'ALL HANDS ON DECK!'
RESPONDING TO UNDERGRADUATE CRIMINOLOGY TEACHING AND LEARNING IN A TIME OF PANDEMIC PEDAGOGY

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ABSTRACT

Across the globe, the Coronavirus has impacted on every aspect of society, including Institutions of Higher Education. This article serves three purposes. Firstly, the authors reflect on one university's response to the pandemic in ensuring continuity of teaching and learning via virtual methods. Secondly, the authors qualitatively explore and report on Criminology lecturers' experiences regarding online teaching and assessment. Lastly, the authors present the findings of a survey among 322 students registered for undergraduate Criminology in the second academic term of 2020. At the institutional level, the University was in the fortunate position of already having had online learning mechanisms in place, although the decision to move teaching and learning fully online and within a relatively short timeframe caused uncertainty and stress in lecturers and students. Inequalities surfaced, since not all students had access to data and equipment needed for online learning. Adapting to online lecturing and assessment stimulated creativity in lecturers as new, alternative ways featured of promoting critical thinking and application of knowledge in students. Nevertheless, Criminology lecturers expressed concerns about the mental health of students and, in the absence of in-person contact with students, the inability of gauging whether students understand module content. In an attempt to leave no student behind, lecturers even made use of social media to communicate study material with students and to enquire about their wellbeing. The survey results show that the majority of students moved back to their families before lockdown commenced. Students spent significantly ($r = 0.49$) more time on online learning during lockdown, and nearly half were worried about successfully completing the academic year. Two-thirds of students stated that the change in teaching methods caused them stress. Overall, the results suggest that teaching and learning of undergraduate Criminology will move towards a hybrid, more student-centred approach at the University.

Keywords: *Online; teaching and learning; undergraduate Criminology; Coronavirus Covid-19; institutions of higher education; students; lecturers.*

INTRODUCTION

Across the globe, the Coronavirus (Covid-19) pandemic has impacted on Institutions of Higher Education (IHE) across the globe. The initial response of universities to the outbreak of the virus varied, but mostly included some form of online teaching and learning (Crawford, Butler-Henderson, Rudolph, Malkawi, Glowatz, Burton, Magni & Lam, 2020: 9). For some universities, the shift from contact classes to online lecturing was swift because they already had mechanisms in place for online teaching and assessment. For others, the shift was more challenging due to limited resources and capacity for online learning. Adapting education practices to crises is nothing new, but in contrast to past experiences, the world has never witnessed or experienced a global education lockdown (Johnson, Veletsianos & Seaman, 2020: 7).

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In June 2020, the pandemic resulted in the closure of educational institutions in 190 countries impacting more than 1.7 billion students (World Bank, 2020: np). The pandemic has challenged the higher education sector to critically assess how teaching and learning takes place and how to optimally use online learning to equip students with skills needed for the workplace (Motala & Menon, 2020: 82-83; Rajhans, Memon, Patil & Goyal, 2020: 6).

When the 2015/2016 #FeesMustFall protest actions swept through South African universities, some Institutions of Higher Education introduced contingency plans to ensure that learning continued via online platforms (Czerniewicz, 2020: np). In 2020, universities had to draw on lesson learned during the student protest actions in order to ensure the continuity of teaching and learning amid the unprecedented challenges associated with Covid-19 (Hedding, Greve, Breetzke, Nel & Jansen van Vuuren, 2020: 1). The transition from contact classes to virtual learning has been overwhelming and challenging for many students and lectures (Stefanile, 2020: 34). In relation to online learning, lecturers had to reconsider their curricula in terms of what needs to be taught and what may need to change (Ramrathan, 2020: 1-10). For this special Covid-19 edition, this article serves three purposes: Firstly, the authors examined their institution's response to the national COVID-19 lockdown and its transition to remote learning. Secondly, Criminology lecturers' experiences with online teaching amid the pandemic were explored. Lastly, the results were presented of a survey among students who were registered for undergraduate Criminology modules regarding their teaching and learning experiences during lockdown.

LITERATURE REVIEW

The impact of the pandemic on higher education

Following the World Health Organisation (WHO) announcement on 11 March 2020 declaring COVID-19 a global pandemic, Institutions of Higher Education across all continents ceased contact classes to adhere to the social distancing mandate issued to minimise the spread of the virus. Universities had to rise to the pandemic by being innovative while still offering quality online education. Evidence has been generated regarding lecturers' experiences with moving to online teaching and learning and it is worthwhile to consider the findings of two such studies. A survey among 78 optometry lecturers in India found that nearly all lecturers (93%) had limited time to switch from contact classes to online teaching, and 61 percent were familiar with the institution's online platform prior to the pandemic. More than three quarters (78%) of lecturers had to modify their curriculum for online learning and the majority (83.5%) reported lengthy consultations hours with students. Two-in-five (41%) lecturers planned to continue with online assessments even when contact classes resume (Rajhans et al, 2020: 3-6). Another survey conducted in the United States found that nearly half of lecturers reduced their learning outcomes due to the pandemic (Barton, 2020: 3).

Johnson et al (2020) report on a survey among 897 teaching faculty, heads of departments, faculty deans and academic administrators as to how institutions have provided continuity of education in the early stages of the pandemic. Seventy-six percent of the respondents noted that their modules had transitioned to online platforms and 64 percent had no online teaching experience (Johnson et al, 2020: 11-12). Most of the respondents (83%) made use of their institutions' online teaching and learning platforms, and a few (12%) used social media tools to communicate with students. Furthermore, nearly all respondents (93%) reported that they had to modify their assessments, including adjusting the weight of examinations and assignments, providing students with more time to complete assignments, and reducing the workload of students (Johnson et al, 2020: 13-14).

Virtual classes have become indispensable in the time of the COVID-19 pandemic, yet not all students have resources available to access virtual teaching and learning platforms (Zafitsara & Velo, 2020: 117; Chiemeke & Imafidor, 2020: 34). In South Africa, particularly in the education sector, the pandemic has widened the educational gap between the privileged minority and the poor majority given the unequal distribution of educational infrastructure and resources (Jansen, 2020: np; Motala & Menon, 2020: 95; Dube, 2020: 139). The lived realities of learners from rural areas and marginalised communities are often not taken into consideration in the implementation of online learning and teaching (Dube, 2020: 139). Some students lack electricity at their homes – especially those living in informal settlements – and many who live in rural areas experience poor connectivity due to limited internet coverage (Kapasia, Paul, Roy, Saha, Zaveri, Mallick, Barman, Das & Ghouhan 2020: 4). Equally problematic is the lack of electronic devices which allow for meaningful online learning (Dube, 2020: 144). Furthermore, the lack of facilities, in particular the closure of internet cafes during Level 5 lockdown, excluded marginalised students from engaging in online learning (Dube, 2020: 146). Questions can, therefore, rightfully be raised regarding education equality when online teaching and learning were hurriedly designed in response to the Covid-19 pandemic (Ali, 2020: 16).

The COVID-19 pandemic will, in all likelihood, result in long-lasting changes to South Africa's higher education sector and will ultimately impact on the way universities conduct teaching and learning in future (Hedding et al, 2020: 1; Jansen, 2020: np). Some universities might increasingly move towards digitisation characterised by a stronger shift to hybrid-learning models, depending on available resources and capital (Habib, Phakeng & Kupe, 2020: np; Czerniewicz, 2020: np). In addition, it appears that the sudden impetus for online learning has released human capacity to be creative and innovative in trying to meet the demands of both lecturers and students alike (Habib et al, 2020: np). Nevertheless, although all Institutions of Higher Education across the globe experienced similar challenges in adapting to lockdown levels, in South Africa these challenges were exacerbated by deep entrenched inequalities (Habib et al, 2020: np). For example, as the country's economic crises deepens as a result of the pandemic, an increase is expected in the "missing middle"[1] (Habib et al, 2020: np).

Furthermore, as part of the revised national budget to cater for costs associated with the prevention and treatment of coronavirus infections, subsidies to Institutions of Higher Education were cut by R2.5 billion which might impact staff salaries, operational costs and research projects (Kassen, 2020: np; Naidu & Dell, 2020: np). Universities' expenditure had to be redirected to prioritise the procurement of, amongst others, laptops and data for students from disadvantaged backgrounds. Additionally, the pandemic has negatively impacted on universities that battled with student and staff protest actions at the start of 2020, including the Tshwane University of Technology, University of the Witwatersrand, University of KwaZulu-Natal, Mangosuthu University of Technology, University of NorthWest, Walter Sisulu University, and the University of Fort Hare (Kassen, 2020: np).

From contact classes to online teaching and learning

The pandemic has provided Institutions of Higher Education with an opportunity to reconsider their teaching and assessments methods, as well as optimisation of available resources and institutional structures (Sandars et al, 2020: 9). To ensure that students and lecturers succeed with online teaching and learning, pertinent features of an online system include reliable communication infrastructure, suitable digital learning resources, user-friendly and intuitive learning tools, availability of effective support services for both learners and teaching stuff, and detailed learning outcomes (Huang, Liu, Tlili, Yang & Wang, 2020: 13).

Effective communication channels are essential to keep students and staff members informed and assured during times of uncertainty. Clear communication to students is imperative to guide them in terms of module specifications, modes of delivery and expected outcomes (Sandars et al, 2020: 3-4).

An essential element of online teaching and learning is co-operation with telecommunication service providers in order to ensure accessible learning experiences. In China, for example, classes for primary and middle school learners were broadcast across four channels so as to provide learners without internet in rural areas access to educational content (Huang et al, 2020: 15). Another important component of online learning is the consideration of suitable digital learning resources. Educators need to take into account the quality of the content, issues of licensing and legal reuse of material, and the selection of interactive learning resources. Equally important when selecting online learning resources is that learning material should be related to the modules' learning objectives, and that the education content should be moderated in terms of difficulty (Huang et al, 2020: 21-22). The use of social media, such as Facebook and WhatsApp groups as a collaborative tool to facilitate learning can enhance the online learning experience for students (Sandars et al, 2020: 6). Preferably, students should have the opportunity to co-create online learning mechanisms in order to increase engagement and self-efficacy amongst learners. Peer review of online content is an important element of ensuring quality control (Sandars et al, 2020: 9).

With teaching and assessing being fully online during the first phases of the global lockdown, lecturers were required to be flexible in the way classes are presented (Huang et al, 2020: 27-28). Going fully online has been a learning curve for most lecturers, and they had to adapt and develop new skills to navigate non-contact teaching platforms. For quality online teaching and learning, both lecturers and students require effective support services which may include skills training to use organisational online infrastructure, designing online learning activities, online teaching strategies, and technological support (Huang et al, 2020: 32). With structured class times removed, teaching and learning can take place anytime and at the students' pace, resulting in them taking responsibility for their learning and greater self-sufficiency. In this regard, Von der Heidt (2015: 286) argues that online learning results in a shift from a lecturer-centred towards student-centred approach, with students playing a more critical role in the learning process.

Students' online learning experiences amidst Covid-19

Within a short period of time, researchers managed to generate important insights into students' experiences with online learning. Agarwal and Kaushik (2020: 554) provide feedback responses from 77 medical students about their experiences of online learning during the coronavirus pandemic. Nearly all the students (97%) viewed the online content as tailored to their level of understanding and learning, and all the respondents stated that going forward, online teaching and learning should be incorporated in their curriculum.

The Centre for Innovation in Learning and Teaching (CILT) at the University of Cape Town (UCT) conducted a survey amongst undergraduate and postgraduate students to explore their experiences of online teaching and learning. The survey was sent to 22 328 students and 3 818 participated, resulting in a response rate of 17 percent. Almost half of the respondents (48%) felt that they understood some of the learning material while four percent felt that they understood none of the learning material. More than one-third (35%) of the students felt that there was too much course content for the hours allocated. Of the students who reported experiencing challenges with assessments, 45 percent reported internet connectivity problems, 72 percent struggled with managing their time and workload, and 29 percent experienced electricity interruptions (Krige, 2020: np).

Adnan and Anwar (2020: 47) report on an online survey among 126 university students in Pakistan to determine students' attitudes towards online learning. Half of the students (51%) reported experiencing challenges with connectivity. More than two-thirds (71%) felt that online learning was less motivating than contact classes, and 50 percent had reservations about completing their studies online (Adnan & Anwar, 2020: 48). Contrary to these findings, a survey administered to 2 520 health sciences students in Croatia indicated that more than half (51%) felt motivated to participate in online learning (Puljak, Civljak, Haramina, Malisa, Cavic, Klinec, Aranza, Mesaric, Skitarelic, Zoranic, Majstorovic, Neuberg, Miksic & Ivanisevic, 2020: 7). However, 47 percent indicated that they missed contact classes, more than half (52%) missed in-person contact with lecturers, and 55 percent preferred a blended learning approach post the Covid-19 pandemic (Puljak et al, 2020: 6). The students further believed that their institution had adapted quickly to remote learning (68%), that online learning was well organised (68%), and that they were provided with the necessary support and training to navigate the online learning platforms. Furthermore, 70 percent of the students indicated that their lecturers asked for feedback to determine whether they understood the work. However, 55 percent of the respondents feared not completing their academic modules as a result of the pandemic (Puljak et al, 2020: 7-8).

In West Bengal, an online survey among 232 students – most of whom were registered in the Faculty of Arts – revealed that 37 percent learned by means of textbooks and online learning, while 30 percent participated in only online learning. Of the students who took part in online learning, 14 percent attended online classes daily with the majority (85%) using their mobile phones to access such learning (Kapasia et al, 2020: 2-3). More than half of the students believed that the pandemic would have on impact on their economic situation thus negatively affecting their education. Almost a third (32%) of the students reported experiencing connectivity problems followed by an unfavourable home environment (Kapasia et al, 2020: 4). A survey to determine the perceptions of the abrupt transition from contact classes to online learning was administered to 380 chemistry and hydrocarbons students at a university in Algeria. Two-thirds of the respondents experienced technical problems such as disruption of internet access when accessing online learning platforms. Additionally, 63 percent preferred contact classes to online learning, while 28 percent preferred a blending learning approach (Blizak, Blizak, Bouchenak & Yahiaoui, 2020: 2468-2469). To explore the effect of the pandemic on medical students' career perceptions, a cross-sectional study in the United States collected responses from 1 668 health sciences students, of which one-fifth reported that the pandemic would greatly affect their choice of speciality (Byrnes, Civantos, Go, McWilliams & Rajasekaran, 2020: 4).

Based on the existing evidence presented above, common results from students relate to welcoming the move towards hybrid teaching and learning strategies, students expressing concerns about completing their studies in time and the difficulties they experience with internet connectivity. Some of the more nuanced findings from the student surveys include:

- Students present varied levels of understanding online content;

- Some students struggle to balance module content and time;

- Some students express less motivation for their studies due to online learning;

- The importance of support in the transition to online teaching and learning;

- Not all students attend online classes and learning opportunities;

- Some students miss and prefer contact classes above online sessions; and

- The home environment is not necessarily conducive to online learning.

RESEARCH METHODS

The research methods used for this article amount to a three-pronged approach in order to meaningfully report on the strategies of one university's response to the Covid-19 pandemic. Firstly, the article reports on the University's decisions and communication regarding teaching and learning based on official communication to students and staff. This section summarises the key events based on the emails sent from the Office of the Vice-Chancellor, the Deanery and the unit tasked with education and innovation. The timeline includes 107 emails sent from the period of March 2020 when the first case of COVID-19 was reported in South Africa up until May 2020 when online classes commenced. These months were selected to provide an overview of the University's response to teaching and learning amidst the pandemic and transition from contact classes to online teaching and learning. Secondly, semi-structured interviews were conducted with Criminology lecturers with the view to solicit their experiences with online teaching and assessments during the COVID-19 pandemic. Excluding the two authors, all other Criminology lecturers (n = 5) were interviewed by means of virtual platforms and phone calls. Mindful of the potential bias associated with the selection method, findings are supported by direct quotations. The lecturers' data was transcribed, and content analysed to reveal themes and patterns.

Thirdly, the results of a survey among students who were registered for undergraduate Criminology modules in the first semester of 2020 are presented. The data stems from the *COVID-19 International Student Well-Being Study* (C19 ISWS). C19 ISWS is the result of a study design, study protocol and questionnaire developed by a team of the University of Antwerp, Belgium. A consortium of universities from 24 countries, including four from South Africa, participated in the survey (the present article reports on the survey results of only one South African university). The survey, which inherently implies a quantitative approach, took the form of an online survey which made use of voluntary sampling procedures. An invitation to participate in the survey was sent to the 2 215 students registered for undergraduate Criminology of whom 322 completed the survey. The response rate (15%) is low and can be attributed to respondent fatigue (during lockdown, students had to complete several online forms, assessments and course evaluations) and availability of data (respondents had to use their own data because the survey did not run on any of the University's free electronic platforms). The online survey was available for students to complete between 12 to 25 June 2020 and all questions that required a response "in the last week" therefore related to respondents' experiences under lockdown level three. A reminder to participate in the study was sent a week after the survey commenced in an attempt to increase the response rate.

Data was analysed using the Statistical Package for the Social Sciences (IBM, 2020) which allowed for descriptive and bi-variate analysis. The Wilcoxon signed rank test – a statistical procedure that tests associations between results from the same group – was used to determine significant changes before Covid-19 and during lockdown. For statistically significant shifts ($p < 0.05$), effect sizes (r) were calculated where 0.10 to < 0.30 indicates a small, 0.30 to < 0.50 denotes a medium, and ≥ 0.50 directs a large effect size. The descriptive and comparative data are presented in the form of text and tables. Respondents were provided with a message of informed consent which they had to tick before continuing with the online survey. The standard ethical considerations of voluntary participation, anonymity, confidentiality and referral in case of any form of harm were included in the message of informed consent. The online student survey received ethical clearance from the University of Antwerp (SHW_20_38) and the University of Pretoria (HUM2020050).

In terms of the research setting, the University is more than one hundred years old and can be considered as a previously advantaged, urban institution of higher learning. In 2020, more than 50 000 students were registered at the University's seven campuses. Criminology is offered at the University's main campus and roughly 2 100 undergraduate students enrol for its modules, resulting in a lecturer: student ratio of 1: 300. The lecturers' teaching experience ranged from five to thirty years, and the academic offering includes Fundamental Criminology, Victimology, Youth Crime, the Criminal Justice System, and Criminology Theory

RESULTS

Covid-19 decisions, response strategies and communication timeline

The first case of Covid-19 in South Africa was reported on the 5 March 2020 by the National Institute for Communicable Diseases. On the 6 March, the University issued a communique that all biometric access systems to the campuses will be disabled in an effort to prevent the spread of the coronavirus. The communique also highlighted support services available, including a crisis centre for students and staff members who may present Covid-19 symptoms. On 13 March 2020, senior management updated the university community, reassuring everyone that management was closely monitoring the situation, and that preparations were underway to take teaching and learning online should it be required, and that the university's programme would continue as scheduled. On 15 March 2020, President Cyril Ramaphosa declared a national disaster in terms of the Disaster Management Act 2002. On 16 March 2020, all classes and tests at the university were postponed with immediate effect. A further communication was sent requesting lecturers to upload all learning content online – the University utilises Blackboard Learn©[2] – before 18 March 2020 to ensure that teaching and learning continued. In addition, students were urged to download learning content via WIFI on campus prior to returning home. In addition to the postponement of all classes and tests until mid-April 2020, provision was made for all staff members to start working from home.

On 18 March 2020, the unit tasked with education and innovation distributed an "academic continuity" document which provided an overview of the different methods of non-contact teaching and learning, as well as the steps lecturers can take to support students online. The purpose of the document was to provide staff with online teaching and learning instructions, for example how to navigate different functions within the online system. At that time, most of the online teaching and learning mechanisms have been available, although these platforms were under-utilised given the standard routine of scheduled rosters for contact lecturing and tutorial classes. The education and innovation unit drew heavily on lessons learned from digital developments made during the 2015 and 2016 #FeesMustFall student protest actions. Allowing employees to work from home using the internet necessitates protection against cybercrime and on 20 March 2020 information was distributed detailing how to securely use the university's online framework from home. On the same date, the University confirmed its first diagnosed case of coronavirus infection, upon which senior management communicated that the necessary response protocol has been instituted.

On 23 March 2020, the Dean of the Faculty of Humanities closed the Faculty. Following the announcement of the national lockdown to curb the rising spread of the coronavirus, the University closed on 26 March 2020, provisionally until 16 April 2020. After meetings held with the Association of South African Universities, a decision was taken that all Institutions of Higher Education would re-open on 20 April 2020. A message of encouragement and support from the university's Vice-Chancellor was sent on 26 March 2020 just prior to the enforcement of the national lockdown and the academic calendar was amended accordingly. To keep students updated in terms of the way forward, a communication was sent to both undergraduate and postgraduate students on 2 April 2020 that:

- Should contact classes not be possible, the academic programme will resume online;

- Students are encouraged to continuously access the university's website for updates and download the necessary software for online learning; and

- Lecturers will be available by means of various platforms, and students should form virtual study groups via social media.

A week into the national lockdown, a message from the Vice-Chancellor on 3 April 2020 urged the university community to adhere to the lockdown rules and regulations, and to keep safe. Alongside the message, the Deputy Vice-Chancellor tasked with academic performance sent out two notices, one regarding online teaching and learning, and the other on working from home. In essence, these notices requested lecturers to commit themselves to students successfully completing the academic year and served as a reminder for lecturers to be virtually present and available to students. The second academic term was meant to commence on 20 April 2020 and the week prior to that staff members were requested to:

- Scrutinise documentation about lecturing online, as well as the support available to communicate with students;

- Provide detailed information to students on how to prepare for online learning (study guides had to indicate comprehensive information about online sessions and assessment plans); and

- Ensure that academic modules were available online and, preferably, be timed-released on pre-determined dates.

The University negotiated a 24-hour free DSTV channel for lecturers to broadcast their lecturers. Staff members were sent guidelines on how to create high quality videos for the channel. In addition, an agreement was reached with the four mobile network operators (MTN, Vodacom, Cell C and Telkom) to negotiate for zero-rated data access to university website. In collaboration with the mobile network providers, a website was launched which students and staff members could access at no data cost to the user. However, due to connectivity challenges and limited access to the website, students were offered once-off data bundles with approximately 15 000 students benefitting from the initiative.

On 9 April 2020, the university's senior management announced that the academic programme of the entire second semester will continue online. Special arrangements would be made in the respective faculties for students to complete, in a controlled and safe manner, their clinical, practical and laboratory experimental work in order to meet the academic and graduate attribute requirements of their degree programmes. At that time, the University was working on plans to support students who did not have access to internet-enabled devices and data. Staff members were tasked with commenting on the faculty's assessment plans. Furthermore, staff members were asked to indicate what assessments options they would utilise for their courses, from continuous formative assessments, summative assessments, and promotion options for certain modules. Additionally, if a student failed to complete a module, an opportunity for an extraordinary examination could be given by the dean.

Lecturers had an array of options when planning their online teaching and learning, including narrated PowerPoint presentations and virtual classroom sessions on Google Hangout or Blackboard Collaborate. Furthermore, progress assessment schedules and formats had to be revised and adapted to online teaching. Changes to the examination timetable as well as, the format of the exam and continuous assessment options had to be considered. Although the second academic term was scheduled to start on 20 April 2020, the Vice-Chancellor

postponed its commencement to 4 May 2020 due to the lack of electronic devices for the number of students in need. A *Frequently Asked Questions* database for students was introduced and a portal was created which granted students and staff members free access to their emails, Blackboard Collaborate, and the library and university websites.

With online classes meant to commence on 4 May 2020, students received a communique from senior management requesting them to prepare for online learning and reminded them that some initial teething challenges might arise. Furthermore, the University was in the final stages of delivering internet-enabled devices to students who could not afford such equipment. When classes started on 4 May 2020, lecturers were required to send feedback daily of issues experienced by both staff members and students regarding online teaching and learning. The structured feedback recorded challenges in the form of zero-rated data and connectivity, online platforms, assessment and accessing electronic devices. Furthermore, lecturers had to consider changes to exam entry requirements, assessment practices and the nature of the second semester exam.

Criminology lecturers' experiences with teaching and learning

Teaching in times of trouble

The lecturers highlighted the limited time and subsequent stress in preparing for online teaching and learning:

L1: *"At the beginning it was very challenging and there was a lot of uncertainty. And as a lecturer one became the face of UP."*

L2: *"I have taught contact classes for the past 27 years and only had limited time to prepare and get everything online. At the time I was preparing for a holiday and not prepared for full online teaching."*

L3: *"I was in panic mode when I heard that we are going online and also very scared. The timeframe to prepare for online teaching was very limited but was grateful that it kept being pushed back so one could have enough time to prepare. In the beginning it was very scary, eventful and I experienced a lot of pressure."*

L4: *"At first it was very daunting as I was worried about assessment. I believe that 2016 had slightly prepared me for online learning just not for assessments. The experience has been immensely challenging but also rewarding."*

Thinking out of the box: Assessments

The lecturers commented positively on the opportunities which online assessment provides:

L1*: "I was worried about the exam and how one could ensure integrity and how to assess* [module name] *with multiple-choice questions, but I was pleasantly surprised once I applied my mind how I could actually formulate questions that had integrity and that even if they had their books next to them it didn't make that much of a difference."*

L4: *"Multiple-choice questions for* [module name] *test and exam worked well. If we return to contact classes, I will definitely incorporate MCQs in my assessment strategy. If I wasn't forced to use MCQs, I would have never tried it."*

L5: *"Online teaching forces one to think differently about lecturing and assessment. The* [university] *provided online training courses to lecturers on teaching and assessment, which was very helpful with the sudden change to online teaching and assessment. One of the advantages of assessing online is the reduced mark load."*

No student left behind

The lecturers kept contact with students and followed-up on problematic issues:

L1: *"Luckily I used WhatsApp groups as a teaching tool as well as, a way to communicate with the students because some could not go onto* [the online system]. *For most students, the WhatsApp groups was their saving grace as they could keep up with the work."*

L3: *"I had to call students who had connectivity issues to see how they could be accommodated to write the exam depending on their connectivity issues. I have an Excel spreadsheet list to determine who has issues, to be always aware what the issues are and to stay connected with them."*

L4: *"I am proud about what I have achieved thus far, and I do not feel that my students have been disadvantaged by online learning. I am satisfied that they have obtained the knowledge that they would have obtained if we had contact classes. Our pass rate was 98%. We really went the extra mile, not to leave any student behind and to equip everyone with the knowledge and information that they need to excel."*

Online access does not necessarily mean learning

The lecturers commented that not all students actively embraced online learning:

L2: *"Online learning forces students to read more yet students do not read they just scan through the work. Some students use connectivity issues as an excuse not to do the work."*

L3: *"The last discussion I scheduled with them no one engaged, made me release that students will only take part in activities if there are marks attached to the activity."*

L5: *"A frustration, rather than a challenge, is students not reading their study guides or announcements posted on* [the online platform]. *This leads to additional administration as one has to answer questions that are already available on various platforms."*

Re-imagining and re-thinking student capabilities

The lecturers appear to have shifted from assessing memory to assessing application:

L1: *"I am going to assess in a different manner. It is not important for students to memorise the work. With the online assessment I was able to test whether they understood the work."*

L2: *"I was creative and open with assessments and will consider this in the future."*

L3: *"Online assessment was so much better than face-to-face. Also, the quality of work I received from the students was of a better quality than last year, maybe as result of the fact that they had more time. I will definitely change how I assess in the future."*

L4: *"I only tested application in all of my assessments. During contact classes, more emphasis was on memorising facts than on application. I believe that application is more valuable. When returning to class, I will revisit all my assessment strategies, seeing that I would like to tip the scale to more application and less memorising of facts."*

Educational inequalities

The lecturers actively follow-up on challenges which marginalised students experienced:

L1: *"Data was expensive not just for the students but for me as well, I was constantly buying data ... Data and connectivity was the biggest challenge during the exam. I had to call students who had connectivity issues to see how they could be accommodated to write the exam depending on their connectivity issues."*

L2: *"Many students had connectivity issues, luckily the online infrastructure matters can be sorted immediately. Load shedding was also an issue, but students had to have proof, that is submit their load shedding schedule. But this was not easy to control, especially with students living in remote areas."*

L4: *"I was engaging more with the students, overcompensating and always checking their progress. For students who were not accessing the online platform, I would call or email them asking about their challenges. With some students who had connectivity issues I would email and WhatsApp them the learning material and voice notes. I had a student who, due to the lockdown, had to go back to her home country, Lesotho. As a result of being in Lesotho, she could not obtain data assistance from the university. I had to WhatsApp her the learning material so that she could keep up with the work."*

Uncertainty in the absence of personal contact

The lecturers highlighted that online teaching and learning could create a barrier between lecturers and students:

L1: *"It was a challenge to figure out where to start to make sure that students understood the work. I used students as a sounding board, going back and forth asking them to please look at the work to see if they understand the work."*

L4: *"Online teaching is a lonely and isolated place seeing that you do not always know if you are hitting home and it is very stressful and taxing. Not knowing if the methods that you are using are effective. I would only know if students communicated and/or after your first assessment."*

L5: *"With online teaching it is difficult to ascertain if students understand the work presented. One way to resolve this challenge is to remind students throughout to module to get into contact with me if they don't understand the work."*

Mental health matters

The lecturers commented on their and the students' mental health with online teaching and learning:

L1: *"Most students felt isolated, I try to stay connected to them as much as I can."*

L2*: "Another challenge was mental health; it was not easy to cope with work-load and you're just hoping that you are doing the best for the students. Also, there was no control over the mental health issues of students. With contact classes it is easy to check up on students and some students feel free to come to your offices and talk to you about their personal problems. A lot of students might fall through the cracks without us realising it."*

L4*: "Balancing your own challenges such as load shedding, network limitations, own emotional struggles and fears, having* [your children] *at home whilst you have to work, your own domestic responsibilities, especially during level 5 and 4 when we had no support was not easy."*

Institutional support

The lecturers emphasised the importance of institutional support

L1: *"I can only say good things about the EI unit. They have been incredibly supportive and helpful. They were always available on the clock, even at night. They have empowered us with so much videos and detailed steps on how to navigate the online platform, be it making narrated PowerPoint presentations or uploading a video on YouTube. The EI also had training sessions that were available online. It would have been impossible to navigate online teaching without their expertise. I just think they did a fantastic job to support us and to empower us in such an accessible manner."*

L2: *"There is so much one could do on the online platform. At the beginning of the year, I attended a lot of online training sessions but when we had to unexpectedly move to online teaching there was not enough time to apply all the skills I had learned. However, when I experienced challenges, the EI unit was always ready to assist. The unit was hands on and quick to assist."*

L4: *"The EI unit did an excellent job. The assistance during the exam was phenomenal. One did not feel isolated. Experts were a click away. EI provided all the support one needed."*

Challenges with online teaching

The lecturers identified a range of challenges with online teaching and learning:

L1*: "Data was an issue for most students, and I was not allowed to download articles for the students, I had to work through the library links. Due to most students not having data, one could not have live virtual classes. If students had unlimited data, I would not be worried and online learning would have run smoothly. I am glad that I did not go the* [virtual lecturing] *route because a lot of students would have not been able to access it. The zero-dated connection did not work."*

L2*: "I was teaching two modules. Creating narrated PowerPoint presentations was very time-consuming."*

L3*: "Some students did not keep up with the schedule and some students would fall behind. Students were very engaging and constantly consulting, it was time-consuming because students worked at different times so they all would contact me at different times."*

L4*: "Establishing a relationship with students that you have never met face-to-face was challenging. Not having the opportunity to debate issues in a classroom setting. I am of the opinion that* [the virtual lecturing platform] *is not an option for large groups – inter alia, it consumes too much data … I also do not have time to have discussion boards where I have to type responses to 619 students."*

L5*: "A challenge of online lecturing is the time that goes into compiling narrated power point (online lectures) slides."*

Survey among undergraduate students

The ages of respondents ranged from 18 to 34 years with an average of 20 years (SD = 1.5 years). Most respondents were female (n = 265; 83%), followed by male (n = 51; 15.1%) and six (1.9%) respondents who indicated "X" for gender. More than two-thirds of respondents (n = 214; 69.5%) were registered for degrees in Humanities, followed by Law (n = 84; 27.3%), and the Natural (n = 7; 2.3%) and Health (n = 3; 1%) Sciences. Nearly a third of respondents (n = 95; 29.9%) were first-year students.

      Most respondents (n = 281; 88.4%) and both their parents (n = 271; 85.2%) were born in South Africa. Only five respondents (1.6%) moved back to their country of residence since the first implementation of Covid-19 measures. Respondents presented a variety of living arrangements prior to the pandemic (Table 1), although most moved back to their parents for the nationwide lockdown ($p < 0.001$; $r = 0.50$).

Table 1:   **Living arrangements (excluding weekends and holidays)**

	Before Covid-19		During lockdown	
	n	**%**	**n**	**%**
Parents	80	28.9	216	78
Student residence	67	24.2	7	2.5
Rented with others	58	20.9	18	6.5
By myself	61	22	19	6.9
Other	11	4	17	6.1
Total	**277**	**100**	**277**	**100**

      Most respondents (n = 231; 72.9%) considered their studies as more important compared to other activities (such as meeting with friends and doing hobbies), while one in four respondents (n = 81; 25.6%) considered their studies as equally important and five (1.6%) considered it as less important. Nearly four in five respondents (n = 217; 78.4%) "strongly agreed" and "agreed" that they had sufficient financial resources prior to the start of Covid-19, although significantly fewer respondents (n = 145; 52.3%) claimed the same during lockdown ($p < 0.001$; $r = 0.50$) (Table 2).

Table 2: **Having sufficient financial resources to cover monthly expenses**

	Before Covid-19		During lockdown	
	n	**%**	**n**	**%**
Strongly agree	101	36.5	56	20.2
Agree	116	41.9	89	32.1
Neutral	29	10.5	63	22.7
Disagree	19	6.9	46	16.6
Strongly disagree	12	4.3	23	8.3
Total	**277**	**100**	**277**	**100**

Before Covid-19, two-thirds of respondents (n = 121; 66.1%) attended online teaching and learning for five hours or less per week, although significantly more time was spent attending online teaching and learning during lockdown ($p < 0.001$; $r = 0.49$) (Table 3).

Table 3: **Hours per week attending online teaching and learning**

	Before Covid-19		During lockdown	
	n	**%**	**n**	**%**
1-5	121	66.1	87	34.5
6-10	43	23.5	77	30.6
11-15	8	4.4	37	14.7
16-20	5	2.7	24	9.5
≥ 21	6	3.3	27	10.7
Total	**183**	**100**	**252**	**100**

Nearly the same proportion of respondents spent between one and ten hours per week on personal study time (preparation, learning, reading and writing assignments) before Covid-19 (n = 149; 59.4%) and after the introduction of lockdown (n = 135; 58.4%) (Table 4).

Table 4: **Hours per week spent on personal study time**

	Before Covid-19		During lockdown	
	n	**%**	**n**	**%**
1-5	78	31.1	68	29.4
6-10	71	28.3	67	29
11-15	34	13.5	22	9.5
16-20	18	7.2	23	10
≥ 21	50	19.9	51	22.1
Total	**251**	**100**	**231**	**100**

Nearly two in five respondents (n = 71; 36.9%) sought "more" and "much more" contact with their lecturers to discuss concerns about their studies during lockdown, although more than half of respondents (n = 66; 60%) sought "less" and "much less" contact with their lecturers about psychosocial problems (Table 5).

Table 5:   Whether respondents sought more or less contact with lecturers …

	… to discuss concerns about studies during lockdown		… to discuss psychosocial problems during lockdown	
	n	**%**	**n**	**%**
Much less	24	12.5	41	37.3
Less	36	18.8	25	22.7
Similar	61	31.8	22	20
More	55	28.6	20	18.2
Much more	16	8.3	2	1.8
Total	**192**	**100**	**110**	**100**

Since the outbreak of the pandemic, 18 (5.7%) respondents contacted student support services regarding concerns about their studies (n = 8), financial difficulties (n = 2) and psychosocial challenges (n = 3). Five respondents preferred not to state the reasons for having approached the service.

Nearly two in five respondents (n = 106; 39.4%) "strongly" agreed that their workload increased since the nationwide lockdown was implemented, and one in five (n = 58; 21.6%) "strongly" agreed to knowing less of what is expected of them in their different academic modules. Nearly a third of respondents (n = 82; 30.5%) disagreed that the University provided poorer education since lockdown started. Roughly two in five respondents (n = 115; 42.8%) agreed that the University informed them about the changes that will be implemented under the nationwide lockdown.

Table 6:   Respondents' experiences with the University

	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
My workload increased significantly since lockdown	106	39.4	75	27.9	52	19.3	26	9.7	10	3.7
I know less about what is expected of me in the different modules	58	21.6	81	30.1	57	21.2	60	22.3	13	4.8
Worried about not completing the academic year	55	20.4	64	23.8	55	20.4	61	22.7	34	12.6
University provides poorer education since the pandemic	18	6.7	36	13.4	91	33.8	82	30.5	42	15.6
Change in teaching methods causes much stress	83	30.9	96	35.7	37	13.8	34	12.6	19	7.1
University informed me about changes under lockdown	99	36.8	115	42.8	37	13.8	11	4.1	7	2.6
Sufficient protection measures were introduced	75	27.9	104	38.7	73	27.1	12	4.5	5	1.9
Lecturers/counsellors are available to talk to about worries	38	14.1	75	27.9	78	29	51	19	27	10

DISCUSSION

The Covid-19 pandemic is impacting all spheres of life, including the higher education sector. Fortunately, the University reported on here responded quickly to not only safeguard the health of staff and students, but also in initiating systems and procedures to continue the academic calendar. Technological advances in online teaching and learning made these rapid responses possible. Parallel to experiences elsewhere (Czerniewicz, 2020: np; Hedding et al, 2020), the closure of the University during the #FeesMustFall student protest action resulted in the development of contingency plans in case lecturers and students were unable to meet in the traditional fashion of contact classes and other in-person modes such as consultation hours and tutorial sessions.

Following the closure of the University in March 2020, it was announced that classes would resume online in mid-April, thus giving lecturers little time to transition and adapt to a new instruction environment (Rajhans et al, 2020: 3-6). The anticipated date of starting online teaching and learning was delayed due to instructions from the National Covid-19 Command Council and not all students having had internet access and/or equipment such as laptops to continue online learning. The six weeks between the termination and reopening of tuition was a fairly stressful and anxious time as noted by the Criminology lecturers due to uncertainties in terms of dates being shifted and when the academic programme would resume. Similar to the response of other universities (Motala & Menon, 2020: 87), Criminology study guides had to be adapted, teaching practices had to be re-planned, and assessments had to be re-designed. These work activities, combined with disrupted personal life under lockdown, reportedly negative affected the mental health of some lecturers.

To assist and support lectures with the transition to online learning, the unit tasked with education innovation provided e-learning development courses which included comprehensive guidelines on how to optimally make use of online teaching and learning platforms. The lecturers clearly valued the effort by the unit which underlines that proper and timeous institutional support is imperative for effective online teaching and learning. Although there was a variety of online teaching options, the large number of undergraduate Criminology students rendered virtual classes impractical and other routes, such as narrated PowerPoint presentations and online consultation sessions, had to be used. Nevertheless, the pandemic has stimulated creativity and innovation among lecturers (WITS, 2020) and opened the doors for alternative modes of instruction and assessment. For example, paperless assessment in the form of MCQs eases the burden of hardcopy marking and results in a quick turnaround time to communicate marks to the large number of undergraduate students. Furthermore, the Criminology lecturers noted that, contrary to past perceptions, online assessment has opportunity to assess understanding and application, and not only students' memory and recall of module content. Consequently, having had to adapt to online teaching and learning, the Criminology lecturers realised the possibilities and potential of online instruction and assessment, and as experienced elsewhere (Rajhans et al, 2020), they indicated that they would move towards hybrid teaching strategies in future.

From our study, it is evident that lecturers walked the extra mile to assist students with the sudden transition to fully online teaching and learning. In addition to having adapted the modes of tuition within a short space of time, availability by means of both traditional (e.g., email) and personal (e.g., private phones) channels has been essential and at the financial (and in some cases personal) cost of lecturers. Some lecturers even reached out to students who had not downloaded the learning material in order to ensure that no student is left behind. Contrary to findings by Johnson et al (2020) that few academic staff members made use of social media platforms, the Criminology lectures used social media – once only associated with personal life – as a communication and teaching tool with students. For example, WhatsApp was not only used to deal with student queries and concerns, but also to send information and recordings of

lectures to students who could not access BlackBoard Learn. In addition, WhatsApp was useful in tracing students who had online difficulties and failed to communicate with lecturers via email. Nevertheless, frustration with students not making use of online learning opportunities was noted. Being a residential university, students in the faculty must attend at least eighty percent of contact sessions and this rule can no longer be enforced. However, Criminology teaching material and recorded consultation sessions are available online and students can access these at any time. At least in the case of Criminology, therefore, learning shifted from a lecturer to a student-centred responsibility since students had to familiarise themselves with the module instructions and content without the guidance of lecturers. Unfortunately, as the lecturers noted, not all students sufficiently engaged with the learning material in preparation for assessments. The matter possibly ties in with the result that roughly half of students stated that they knew less about what was expected of them in the different modules, although it must be acknowledged that learning material had to be adapted for online teaching and learning in a short space of time. From the lecturers' data, it appears that the approach nonetheless creates additional administrative work, and that, in the absence of person-to-person contact, it is difficult to gauge whether students understood the work.

A major challenge experienced by students was data and/or connectivity despite the University having introduced various mechanisms to assist students such as the zero-rated portal and the provision of once-off data bundles. Students could download learning materials and recorded class sessions at no cost. Issues of data and accessibility are important factors to consider going forward in terms of implementing a blended or hybrid learning strategy. Lecturers and students were also hard-hit by recent load shedding which goes against the core of online teaching and learning. These challenges are, however, standard experiences across local Institutions of Higher Education (Zafitsara & Velo, 2020: 117; Motala & Menon, 2020: 95; Kapasia et al, 2020: 4; Dube, 2020: 139).

The survey among undergraduate Criminology students shows that the majority prioritise and value their studies, and it is therefore understandable that the closure of campus brought about a disrupted learning experience. Most of the students who did not live with their parents during academic terms had to move back to their families prior to the nationwide lockdown. The authors have first-hand experience of female students pleading to return to their residences because at home they have to cook and clean for their families and look after younger siblings. Furthermore, the home environment of some students seems not conducive for online learning due to a lack of space and family members being unsympathetic regarding requests for quiet times. It is, therefore, understandable that 66.6 percent found the sudden change in teaching and learning methods stressful. This corresponds with the findings by Stefanile (2020: 34) and CILT (Krige, 2020: np) that students experience burnout while trying to cope with online learning from home. Similar to the finding by Kapasia et al (2020: 4), nearly half of students (44.2%) expressed concern about successfully completing the academic year. On the positive side, students appeared less worried about having sufficient financial resources to cover their monthly expenses, possibly because they live at home and do not have to pay for expenses such as transport and meals.

As could be expected, the students spent significantly more time on online learning activities than before the Covid-19 pandemic emerged. What is interesting is that, under lockdown, they spent the same number of hours per week on personal study time, yet 67.3 percent (strongly) agreed that their workload had increased. This discrepancy can possibly be explained by the online learning experience itself since students have to spend more time in terms of preparation, reading and learning on their own as opposed to some of these activities taking place in class and tutorial sessions. The survey results further confirm the qualitative data that some students are more likely to contact their lecturers to discuss concerns about studies during lockdown. Of concern, however, is that students appear less likely to discuss

psycho-social problems than before which could be ascribed to the absence of face-to-face contact with lecturers, albeit before or after class, or during pre-scheduled consultation hours. As a lecturer noted, the absence of contact classes results in poor interpersonal relationships with students and this may well inhibit students' willingness to approach lecturers regarding psycho-social problems. The matter extends to the finding that roughly a third of students disagreed with the statement that the University availed lecturers/counsellors to consult about their concerns, which could partially explain the low uptake (5.7%) of student counselling services. On the upside, nevertheless, is that 46.1 percent of students disagreed, and 33.8 percent were neutral on the statement that the University offers poorer quality education amid going fully online. Similarly, most students (79.6%) agreed that the University informed them about the instituted changes under lockdown. As mentioned, effective communication is an essential component of online teaching and learning (Huang, Liu, Tlili, Yang & Wang, 2020: 13; Sandars et al, 2020: 3-4).

In conclusion, the pandemic caught the world off-guard. The University had to rapidly transition to remote teaching and learning to continue the provision of quality education and support. Our study demonstrates that technological advancement is indispensable, and it is imperative to develop lecturers' technical and pedagogical skills for remote learning. Although efforts have been made to ensure accessibility for all students, one cannot ignore the role of privilege in South Africa which structurally excludes some learners from full participation in online learning. Additionally, lecturers have had to be creative and innovative in how they deliver education as remote teaching is not a one-size-fits-all answer to the pandemic. The pandemic has created an opportunity for institutions to shape the world post Covid-19, prepare students for greater global engagement, and propelled digital transformation of the higher education sector towards the fifth industrial revolution.

LIMITATIONS AND FUTURE RESEARCH

The present study reports on one university's teaching and learning experiences amid the Covid-19 pandemic, and specifically so regarding Criminology lecturers and students who were registered for undergraduate Criminology modules. Experiences elsewhere may well reveal alternative realities to, and finer nuances of the results presented here. In this regard, the authors fully acknowledge that the findings stem from a traditionally privileged university, and that historically disadvantaged Institutions of Higher Education may present different experiences. In addition, the student survey attracted a relatively low number of respondents, although surveys of this nature appear to be the reality even at university level (cf. Krige, 2020: np). Considering the sampling strategy of the student survey, generalisation across context and geography should be made with caution. The survey instrument was developed by researchers in the developed world, and the phrasing of some questions and the way in which they were to be answered might not have fully matched local needs and realities. Furthermore, the instrument did not capture sufficient biographic information to judge whether the sample is representative of the institution's student population. Follow-up research is needed to determine the extent to which the pandemic pedagogy experience has influenced moves toward hybrid teaching and learning at the University, its influence on learning outcomes, and the academic preparedness of the 2020 cohort of students for the world of work.

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ENDNOTES:

1. The 'missing middle' refers to university students who cannot afford university fees but who are not from poor enough households to qualify for government funding through the National Student Financial Assistance Scheme (NSFAS).
2. Blackboard Learn is an online learning management system designed to facilitate teaching and learning by engaging students in the learning process and easing the administrative burden of lecturers. The system provides lecturers with various instruction tools and methods to assess students' performance (Blackboard, 2020).

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