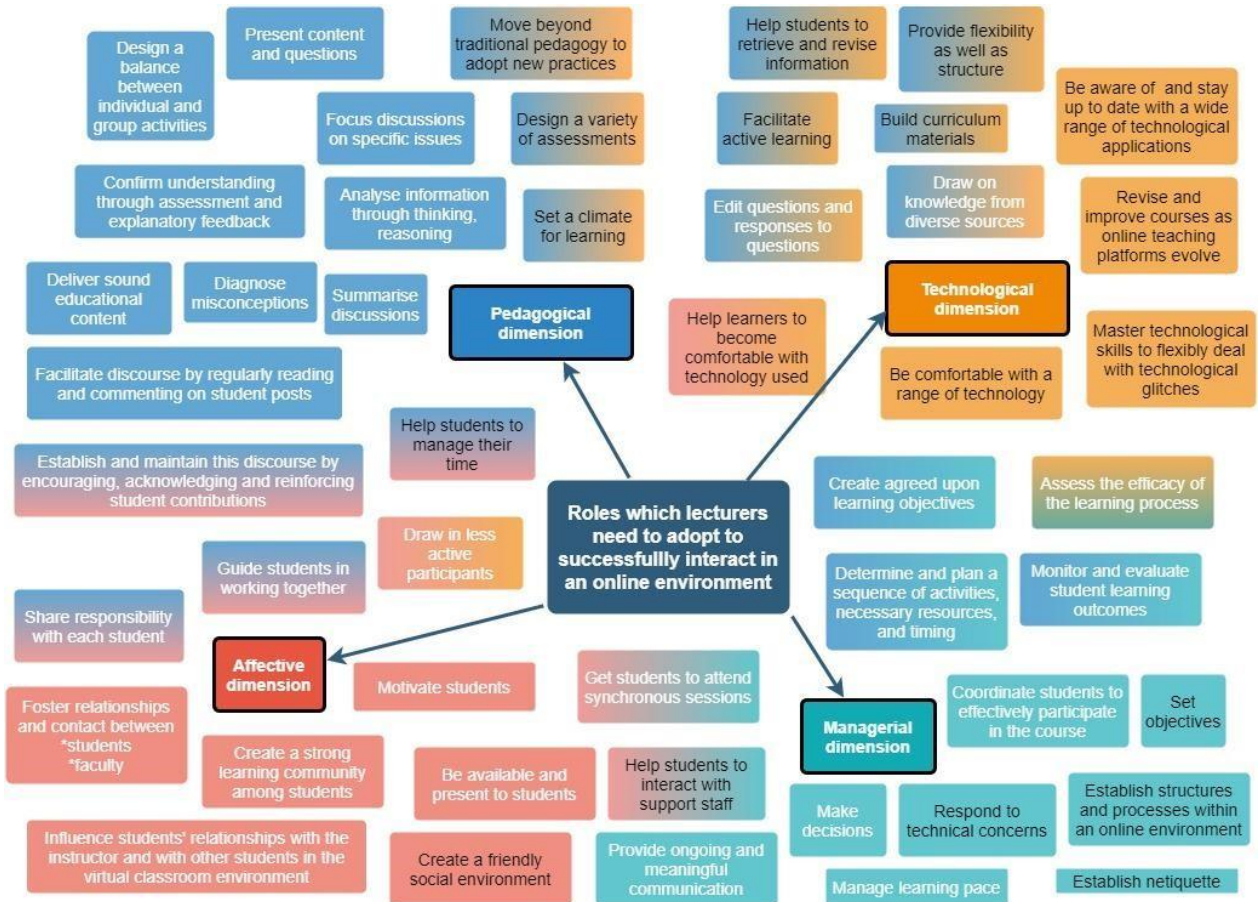


Fig. 1. Lecturer roles in effective online learning facilitation.

Research indicates that novice lecturers tend to take on more of a managerial role when teaching online [16]. Students appreciate this role, as they are given explicit instructions of where to navigate to online and when to interact. Students showed particular appreciation for the structure and organisation that came forth from this managerial role. This is, however, not enough to ensure effective online learning. More experienced lectures, in contrast, were able to draw from all four dimensions.

B. Emergency Remote Teaching

Instead of following the process suggested above in moving towards responsibly designed online teaching, the unplanned shift to moving courses online discussed in this article can instead be described as emergency remote teaching [9]. The shift meant that many educators were forced to start online course development without proper training in using online platforms, and many students and educators did not have adequate equipment, ICT skills or internet access to successfully make the switch to online learning (cf. the discussion of constraints with regard to the divide in ICT access, discussed in Section 1). Emergency remote teaching can be defined as “a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances” [9]. Instructors specifically view ERT as a temporary situation that will no longer be necessary once the coronavirus pandemic is under control, and due to the stress of online teaching on many educators and students,

studies have suggested that lecturers “considered remote education to be non-viable in the long run and something that should only be used as a temporary and complementary resource” [17]. However, some education officials in South Africa have already indicated that they see the move to online instruction as a “success” [18] and thus at least some aspects of the shift to online instruction will potentially become permanent. ERT is seen as providing essential access to learning support “that is quick to set up and is reliably available during an emergency or crisis” [9]. The level of support from ICT staff on campus is often limited during ERT as many more teaching staff members require support than in usual teaching times, thus “faculty take more control of the course design, development, and implementation process” [9] than for regular online courses. Teaching staff, who are not trained experts, are thus left to train themselves in moving their courses online, which often leads to additional stress and a much greater demand on their time as they have to learn to use functionality on online systems that they would not normally make use of [17].

In evaluating the effectiveness of ERT, it is important to consider the “aspects of context (institutional, social, governmental) [that] affected the feasibility and effectiveness of the transition” [9]. For this reason, it is important to consider the unequal context in South Africa and how this impacted on our approach to ERT. Additionally, student evaluations of instructors can also be affected by ERT, and might lead to distorted reflections of the instructor’s abilities

[9]. However, there is still valuable information in students' feedback about their experiences of online courses and of the way courses were presented. We thus analyse the feedback on our two courses to consider how our teaching context impacted on how we designed these courses to cater to all students within a universal design for learning (UDL) approach (see Section III), and how students experienced these courses in light of the multiple roles we played as lecturers (see Fig. 1).

III. THEORETICAL FRAMEWORK

In analysing our data, we employed the theory of universal design for learning (UDL) as our main theoretical framework. UDL is based on the principles of universal design in fields like architecture, and “focuses on eliminating barriers through initial designs that consider the needs of diverse people, rather than overcoming barriers later through individual adaptation” [19]. UDL thus recognises that while “providing access to information or to materials is often essential to learning, it is not sufficient. UDL requires that we not only design accessible information, but also an accessible pedagogy” [19]. While UDL has largely been applied to designing courses for students with diverse neurological, cognitive and physical abilities and characteristics, it has also been applied to “interrogate and reject practices that marginalize and oppress students on the basis of identity and place (i.e., race, gender, ability, rurality, urbanicity)” [20]. Three principles for courses that effectively incorporate UDL [19] are that these courses should be based on 1) multiple means of representation, meaning that they offer students various ways to access and work with information, 2) multiple means of expression where students can be given opportunities to express their understanding of information in diverse ways, and 3) multiple means of engagement, meaning that students engage with course content in a range of styles.

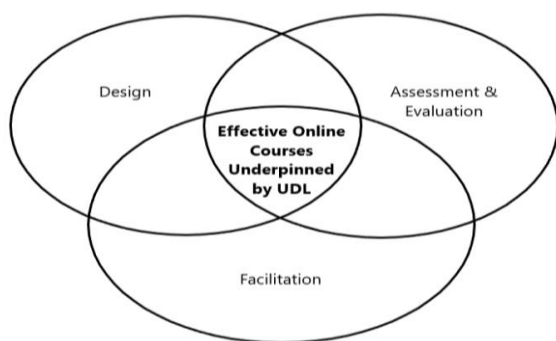


Fig. 2. Conceptual framework for effective online courses: design, assessment & evaluation, and facilitation all underpinned by UDL [6].

In designing the two courses under discussion in this paper, we attempted to integrate these three principles into our course design to mitigate the challenges related to ERT. In the case of an unequal society like South Africa, effective and accessible instruction for diverse groups became particularly challenging during ERT. A great number of students live in rural or semiurban “township” areas with limited internet access, poor mobile connectivity, unstable electricity supply and overcrowded living conditions that make learning incredibly difficult [5]. Our online courses thus had to cater

to the needs of these students through providing effective teaching strategies in emergency conditions.

In addition to the theoretical framework of UDL, we also considered the best practices for effective online courses discussed in the literature review above, and analysed how the feedback we received on our courses reflected our adherence to or divergence from these best practices in our ERT courses. Furthermore, we critique these best practices for how they do not take into account unequal contexts or UDL principles. These categories of best practices are captured in the figure below (Fig. 2).

IV. METHODOLOGY

Both researchers involved in this study are Senior Lecturers with more than a decade's experience working in higher education. Neither have taught courses exclusively online prior to the move to ERT, and our experiences with learning management systems have mostly included working with hybrid approaches to teaching and learning, with the greater focus being on contact teaching. In May 2020, the two researchers conducted annual course evaluations for two undergraduate Bachelor of Education courses, an English I course entitled “Media Stories” and an English II course entitled “English Grammar”, and the data discussed below stem from these evaluations. These data were thus collected two months after ERT started at South African universities. The evaluation forms were identical for both courses, and consisted of multiple Likert scale questions on students' experiences of the courses, as well as four qualitative questions where students could write longer answers about their perceptions of the courses. Two of the qualitative questions in particular yielded data relevant to this project's focus on improving online learning approaches in unequal contexts to align with best practices, and many of the students' answers to these two questions specifically addressed aspects of UDL; thus, we elected to specifically analyse answers to these two questions in the current article. These questions were “How could this course be improved in future” and “Let your lecturer know if there is something in his/her lectures he/she does especially well”. Questionnaire data were anonymously collected through Google Forms, and ethical clearance was obtained from the University of the Witwatersrand. Total population sampling was used, though many students either did not complete the evaluation form, did not answer the qualitative questions, or did not provide consent for their answers to be used as part of this research study. Of the 328 English I students, 139 submitted feedback forms, and of the 208 English II students, 68 submitted feedback forms (with consent for their answers to be used as part of the study in both instances).

Data were analysed by means of content analysis of student feedback, through which text is coded into emerging themes. Codes emerged through an analysis of student feedback, and were validated through a moderation process, and subsequently organised into themes based on the four dimensions of lecturers' roles discussed in Section II-A (represented in Fig. 1), namely pedagogical, managerial, affective and technological dimensions. Our reason for organising codes around these four themes was that it would

allow us to consider both what we were able to accomplish as lecturers, as well as where students felt we could have designed our courses to better meet their needs in terms of the four dimensions of roles we were expected to embody. We could also consider the principles of UDL as they apply specifically to each of the four dimensions, and to look at intersections with best practices of online course design.

V. RESULTS AND DISCUSSION

Both of the courses discussed in this article had large classes, with 328 students registered for English I and 208 for English II. The lecturers had limited technical and facilitation support during this time due to the emergency conditions, and we completed all of the course design on our own, while English I had a student assistant to help respond to some student queries and to pose questions to students in their discussion groups. English I (Media Stories) made use of extensive explanatory notes that the lecturer had typed each week explaining core concepts, which included short videos from relevant media sources and images of examples of media texts to assist students with understanding the concepts. This course also made use of discussion forums where students were divided into small groups of around 30 students to collaborate on analysing texts. English II (English Grammar) used narrated PowerPoint slides of around 15-30 minutes per week to deliver course content, in addition to numerous online exercises sourced from the Internet. The Grammar course was more practical, and required students to understand and apply specific grammar rules to sentences. Both courses made use of regular quizzes to allow students to practise their learning as well as “touching base” e-mails on Mondays and Fridays to let students know what the expectations for the week ahead were, to motivate them and to praise their participation. Furthermore, both lecturers would answer student emails about the course content, which often numbered in the dozens each week. Both lecturers attempted to incorporate UDL principles, within the constraints of ERT and the divide in ICT access discussed in our literature review [4], by using: 1) multiple means of representation (specifically using modes such as video lectures, typed notes, and quizzes); 2) multiple means of expression (by letting students participate by means of instant polls, forums, as well as typed answer and multiple choice questions in quizzes); and 3) multiple means of engagement (using online forums and e-mails to allow students to engage with each other and with the lecturer).

For the question “*How could this course be improved in future*”, 96 students provided responses for English I and 47 for English II. Of these responses, 24 students in English I (25%) and 16 for English II (34%) indicated that nothing could be improved in their view, indicating that these students were satisfied with the courses overall. The fact that these students had no previous experience of online teaching, and that their only benchmark for comparison was their other courses, could explain why so many students had no further suggestions for improving course design. For the question “*Let your lecturer know if there is something in his/her lectures he/she does especially well*”, 98 students responded for English I and 53 for English II. Many of the codes of the

two courses overlapped, which we discuss under the relevant themes below, but we also highlight significant differences in how students responded to the two courses in order to consider how this might reflect the mode of delivery (narrated slides versus typed notes) or the differences in the structures of the courses. When feedback was largely similar between the two courses, we considered this a reflection of students’ general responses to emergency remote teaching.

A. Affective Dimension

Our analysis in the affective dimension included codes of *communication and engagement*, *empathy towards students and motivating them*, and *experiencing isolation* in the learning environment (see Table I). Within these codes, positive comments about the lecturers’ approaches far outweighed critical comments, and students voiced a great deal of appreciation for how lecturers were attentive to the emotional elements of online teaching and learning. There were 57 total comments across the two courses that were coded in the theme of the affective dimension. Of these comments, the most prominent emerging theme was *communication and engagement*, with 34 (59,6%) positive and 6 (10,5%) critical comments. This demonstrates that for students, having regular, clear and effective communication with instructors is the single largest enabling factor in their online learning, and resulted in positive feelings towards their studies.

TABLE I: AFFECTIVE DIMENSION

Code	Response Type	Eng I n (%*)	Eng II n (%*)	Total n (%*)
Communication / Engagement	Positive	15 (26.3%)	19 (33.3%)	34 (59.6%)
	Critical	4 (7.0%)	2 (3.5%)	6 (10.5%)
Empathy / Motivation	Positive	3 (5.3%)	7 (12.3%)	10 (17.5%)
	Critical	2 (3.5%)	1 (1.8%)	3 (5.3%)
Isolation	Positive	1 (1.8%)	0 (0.0%)	1 (1.8%)
	Critical	3 (5.3%)	0 (0.0%)	3 (5.3%)

* Percentages are calculated based on the total number of responses received coded under the affective dimension

On the topic of communication, some of the positive comments for English I students include: “My lecturer gives satisfying responses to questions”; “[I] appreciated his willingness and consistency in answering questions on forums and helping when students were confused”; “clear instructions”; and “responding to our emails”. For English II, positive comments include the following: “Explain the concepts well and interacting with us students”; “keep engaged on forums”; “She responds super fast to emails and always offers an extended hand”. The negative comments on communication focused on how a small number of students in both courses did not feel that instructions on tasks were clear enough. In addition, one English I student commented “Communication shouldn’t be that formal through emails it can be through other platforms like [the social messaging app] WhatsApp”.

These responses indicate the importance of recognising that learning is “both a social and a cognitive process” [9], and thus online course facilitation must recognise the significant need of students to positively and personally engage with the instructor as well as with other students. This also links to the UDL principle of designing for multiple

means of engagement [19] to cater to the needs of diverse students. Of the 98 English I students who responded to the question “Let your lecturer know if there is something in his/her lectures he/she does especially well”, only 15 students (thus, 15% of first-year responses) gave positive comments related to the theme of communication, while 19 of the 53 students (thus, 36% of second-year responses) who responded to the same question gave positive comments under this theme. In addition, students in English I were the only ones to mention negative feelings of isolation (three comments). As the general structures of both courses were similar, and the use of email and other forms of communication were similar for both, the discrepancy between the two courses is likely due to the fact that English I did not include narrated slides, which is the only major difference between the design of the courses. Thus, hearing lecturers’ voices might improve students’ feelings of connection with lecturers and create more points of engagement for students. The purposeful use of social networking apps like WhatsApp, as suggested by one student, might also be a way to expand the means of engagement, thus further embracing UDL principles.

For the code of empathy and motivation (13 comments across both courses), the majority were positive (10), and students commented on lecturers being “approachable”, “understanding and very accommodating”, “being vigilant on our progress and the willingness to assist when necessary”, “showing a sense of care to understand that as learners we are trying to learn regardless of the circumstances”, being “always there to help” and “attending [to] us one by one when we have difficulty with the course”. However, one student specifically mentioned that the English II course did not cater to their disability, and an English I student noted that their challenges, which were unspecified in their feedback, were not listened to by the lecturer. Another English I student requested “Giving surveys every two weeks to check if learners are still okay in the course because pressure plays its role”. These comments demonstrate how we were unable to meet all students’ needs in the emergency conditions, and some students struggled emotionally. These comments also speak to shortcomings of our courses in the managerial and technological dimensions due to the limited support during ERT. Due to the nature of ERT, we were largely unable to fulfil roles outlined in Fig. 1 such as drawing in less active participants, encouraging students to work together and fostering relationships between students, and building a learning community.

The affective dimension is extremely important in online education, and thus we recommend that online courses are designed in ways that allow for regular and supportive engagement with lecturers. However, these design efforts must be complemented by a great deal of administrative and technological support from universities, especially for students with disabilities and unique challenges, as catering to these needs is often beyond the abilities of lecturers. Expecting lecturers on large courses to offer individual attention to all students is likely to exacerbate lecturers’ own emotional challenges highlighted by well-being, job satisfaction, burnout risk and retention, and their emotional bonds with students [21] as research has shown “a dynamic

relationship between the type of emotional responses [in participating lecturers] and the amount of institutional support” [21]. Thus, the affective dimension of online teaching should also be considered for lecturers, as their own emotions during online teaching could affect their “well-being, job satisfaction, burnout risk and retention, and their emotional bonds with students [which could] influence their decisions about teaching strategies, curriculum selection and lesson planning” [21].

B. Pedagogical Dimension

The theme of the pedagogical dimension was generated from a total of 44 comments across the two courses, made up of four codes: *assessment*, *feedback*, *learning content*, and *lecturers’ preparation* (see Table II). These codes mostly related to two aspects of the framework for effective online pedagogy [6], namely *facilitation and assessment* as well as *evaluation*. Two of the codes received more positive comments than critical ones, namely assessment (9 positive, 3 critical) and preparation (12 positive, 0 critical). Feedback had a mix of positive and negative comments (5 each) and learning content had mostly negative comments (8 negative, 2 positive). Students thus seemed least satisfied with the learning content that they were provided for the courses, and most satisfied with the assessment models.

TABLE II: PEDAGOGICAL DIMENSION

Code	Response Type	Eng I n (%*)	Eng II n (%*)	Total n (%*)
Assessment	Positive	8 (18.2%)	1 (2.3%)	9 (20.5%)
	Critical	2 (4.5%)	1 (2.3%)	3 (6.8%)
Feedback	Positive	2 (4.5%)	3 (6.8%)	5 (11.4%)
	Critical	2 (4.5%)	3 (6.8%)	5 (11.4%)
Learning Content	Positive	2 (4.5%)	0 (0.0%)	2 (4.5%)
	Critical	7 (15.9%)	1 (2.3%)	8 (18.2%)
Preparation / Style of preparation	Positive	10 (22.7%)	2 (4.5%)	12 (27.3%)
	Critical	0 (0.0%)	0 (0.0%)	0 (0.0%)

* Percentages are calculated based on the total number of responses received coded under the pedagogical dimension

In terms of assessment, the positive comments indicate an appreciation for self-assessment opportunities. Students commented that “quizzes help especially in understanding weekly lectures” and “giving us quizzes really help one get to know where they need to improve”. Regular formative assessments thus were an extremely important part of facilitating students’ learning in the online courses, and helped to maintain regular engagement with course materials. Lecturers adding formative quizzes to course content, to a greater extent than had been the case in contact lectures, was a conscious effort towards the UDL principle of including multiple means of expression for students to express their understanding of information in diverse ways. While many students appreciated this effort, some students indicated that this was not enough, as can be seen in students’ critical comments on this theme.

Critical comments from students included one English II student who requested of the lecturer: “Consult students first about preferred ways of assessment”. This comment indicates that despite lecturers’ attempt towards multiple means of expression (according to UDL principles), students

might still have felt that insufficient means of expression were available to them [19] in the Grammar course where online quizzes were the only form of expressing understanding of concepts. An English I student also requested “More practice quizzes”, demonstrating the benefits of these formative assessment tools and that students have a need for such self-assessment opportunities [6]. These comments relate to the best practices included in Fig. 1 of “Confirming understanding through assessment” and “Designing a variety of assessments”. However, due to the emergency conditions, the practicalities of designing and administering a variety of assessments in consultation with students would have been beyond lecturers’ capabilities.

A prominent shortcoming in both courses was the aspect of feedback, with students in both courses requesting individual feedback: “more feedback can be given to individuals on their performance” (English II student) and “Individual feedback on weekly tests should be provided before the main tests so that one can see where they went wrong and learn from it” (English I student). The number of critical comments in terms of feedback might relate to the fact that the online tests often had to be kept open for longer than intended as some students were not able to access online assessments in time, thus delaying feedback for all students. Additionally, due to only one lecturer being responsible for each course with hundreds of students, individual feedback on written answers to quizzes was not feasible, and this frustrated some students, especially those who already felt disconnected from lecturers and peers. It is important to recognise that effective formative assessments depend on good feedback practices, including “frequent check-points and opportunities for both peer- and instructor- feedback cycles” [6]. This is echoed in best practices summarised in Fig. 1 such as “facilitating discourse”, “acknowledging and reinforcing student contributions” and providing “explanatory feedback”. From the perspective of UDL, insufficient feedback might have let students feel as though pedagogy was not sufficiently accessible, and that by not being given individual feedback, they were not given enough ways to work with information. Future iterations of the courses could include automatic feedback and more opportunities for peer assessments in order to mitigate the constraints on lecturers’ time.

The code with the highest number of critical comments was learning content. A few students were positive about the content of courses, commenting on the English I course that “learning material builds new knowledge about the media and new views”. However, the majority of comments (8 out of 10) were critical of the content of courses, and many students requested additional or more relevant learning materials. An English II student demonstrated the challenges of our unequal context with the request for the course to add “resources because at home there is no libraries”. Many students thus are unable to access resources to further their learning, or to identify reliable online sources that could positively contribute to their learning, and in resource-poor contexts, online courses should cater to these students who also might not have sufficient mobile data to access internet resources on their own. English I students also asked for the course to be improved “by adding more resources that provide efficient knowledge” and “provide enough material

with clear explanation”. The recommendation that online courses should provide “links to thought-provoking sources” [8] is significant here, and it is clear that in our need to simplify courses for remote learning, some students without access to further explanations or resources were disadvantaged. ERT would seem to have placed additional pressure on lecturers to “deliver sound educational content” and to “help students to retrieve and revise information” (Fig. 1), considering that students might have felt that they did not have direct access to lectures as sources of information, or to on-campus resources, and did not necessarily have the information and computer literacy to compensate for this hurdle.

A request in many comments was for more contextually-relevant learning materials, particularly in the English I course where examples often focused on national or international politics which undergraduate students were sometimes unfamiliar with, and many of the examples that relate more to students’ everyday experiences were removed to simplify the course. Students requested “more examples that are home based (everyday experience)”, “Relate it to our daily lives”, and “Examples of the articles should be linked mostly to our local lives so we can be able to understand better and quickly”. While it was important to make students familiar with a range of media stories, these requests demonstrate that online courses should be cognisant of and responsive to contexts where they are taught, especially because lecturers are unable to give additional context to students whom they might assume are familiar with particular subjects, and students might be less willing to ask for clarity through digital sources than through face-to-face consultations. Students from rural and township areas would not see examples in the learning materials that related to their lives, and thus the courses might reproduce marginalisation of their identities, voices and experiences. As UDL also needs to “interrogate and reject practices that marginalize and oppress students on the basis of identity and place” [20], online courses catering to diverse students should purposefully include texts from diverse contexts to facilitate students’ engagement with these courses.

The final code under the theme of the pedagogical dimension, strongly linked to that of the managerial dimension, was preparation. All of the comments in this code were positive. Comments included: “[The lecturer] plans all her work”, “he is always well prepared”, “work is always on time”, and “The work is in small good chunks not overwhelming”. These comments demonstrate that students’ experience of online courses are greatly enhanced by effective planning and organisation on the part of lecturers, echoed in best practices summarised in Fig. 1 of “determining and planning a sequence of activities, necessary resources and timing”, “establishing structures and processes within an online environment” and “managing learning pace”. The reference to “chunking” [6] demonstrates how effective preparation is part of the design phase of online course delivery that allows students to feel more comfortable in the learning environment.

C. Technological Dimension

Only one code generated in the data clearly linked to the

theme of the technological dimension and its multiple associated roles, namely the code of *modes of delivery*; however, there were multiple comments linked to this code in both courses (32 in English I and 7 in English II) (see Table III). The vast majority of these comments were critical of the mode of delivery, and students requested more varied styles of delivery of course content (27 critical comments for English I and 6 for English II). The theme of the technological dimension linked to all three aspects of effective online courses [6], namely design, assessment and evaluation, as well as facilitation. It is thus incredibly important to get the technological aspect right in online teaching, and the feedback from students demonstrates that emergency remote teaching makes this very challenging for lecturers as they are required to quickly develop skills that they have little or no training for, and cater to a variety of students' needs by using technologies that students might struggle to master. Additionally, as illustrated in Fig. 1, the vast majority of these skills in the technological dimension go beyond the requirements that can reasonably be solely placed on academic staff, and thus emergency conditions would make this an area where shortcomings are more likely to become apparent in online teaching, as there is less likely to be multidisciplinary teams and appropriate infrastructures from which lecturers can draw under these conditions.

TABLE III: TECHNOLOGICAL DIMENSION

Code	Response Type	Eng I n (%*)	Eng II n (%*)	Total n (%*)
Mode	Positive	5 (13.2%)	1 (2.6%)	5 (13.2%)
	Critical	27 (71.1%)	6 (15.8%)	33 (86.8%)

* Percentages are calculated based on the total number of responses received coded under the technological dimension

Students appreciated the multiple forms of engagement offered by the courses [19]. Students commented positively on the following: “the forums are helpful”, “Great lecture slides - great forum participation encouragement”, “presenting lecture slides was exceptional good”, “Even though the forum discussions (...) are sometimes a pain, they were very good in building my knowledge”, “Allowing for discussion for what I have studied”, “Communication via forums made me not to be shy anymore to pose a question if I did not understand”.

However, the critical comments mainly focused on the lack of multiple forms of representation of course content [19], a principle of UDL that requires material in a variety of styles to give students ample opportunities to build understanding. Students recognised the limitations of the courses that were set up quickly in their comments, requesting “more videos in lessons”, “include voice overs”, “creating challenging questions on forum discussions so that as student we could engage and help each other”, and for lecturers to “add examples or materials”. Many students in the English I course, as alluded to in the discussion of the affective theme above, specifically asked for the lecturer to include narrated PowerPoint slides (14 comments). Some of these comments included: “Content is more understood with the voice of a lecturer”, “allow for more interaction between students and lecturer for example video meetings”, “some of [us] learn ...well when listening”. There seemed to be a

greater connection with the lecturer if materials were narrated in the lecturer's voice, even though other shorter videos were provided in the course.

A large number of students (12 of the 39 responses in this theme) asked for online courses to be run synchronously, even though this would disadvantage some students with poor connectivity. Four (4) students also asked for a return to contact or face-to-face classes in the English I course, perhaps a reflection on their inexperience with university learning and the fact that they were uncomfortable with online learning in general. This could also be linked back to the affective dimension, in that students did not feel that they could foster relationships (cf. Fig. 1) effectively online.

One comment was particularly revealing in terms of the unequal context we were teaching in: “I think for most first years especially [those] in villages like ours should be given more time since we do not have enough material at home it would be better if we stayed at residence at least we can connect to the internet easily and use res computers to type our work”. This lack of material resources impacted on multiple dimensions of the course for this student, as they were unable to complete quizzes in time or type their responses to forum tasks. The struggles with internet access also affected this student, as with many other students in the course (see [5] for a more detailed discussion of student challenges in this context). Thus, students from rural or under-resourced backgrounds would have had wide-ranging challenges that were beyond the capabilities of lecturers to address.

D. Managerial Dimension

The managerial dimension was undoubtedly the one that both lecturers felt took up the vast majority of our time, as this included redesigning our courses from mostly contact courses to online courses, answering a deluge of emails from students about struggles they were having with the courses or with online learning, and regularly having to work with students who missed weeks of instruction due to individual circumstances related to ERT and who needed to catch up on missed tasks and assessments. An emphasis on the managerial is likely to be associated with novice online teachers, and this was especially true of our courses as neither the lecturers nor the students knew at the start of 2020 that we would move to online teaching [16].

TABLE IV: MANAGERIAL DIMENSION

Code	Response Type	Eng I n (%*)	Eng II n (%*)	Total n (%*)
Organisation	Positive	25 (31.1%)	9 (11.5%)	34 (43.6%)
	Critical	4 (5.1%)	0 (0.0%)	4 (5.1%)
Workload and Pace	Positive	6 (7.7%)	4 (5.1%)	10 (12.8%)
	Critical	17 (21.8%)	13 (16.7%)	30 (38.5%)

* Percentages are calculated based on the total number of responses received coded under the managerial dimension

Two codes were grouped into the theme of the managerial dimension of online teaching, namely *organisation* as well as *workload and pace* (see Table IV). Organisation received overwhelmingly positive comments across the two courses (34 positive comments versus 4 critical comments). However, the code of workload and pace received overwhelmingly

critical comments (30 critical comments and 10 positive comments) and students spoke of their struggles in managing online learning under this theme that reflected the inequalities they faced.

Students appreciated the structure of the online learning environment, with many commenting that the ease of accessing information made the requirements of the courses easy to follow. Student comments focused on best practices summarised in Fig. 1 such as “determining and planning a sequence of activities, necessary resources and timing”, “coordinating students to effectively participate in the course”, “establishing structures and processes within an online environment” and “responding to technical concerns”. Some students commented that they appreciated aspects including: “The layout of the course content. Very well presented”, “My lecturer is excellent in organising material”, “I could easily navigate around and know what I have to do this week”, “The work is well organised for each week. This was helpful as it does not complicate things”, “The way he structures it is really commendable. After the notes he gives small quizzes which tests our knowledge on the subject” and being able to “easily navigate around (...) what I have to do this week”. These comments demonstrate the importance of “an easy-to-use and powerful navigation system” [8] to make online learning a pleasant experience for students. Other notable comments included: “I love the way my lecturer is well organized and sends work on time, she does not leave any deadlines for last minute”, “[My lecturer] has everything in the course well managed. (...). The work is in small good chunks not overwhelming”, “The lecturer organizes the work in a much less complicated way which allowed me to do all my work step by step and make it easier for me to understand the work”, and “She presents her lessons very well which shows that she prepares before she presents each and every lesson. This also inspires me as a student teacher”. Students commented on noticing that lecturers “devoted” themselves in preparing work, and, as one student notes, “I respect him for that”. Student feedback therefore indicates that students respond well to online courses that are logically (and possibly predictably and consistently) laid out, with materials uploaded at regular times for students to work through at their own pace, being presented with work in manageable “chunks” so as to not overwhelm students, and work that speaks of thorough preparation. Achieving these goals is not necessarily easy for lecturers who often also have to teach in this new mode for the first time, and it might be advisable for institutions to provide training and guidance in how these outcomes could be achieved. This is particularly important in a context where we are educating prospective teachers as with the two courses discussed in this paper.

The critical comments about organisation specifically spoke about extending deadlines for tasks as students felt rushed and overwhelmed in their online learning. These comments related to the best practices characteristics of “Managing learning pace” and “Setting objectives” under the “Managerial dimension” in Fig. 1. A few positive comments included: “Allocating manageable work for every week” and “gives us enough time to complete assignments and tests”. However, the majority of comments (17 English I, 13 English II) were critical of how lecturers managed the course in terms

of workload and pace. Many students were forthright in their requests: “Reduce the Workload”, “skip a week after every teaching week so that we can catch up with the previous week’s content”, “reduce the amount of weekly activities”, “Less notes, we have other courses to learn too”, and “The amount of Assignments given should decrease”. Another comment coded under this theme spoke of challenges to online learning due to social and economic factors: “accommodate all students, as we stay in very difficult communities. Having the house chores and many siblings to take care of, while trying to keep up with the workload”. It is notable that all lecturers at our university were encouraged to reduce workload by at least 30%, and both authors of this article significantly reduced the readings, content and formal assessments in our courses. However, for some students, there remained significant challenges in their homes and communities that impeded their online learning.

VI. CONCLUSION

Keengwe and Kidd state the following: “Advancements in information and communication technologies have created tremendous opportunities for faculty to expand the educational process beyond the traditional classroom to include geographically dispersed audiences via online. However, in the shift from the traditional learning and teaching modality to online teaching and learning environments, it is critical for faculty not only (to) strive to learn the technologies associated with online learning, but also understand the need to fundamentally change and transform their pedagogical approaches to the learning and teaching process to meet the instructional needs of online students” [7].

The effect of the Covid-19 pandemic on accelerating a move towards blended and online learning has been framed positively in much of the literature. This is evident from statements such as that it has “evolved institutions to invest in online learning” [22], “brought some much-needed innovations and change... that could bring a lot of surprising innovations” [23] and that it “must become a standard part for future higher education systems” [24]. Though we do not dispute that the pandemic has indeed fast-tracked the integration of online learning into traditional university curricula, and that online learning brings with it great possibilities for higher education, we argue that the realities of ERT have not necessarily built a good foundation for effective online courses. As indicated by the extract [7] above, it is not enough to master the technologies associated with online learning; it is arguably more important to “fundamentally change and transform (...) pedagogical approaches”. This process of online learning design was not possible within ERT in our context, and thus, we argue, is likely also lacking in many online courses developed under these circumstances.

The lecturers responsible for the two courses under discussion in this paper attempted to include UDL principles in their course design to facilitate the transition to online learning as responsibly as possible within ERT; however, as can be seen from the gaps indicated by student feedback, between the reality of our teaching context and UDL ideals,

ERT prevented us from doing this effectively. Specifically, we took away from the student feedback that despite trying to implement the strategies of UDL, ERT in our contexts prevented effective online pedagogical approaches such as meaningful feedback, content that met “the instructional needs of online students” [7], and a variety of teaching and learning modes. Even where we consciously attempted to give students access to multiple means of representation, expression and engagement in the courses, there were constraints in terms of their time and ability to do online learning that we could not account for in our design, facilitation or assessments within the confines of ERT. In fact, we have found that UDL is almost incompatible with ERT, and that without a proper design phase [6], responsibly transformed pedagogical approaches [7] and adherence to best practices are almost impossible. Furthermore, while certain aspects of good online teaching (for example characteristics that fall within the technological and managerial dimensions) could potentially be revised and refined in future iterations of the course, it seems unlikely that those aspects related to pedagogy could effectively or sufficiently be updated or refashioned to transform online courses designed under the conditions of ERT to reflect the pedagogical soundness of those that were purposefully designed on the foundations of effective online teaching pedagogy.

A final consideration that was central to the two courses under discussion, is how students coming from contexts with great socioeconomic challenges are particularly disadvantaged through a pedagogy that is not rooted in careful design and planning, an inevitable reality of courses designed under ERT conditions. For example, students living in areas where further education is not the norm are more likely to rely on the communities of learning created in traditional university environments. If students do not feel connected to the lecturer or fellow students, their sense of isolation is likely to be exacerbated. Something as simple as regularly hearing the lecturer’s voice in pre-recorded audio or video lessons can help to foster this sense of connection for vulnerable students. Carefully designed online courses are also more likely to take cognisance of vulnerable students such as those living with disabilities, and have the potential of being planned in an inclusive manner in multi-disciplinary teams – that type of purposeful inclusivity is simply not feasible in ERT. Inequalities between students are further made transparent in areas such as workload. Students with limited digital and computer literacy, working from inferior devices and from areas with unreliable ICT infrastructure and few (if any) community members to draw on if they experience difficulties with the technicalities surrounding online learning, are much more likely to need more time to work through the same content as students from resource-rich environments, and are more likely to feel overwhelmed in the face of these very real challenges. Students from under-resourced environments are also less likely to have access to the same level of additional resources related to learning content as their peers, and are less likely to be equipped to find such additional resources. We have also found that such students are likely to have less confidence to approach the lecturer when they need additional resources

than peers from more privileged backgrounds. Students from under-resourced contexts are also more likely to need learning material that is rooted within their lived experiences. If students do not share new lived experiences in a contact teaching environment where lecturers can, with relative confidence, make some assumptions about which contexts they can draw on, the lecturer needs to be particularly aware of the various contexts in which students find themselves, even as university students, to avoid unconscious biases from excluding vulnerable students. Ultimately, we argue that lecturers and course designers reject the temptation to see online learning as a great equaliser “to include geographically dispersed audiences via online” [7]. Instead, we argue that technology is never neutral, and that online learning is likely to compound inequalities among students rather than eliminate them. Only through mindful and thorough course design can the lecturer work towards ameliorating the inequalities caused by the technological divide.

One student stated of one of the courses under discussion that “It is presented at a good level however due to the lockdown it has not been at its best” – this encapsulates the argument of our paper. Online learning built on the foundations of ERT, though inevitable as a short-term strategy during the Covid-19 pandemic, cannot and should not be seen as a shortcut towards sustainable online teaching practices. This is particularly important with a student body from unequal contexts. If universities do wish to embrace online teaching modes to a greater extent, a meticulous design process should be planned for and executed to ensure that we move towards social justice, and not away from it.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Grant Andrews and Ilse Fouche collected, coded and analysed the data for English I and English II respectively. Ilse Fouche designed tables and figures. Both authors shared responsibilities for writing sections of the article, and both reviewed it before final submission.

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