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ENSURING BUSINESS CONTINUITY IN HIGHER EDUCATION DURING LOCKDOWN 2020: A FACULTY RESPONSE AT THE DURBAN UNIVERSITY OF TECHNOLOGY

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ABSTRACT

The Covid-19 scenario propelled humanity globally into adopting different ways of doing and being; Higher Education in South Africa was no exception. At the onset of lockdown in 2020, the immediate concern was to salvage the academic year. This paper shares the experiences and outline the journey of the Faculty of Accounting and Informatics at the Durban University of Technology, in devising a Continuation Plan for Teaching, Learning and Assessment. This qualitative study offers a scoping review, through a participatory action research approach, tracking the perspectives and decision-making of the Faculty Executive Committee, its stakeholder-researchers, by analysing the drastic changes in material, mode, delivery and assessment that were required during lockdown. The process led to the proposal of a Blended Learning Model, with reference to Bloom's Taxonomy, Multi-modal Learning and the experiences of blended learning locally. The framework proposed comprises blended learning with remote teaching, contact teaching, learning and assessment to foster ubiquity in a collaborative, supportive, structured and flexible learning process. The paper illustrates some of the changes required for remote teaching, contact teaching, assessment and moderation. It concludes with comment on the thinking around the phased-in resumption plan and the next steps for departments within the Faculty.

Keywords: Covid-19; business continuity; blended learning; multimodal learning; teaching; learning; assessment.

INTRODUCTION

The Covid-19 pandemic has impacted higher education globally, placing universities in South Africa under considerable stress in attempting to salvage the academic year (see Universities South Africa, 2020 and Ngqakamba, 2020). At the Durban University of Technology (DUT), an institutional call was made for a unique and carefully considered Continuation Plan for Teaching, Learning and Assessment (TLA), which would compel a review of mode of delivery, learning material and assessment, as well as consideration of make-up time, given the uncertainty around resumption after lockdown in South Africa. How did the Faculty of Accounting and Informatics (FAI) respond to this call? This paper outlines and analyses the process and challenges faced by the Faculty during 2020, at the onset of national lockdown.

In mapping out a TLA plan for Semester 1, 2020, followed by a resumption plan, the FAI at DUT had to take cognisance of the extraordinary conditions, constraints and environmental issues that Executive Management, Faculty, students and support services at the university had to work within. This context of crisis was evident in education worldwide, and is documented in the literature (see Chinyamurindi, 2020 and Ali, 2020). The Faculty found itself in a quandary, attempting

to manage as best as possible under a very difficult set of circumstances, evolving daily, with input from all sectors and stakeholders. An acute sense of frustration was generated. The guiding principle as a Faculty was that student concerns were paramount and these included access to funding, devices, data, learning material and people (Faculty staff). The Faculty determined – perhaps idealistically – that it would minimise any negative impact on student learning. Hence, it saw the need to begin by understanding and foregrounding student issues. Student needs, according to Cloete (2020), should command our attention first, and may have been overlooked in the new national imperatives. Even while it hammered out a proposed FAI TLA framework, which as this paper will show, opted for Multi-modal Learning and a flexible Blended Learning (BL) Model incorporating e-technologies to an extent, it acknowledged that disciplinary differences and level of study may mean that departments would have to still choose what works best for them. There was no denying that the institution and Faculty was on a learning curve and that all practices would have to be continuously reviewed to ensure effectiveness in meeting goals and ensuring quality. The Faculty proceeded as a collective to then identify student needs and staff challenges in terms of perceptions, preparation and motivation; to list resources and to research BL. This in effect took a participatory action research approach, as it sought to critically reflect on the current situation posed by Covid-19 lockdown, to research all options for a teaching and learning framework and to take action in response.

The aim of this paper is to outline these challenges and the process leading up to the BL Model proposed for the FAI and the phased-in resumption considered doable, despite the challenges in both areas.

LITERATURE REVIEW

Blended and Multi-modal Learning

Several higher education institutions (HEIs) have encountered challenges with the introduction and implementation of e-learning technologies: the complexity of technology, unpreparedness of universities in terms of required systems being in place, staffing matters in terms of academic and support staff (Faculty, computer technicians, tutors, instructional designers and assistants), lack of engagement with key stakeholders, the absence of policies and procedures in place for implementation and lack of integration of the traditional approach with the online approach (Singh & Padayachee, 2017, p. 32). Other researchers raised questions around whether BL and e-Learning technology are user-friendly, how logistical issues for staff and learners would be addressed, as well as access and data costs; how do staff would use textbooks and whether they were available; what perceptions surrounded it and what its intrinsic and extrinsic motivational factors were. (Ibrahim, 2019; Tshabalala, Ndeya-Ndereya & van der Merwe, 2014). Further concerns surround the staff development, motivation and readiness and attitudes and beliefs surrounding this approach, and whether instructor interactions with technology are a factor in its success. At DUT, the question of whether the institutional environment was conducive to online teaching and learning, was a key one: ready-or-not, this was the way forward. The applicability of these critical questions to staff at DUT and in the FAI had to be considered, as well as the readiness to embrace this approach. This paper attempts to share the path taken in the learning curve that ensued, to contribute to an understanding of how crisis was managed, and how the research approach taken, was beneficial. This paper was based on the opinion that navigating a new approach would potentially impact teaching practice in the long-term.

Mahesh (2017) summarises the challenges:

> The first is teaching staff development; individuals who prefer traditional methods of knowledge dissemination may resist e-learning. Second, e-learning technology faces the possibility of being abandoned if it is not user-friendly. The third challenge relates to the logistics of

students' access to the technology. Vast numbers of students from different faculties and departments need access to computers or mobile devices with an internet connection and data to obtain lecture notes and videos, as well as to complete assignments and access virtual labs. For one student registered for four to five modules in a semester, this might be slightly overwhelming. It is also likely to cause a bottleneck at local area network facilities. Tied into this is the compatibility of e-learning technologies across electronic devices. Smartphones and small tablets might be increasingly used by students during lectures and to manage small tasks while on institutional grounds, but are not a suitable mode of learning for completing assignments or participating in a virtual lab scenario. Finally, blended learning (BL) needs to be balanced with direct contact sessions with students with regards to the number of credit-bearing notional hours a module is worth.

Prinsloo and van Rooyen (2007, pp. 51-52) in their study on the viability of BL as an option for teaching in second year Accounting at Unisa, affirm the need for an online learning environment in BL, while simultaneously acknowledging that access to online environments is cause for concern in the SA context. Including different technologies and strategies into a BL approach is futile if students are unable to **access** these technologies and strategies. The question of access to these support services and technologies often overshadows other concerns such as the essential integration of these technologies in creating sensorily and conceptually rich environments for active learning. Merely adding another technology or sending out more material does not necessarily increase students' chances of success.

Despite finding resonance with these challenges, which have been articulated in the literature for a few years, the FAI also had some distinct advantages such as:

- Its acclimatisation already with e-learning technologies and BL (most staff members have been using MS Teams and Moodle for a range of activities);
- Most staff have been utilising Moodle as a repository;
- It has a supportive environment (IT labs);
- Its good level of preparation in terms of materials for the semester;
- The work for the 10 to 12-week semester that needed to be covered had already been reviewed and reported on internally.

However, the following specific challenges with e-learning technology, all complex and multi-facetted, were also identified:

- The problems introduced through remote teaching include both technical and financial issues:

  poor network connectivity, bandwidth issues, dwindling data, data and WhatsApp costs and the absence of devices.

- The difficulties experienced by staff and students in adapting to the present situation, with the e-learning technologies available (Moodle, MS Teams, etc.).
- The differences between undergraduate students and postgraduate students, which should guide support offered, without giving preference in terms of budget.
- The apprehension of students over funding issues, safety issues and technology issues.

- The focus on staff preparation for delivery needs to be complemented by that of students as recipients (as mentioned): student needs (for example, where they do not have a device, in rural areas where no access to technology is available, or where they require skills to navigate the new delivery mode) have to be attended to in the first instance, all at the same level; students should also not be simultaneously over-burdened with assessments.

- The acknowledgement that in some modules, at 2nd, 3rd and 4th year level, continuous assessment is not ideal, given the type of work that the discipline requires.

- The challenges posed by synchronous/asynchronous options.

- The options for addressing the needs of students with learning disabilities and limited resources and the need for concessions to be made on a case-by-case basis.

- The lack of availability of textbooks in some cases.

- The acknowledgement by the Faculty that a 'one size fits all' TLA response is impossible to achieve.

Grappling with these challenges in several Faculty and Executive Committee (Exco) meetings, all held on Microsoft Teams during the height of the lockdown period in South Africa (April 2020), led to a tacit understanding that the Faculty had to meet them head-on, to the best of its ability. It understood that whatever framework was devised or whatever steps were taken, they would need to be reviewed; moreover, the whole endeavour could prove to be a back-and-forth exercise with national and the Department of Higher Education (DHET) directives still anticipated (in the last week of April, after a month of work from home). A flexible BL TLA framework was subsequently drafted for the Faculty for Semester 1, 2020.

In South Africa, the past five years have been fraught with crisis in funding and philosophy, leading to HEIs re-determining their strategies, culminating in the #FeesMustFall campaign and closure of several institutions nationally, making contact learning an impossibility. One direction was to embrace information communication technology from direct contact to digital teaching and learning platforms. In some cases, BL, broadly understood to mean the integration of modern technology to boost traditional contact-based learning to allow for the timely and effective completion of the curriculum, was adopted. For Prinsloo and van Rooyen (2007, p. 51), "Blended learning refers to the use of a variety of technologies, pedagogies, contexts and delivery modes (such as online learning) to create a strategic mix that will increase student success". While the literature reveals that no model for BL has been devised, nor has enough research conducted on efficacy, it has taken various forms. At the University of Pretoria, the hybrid approach is proving that those exposed to BL online options outperform those who work in a completely contact or an online only environment. While some research (for example in Ndaba's description of experience at UKZN in *Blended Learning Study Scoops Award at Research Day, 2020*) indicates that it is not the preferred option, arguing that among other factors, its success depends on students' willingness to learn in a BL environment. Others see great potential for BL in the era of the 4th Industrial Revolution (4IR) and artificial intelligence (AI).

Oakley (2016, p. 67) asserts that:

> BL is an effective approach to the passive knowledge engagement of a massive number of students, which also increases learning outside the traditional face-to-face learning environment…If adopted appropriately, then BL can turn HEIs into a more flexible and agile state to quickly adapt to contextual changes, in a cost-effective manner.

Options for BL have ranged from bimodal delivery (face-to-face plus

technology-mediated) to what has been termed 'flipping the classroom' and have historically encompassed six "models", which Staker and Horn (in Bryan & Volchekova, 2016, pp. 25-26) reduce to four: rotation (learners rotate from online to classroom-based work), flex (mainly online with an individual tailor-made schedule, with face-to-face support as needed), self-blend (online module supplementing class-based work, on or off-campus) and the enriched virtual model (mainly online with occasional contact).

BL options flip the process of learning from the traditional first exposure to learning matter in the classroom, face-to-face, to learners first gaining exposure to new material via reading from information and communication systems online, then using contact (online or face-to-face) for assimilation of knowledge via review, problem-solving, discussion and assessment.

In terms of Bloom's revised taxonomy (see Anderson et al., 2001), this means that students are doing the lower levels of cognitive work (gaining knowledge and comprehension) outside of class, online and focusing on the higher forms of cognitive work (application, analysis, synthesis and/or evaluation) in class, where they have the support of their peers and instructor (Brame, 2013). A team from the University of Western Sydney (2014) offers a useful guide for using Bloom's taxonomy in BL through the constructs 'Understanding, Remembering, Creating, Evaluating, Analysing and Applying', matching them with multiple learning activities through technology. Despite the literature on BL and its use and usefulness in SA higher education in particular, the challenges thrust upon staff in the Faculty were new and exacerbated by the Covid-19 pandemic: a scoping review was necessary to determine what would be the best route.

With the onset of lockdown, studies on how universities were responding have proliferated, noting the impact on teaching and learning. Motala and Menon (2020) provide a critical reflection of the impact of Covid-19 University of Johannesburg as a case study, which captures the dilemmas faced nationally in Higher Education, referring to this as the 'new normal'. Hedding et al. (2020, p.1) observed: "In addition, COVID-19 has compounded the difficulties experienced at some universities in South Africa which were negatively impacted by staff or student strikes at the start of 2020. An encouraging aspect of this exercise is, however, that the shift to online teaching forces academics to truly interrogate and re-evaluate their curricula. It encourages a move away from 'rote learning' to focus more on problem solving, critical thinking and applied understanding by using a holistic and integrated approach, because traditional assessment techniques are no longer viable". Thus, the complexities of how the normal, daily patterns of learning are transformed through technology, as noted by Lowenthal, Borup, West & Archambault (2020) amongst others, have to be acknowledged. It is against this backdrop that the Faculty embarked on its mission to establish a Teaching and Learning Framework most suited to the conditions of lockdown, and its disciplinary bent.

RESEARCH METHODOLOGY

The aim of this study was to track, monitor and capture the perspectives and challenges faced by the call for continuity of academic business during crisis, specifically the Covid-19 lockdown in 2020, as well as the process leading up to the proposal of a Teaching and Learning Framework for the FAI. The Faculty itself is thus the unit of analysis, the stakeholders (or 'sample') being the Executive Committee (Exco) comprising 14 members, with 7 Heads of Department (HoDs) representing the views of their departments. The Executive Dean presided, and the e-Learning specialist, Research Chair, Third Stream Income/Industry Co-ordinator, Officer, and Quality Promotions Officer contributed to ongoing debate. The community (or 'population' of the study) was the entire Faculty (comprising 99 academics). HoDs reported that given the critical nature of the situation, departmental staff were generally in full attendance at their meetings, except when hampered by connectivity issues. The context demanded that all staff adapt and

develop set plans in response to the current situational crisis and to put in place an *ad hoc* measure for the semester that would work, bearing in mind its potential extension into the next semester. Over and above these goals, the Faculty was intent on doing whatever was possible and constructive to ensure continuity of the academic programme. Thus, a scoping review of established delivery methods and prospective ones, under the lockdown conditions, was necessary.

This is a qualitative study which took a participatory action research approach (PAR). PAR emanates from the paradigms of critical theory and constructivism, and is useful for organizational or institutional self-assessment, where the subjects "participate with the professional researcher throughout the research process, from the initial design to the final presentation of the results and discussion of their action implications" (Whyte, 1989, in Danley & Langer, 1999, p. 1). It is associated with action research (it leads to change), evaluative research (assessing strengths and weaknesses) and participatory research (where stakeholders are participants, who take ownership of the outcomes). PAR was considered a suitable approach as the participants were seeking ways to understand the new normal of lockdown and how best to respond to it. This constitutes self-reflective inquiry by researchers and participants to gain understanding and to improve practices in light of the situation (Baum et al., 2006). The reflection captured here emanated from the Covid-19 lockdown circumstances at the onset of lockdown in SA and was in response therefore to the problems and challenges raised by the need to continue an academic teaching and learning programme. The Faculty's self-reflection is set against that of the institution, and analysis of the evolving understandings of what was best for us to do, was informed by institutional positioning.

Pain et al. (2017) aver that PAR is characterised by a joint production of knowledge and some form of action This action is propelled by reflection, the collection of data and action, a process which is iterative; it takes into account power relationships, noting the ways the researcher can become the researched (Baum et al., 2006). For the Faculty, continuous and deep reflection was necessary to assess the challenges, the preparedness of staff and students and the practicalities as well as ethical issues implicated in the action proposed: switching to an online platform and blended learning. This constituted in a change in the lives of teachers and learners, though the full impact of this is an area for monitoring.

Susman (1983) identifies five phases in action research cycles: problem identification or diagnosis, action planning, taking action, evaluating and specifying learning. It requires collective discussion of various possible solutions from which a plan of action emerges and is implemented. This collective discussion began at Exco then continued in 7 academic departments, with formal reporting at Exco again. Faculties were tasked by institutional structures to plan their strategies for dealing with the effects of the pandemic lockdown, and the FAI undertook to do so as a qualitative reflection (which is reported here).

For Winter (1989), six activities characterise action research, and these resonated with the Faculty's process: reflexive critique, dialectical critique, collaborative resources, risk, plural structure and theory, practice and transformation. These are summarised below, with reference to the Faculty's circumstances and context:

- Reflexive critique – With reference to data and documents, within a social setting, reflective critique means reflecting on issues and processes including the biases, positioning and ideological realities involved. This meant analysis of the environment, official documents, new statistics gathered, the different module offerings in Semester 1, the statistics (staff numbers and student registration numbers for each level), and the practicalities involved as well as capacities implied.
- Dialectical critique – The experiences and phenomena are conveyed and

unpacked through dialogue, taking into account all inter-relationships between the phenomenon and context, as well as factors likely to create change. Over several weeks from March to April 2020, the process of engagement continued through special Exco meetings of the FAI, in an attempt to make intelligent and equitable decisions to solve the problems everyone now faced. The Faculty process was dialogic and within a dynamic context, as it found itself on the threshold of instituting a major transition to online teaching and learning.

- Collaborative Resource – All participants become researchers as they collaborate in interpreting the context and finding solutions, learning from one another's experiences and insight. Heads of Department (HoDs) from Exco regularly cascaded information down to their departments and offered feedback at the next Exco meeting. Thus the Faculty HoDs and academic staff were participants whose experience of the change to online teaching was documented formally and presented to Exco as a collaborative resource in determining the faculty's continuity plan under lockdown.
- Risk – The ensuing change process can cause upheaval in changing known ways of doing things, generating fear, lack of confidence and instability. However, the process itself is geared towards encouraging participation and learning. In determining the best way forward, both individual and group discussion ensued, with many reservations and concerns raised (as discussed). Decisions and plans tabled regularly, even as further directives from the university and government were issued, creating an atmosphere of uncertainty.
- Plural Structure – Multiple views, perceptions, interpretations and proposed actions are engaged with as part of the research process. Different solutions can be proffered and evaluated. At Exco, given the range of problems to be addressed (logistical, financial, policy, access etc.) and the different views and plans proposed, task teams eventually evolved to focus better on problem-solving and capturing the best way forward.
- Theory, Practice, Transformation – Research in this way leads to theory, which leads to practice, which leads to transformation that is ongoing. Learning is continuous, as practice is monitored and evaluated in ongoing cycles. The Faculty finally came to consensus on the Teaching and Learning Framework for the Faculty, which was to be tabled by the Executive Dean to the Executive Management Committee of the institution. This wholly different plan, away from traditional, contact teaching, would be subject to final institutional decisions, then effected by June 1, and all aspects would be monitored.

OUTCOMES

In reflecting critically on the approach to the crisis faced, considering BL as an option and proposing a framework for the Faculty, the following key questions were raised repeatedly to guide us:

- Does the Faculty have the environment for BL?
- Does it have the right instructor attitude?
- Does it have the materials for new modes of delivery?
- Was staff confident in handling different modes of delivery?
- Were students confident and equipped to handle different modes of delivery?

The responses from departments to these questions were hardly a resounding "Yes" at this stage, but the intention was to adapt and develop capacity and competency in response to the situational crisis and to put in place an

ad hoc measure for the semester that would work, thereby ensuring continuation of the academic year. The teaching and learning lives of all needed a dramatic change, made clear by Minister Blade Nzimande: "Critical interventions put in place include the development and implementation of effective multi-modal remote learning systems (digital, analogue and physical delivery of learning materials) to provide a reasonable level of academic support to all students at all institution. All institutions will continue to offer training and support to academic staff and students in respect of the necessary technologies and mechanisms required to support online and multimodal teaching and learning" (Government SA, 2020). Over a period of a month, the Faculty crafted and proposed its ubiquitous teaching, learning and assessment plan.

Ubiquitous Teaching, Learning and Assessment

Thus, the results of the research and reflection on how best to achieve Faculty goals were gained from an analysis of the situational factors pertaining, the institutional directives and appraisal of the context specific to the Faculty. The process led to the formulation of a TLA framework for the Faculty. The framework proposed comprises flexible BL with remote teaching, contact teaching, learning and assessment to foster ubiquity. A collaborative, supportive, structured and flexible learning process (see Public Universities with a Public Conscience, 2020) was proposed, guidelines for which are outlined next.

Remote Teaching

Remote teaching, it was agreed, would take place in both synchronous and asynchronous modes. MS Teams and Moodle Learning Management System would be mainly used for remote teaching. Any endeavour of remote teaching must have low data requirements so that under-privileged students are not disadvantaged. Lecturers and academic support staff should prepare for remote teaching and resources (some suggested by the Council for Higher Education, such as The Remote Teaching Guide from UCT (n.d.), could be accessed immediately. Likewise, the Centre for Learning and Teaching (CELT) at DUT was suggested as a resource. The following guidelines for remote teaching were proposed:

- Provide an opportunity for students to gain first exposure prior to class.
- Provide an incentive for students to prepare for class, with the kind of feedback that grading for accuracy usually provides.
- Provide a mechanism to assess student understanding.
- Provide in-class activities that focus on higher level cognitive activities.

The following technology platforms, after much debate, were proposed for facilitating teaching and learning:

Moodle

Subject lecturers could post slide presentations, practical workbooks, tutorial questions, assignments and projects for Semester 1 on the Moodle e-Learning Management System. Moodle could be used interactively for quizzes, self-tests and online discussion forums.

WhatsApp

Given the lack of connectivity for e-learning mediums, students were found to be more accessible on their mobile phones through 3G and 4G connectivity. Lecturers could contact class representatives on the WhatsApp groups and package learning material in the WhatsApp format for distribution to class representatives, who in turn could send out to student WhatsApp groups.

Microsoft Teams

All staff had Microsoft Teams installed

on their laptops. Lecturers were encouraged to use Microsoft Teams as a back-up to Moodle. Online consultations with students could be conducted using Microsoft Teams, which worked well for large sized classes. Microsoft Teams could also be used for supervision of postgraduate students and staff meetings as needed.

Video Production

Staff were encouraged to create videos of contact lessons so that syllabus coverage could continue in a distance learning format. Two open-source applications that are quick and easy to produce videos are Screencast-O-Matic (short videos) and OBS Studio (long videos). The software is very effective. Once a video was produced, it could be uploaded to Moodle, Microsoft Teams, WhatsApp and YouTube.

The software was freely available online from: https://screencast-o-matic.com/screen-recorder and https://obsproject.com/

OneDrive

Staff had been using OneDrive for the collection of projects and assignments and could continue to do so. OneDrive had ample space (one Terabyte) and was available from https://products.office.com/enus/onedrive/online-cloud-storage.

Contact Teaching

Contact teaching would be restricted in accordance with the social distancing regulations and the provision of suitable university conditions. The guidelines for contact teaching proposed were:

- Provide for small classes of 20 to 50 students and less.
- Provide tutorial support for small groups.

To facilitate both the teaching and learning options above, support would be provided for students who did not have online access:

- One flash drive distributed per student to store learning materials.
- Hard copies of material provided to students with no access to devices.

Given the flexible approach taken departments could choose how best to make material available to their students.

Assessment

Unprecedented times generated by the Covid-19 crisis called for unprecedented measures in assessment. There was clearly a need for the Faculty to shift its assessment paradigm drastically, as social distancing literally means no invigilation, examination halls or large numbers. Online assessment implies re-designing assessments, the restriction of time, open-book assessments and consideration of how best to test where contact assessment has historically been regarded as optimal. It means reviewing the weighting, design and type of assessments, digitising assessments (linking on Moodle and OneDrive, for example) and advertising for students in good time the dates, times, type and scope clearly. Guidelines for both assessment and moderation were drafted to be adapted for use by departments.

Continuous Assessment

While acknowledging that the university would have the final say in terms of the calendar, programmes and assessment, the Faculty proposed that examination for this semester would be completed based on continuous assessment. This was seen as a once-off measure and the assessment policy of the Faculty would stand thereafter, with gradual integration on resumption of full-time lectures and systems institutionally and possibly a summative assessment by the end of the year for Semester 2 modules. The guidelines for assessment were as follows:

- Assessments could be major or minor.

- Two major assessments were compulsory with a minimum weighting of 30% per assessment.
- Lecturers could re-weight assessments in line with the changes to the assessment plan, which varied across subjects in the Faculty.
- New assessments would be introduced, in the form of online assessments or contact assessments.
- Major assessments could be focused on specific section/s of work or consolidated with the entire semester's work.

It is germane to note that if an institutional decision on contact assessment was made, departments could adapt the arrangements for examination conditions that were to be made by Examinations and other support services were to ensure social distancing and no risk to staff and students. A range of possible assessment types were identified: tests, multiple choice questions, group projects, assignments, quizzes, essays, oral presentations, portfolios, reflections and practicals with workbooks. For the Faculty to grasp the nature of both the shift required and the flexibility the framework offered, Table 1 offered an example of an assessment plan to be adapted by departments across all subjects.

Table 1: Example of an Assessment Plan

Subject	**Theory in Professional Practice**				
Code	TIPP301				
Lecturer/s	X				
Weightings	30%	10%	10%	10%	40%
Assessment	Major	Minor	Minor	Minor	Major
Type	Group Project	Quiz 1	Quiz 2	Short Assignment	Test
Platform	MS Teams	Moodle	Moodle	OneDrive	Moodle
Dates	13/05	20/05	27/05	09/06	12/06

Moderation of Assessments

For clarity and common understanding within the Faculty, the following terms were defined:

- Final mark – the final mark as calculated using the 'course mark formula'.
- Assessment (major, minor) – any mark that contributes to the calculation of the final mark.
- Replacement assessment – also known as a make-up test (for doctor's certificates, death certificates, etc.) and to be administered at the discretion of the lecturer. A replacement assessment can replace any mark in the original final mark calculation.
- Reassessment – Final reassessment – replaces a supplementary exam and is 100% of the final mark. Supplementary rules apply in that a distinction will not be awarded.

The proposed guidelines for moderation were as follows:

- A minimum of 60% of the 'final mark' is to be moderated, according to the formula for the 'final mark'.
- Moderators' reports will be filed for the moderation of a minimum of 60% of the final mark (however the 60% is made up).
- Exit level modules will be externally moderated following these same guidelines.

The reassessment of missed assessments would be conducted as follows:

- The implementation of replacement assessment/s (commonly termed a make-up test) for any assessment missed with a valid doctor's certificate or other reason would be allowed for in the formula for the final mark.
- A student would be given one opportunity to take a replacement assessment.
- A student with a final mark below 50% could attempt a final reassessment that replaced their previous final mark, essentially a supplementary exam that is 100% of the final mark.
- Students would be given one week's notice of the final reassessment date and time.
- The reassessment could take place in the classroom during regular class time or remotely, using digital platforms.

DISCUSSION

While this TLA framework looked good on paper, the writers felt acutely the practical challenges that would loom with phased-in resumption. The perennial question raised its head: how would the Faculty enable contact with large classes, while observing social distancing and other health precautions? The whole gamut of issues preceding the crafting of the TLA hit the Faculty again in full force. Who would it bring in first (students and staff) and why? Does it have adequate lecture halls, venues and labs ready? Should it consider an annual exam at the end of Semester 2 rather? What was the institutional position on obtaining devices and zero-based data for students? What if different campuses were at different levels of risk? Would it be able to save the academic year? The pervading sense of the seismic shift at hand was sobering, even as it was acknowledged that a plan was necessary, that some action was needed.

Phased-in Resumption Plan

In the researchers' analysis, they noted that the process of teaching, learning and assessment in the digital world of today is not only focused in the physical classroom but has moved education activities to the virtual environment facilitated using digital tools, resources and platforms to create a new learning culture and improve learning outcomes. This was in line with the SA White Paper on Education and Training (1995), which detailed the use of multimodal methods for teaching and learning. The Faculty concluded that by using BL supported by frugal technology, it would be possible to implement phased-in resumption effectively. The most critical decision, however, was how to equip students for BL. The Faculty Exco considered an environmental scanning exercise to help in the planning of the phased resumption. Different factors then informed the decision of Exco, such as staff access to laptops, level of the lockdown, class size, social distancing, syllabus coverage, at risk students, government legislation, regulations and frameworks, social exclusion, computer facilities for students and workforce.

Weighing these factors up carefully and once again acknowledging the probability that further changes could be made given an institutional stance, the Faculty then proposed that it would resume learning activity with first year students who constituted less than half of the student population. The rationale was that they were traditionally regarded as undecided, at risk and at the foundation level; building that foundation was critical. Moreover, they were

more easily managed, unlike the final year students who were already familiar with the university rules and could work with minimal support. Consequently, Table 2 shows the first year modules selected for phase one resumption.

Table 2: Phase 1 Resumption Modules

S/N	Module	Class size
1	Financial Accounting 1	800
2	Internal Auditing I	250
3	Taxation I	300
4	ICT Application Development I	800
5	Higher Certificate	250
6	Cost Accounting I	890
7	Application Development IA	300
8	Business & Information Management I (PMB)	60
9	Management Accounting I (PMB)	60
10	Diploma in Accounting I (PMB)	100

Next Steps

During the first phase, the next steps for departments as per CHE directives communicated to the Deputy Vice-Chancellors of academic teaching and learning at public HEIs (2020) and the Faculty's TLA framework, included:

- Departmental arrangements with CELT for staff training on online teaching and learning (Team Curriculum Conversations were subsequently scheduled on a regular basis).

- Preparing and uploading material, using the resources available well in advance before the online teaching or assessment.

- Engaging in dialogue with students, especially those in first year, who are not acclimatised to the university system at all and who may have more challenges than others, to ensure inclusivity and to discuss the plans being put in place to complete the semester.

- Locating students who may not be able to access learning material to advise them of the Faculty's support (flash drives).

- Reviewing materials and assessments in order to ensure delivery that is both appropriate and of a high quality.

- Advertising assessment plans to students using Moodle, Facebook, departmental websites and other channels.

- Ensuring safe teaching and learning spaces.

- Ensuring that the necessary screening takes place before any contact sessions.

- As in action research, the results of the plan would be reviewed after implementation to assess success, an ongoing process of refinement depending also on the length of lockdown.

These steps were shared with departmental staff members with critical feedback offered at the next Exco. Thus, the analysis of the chosen path by the Faculty revealed that there were more complexities regarding the requirements and steps to be taken on a practical level and to ensure equity and adequate support to both students and staff at all times, in effecting the framework. The challenges such as the time factor in preparing materials and upskilling staff, accessing students and their representatives and making materials available to those who had no access to technology, were just the tip of the iceberg. Complexities were mounting and involved ensuring the integrity of online assessments; the issuing of devices for online learning like USBs and headsets under lockdown restrictions; the unstable Moodle platform (the institution was having load issues and a new Moodle server needed to be purchased); device affordability for the online platform; ironing out data issues for university purchased data bundles and the difficulties associated with implementing an online tutor systems for leaner support. It was necessary to make drastic changes to assessment modes to Continuous Assessment, with consideration subsequently for make-up tests, the submission of Academic Programme changes for ratification, and the concerns around what exams could be scheduled and the logistics, including sanitisation, of those venues. The personal and social implications of online interaction and the need to accommodate different learning styles presented another challenge. Monitoring and evaluation processes of new modes were necessary. The sense that we were all jumping too quickly into a new mode without considering all its implications was ever-prevalent. Day-to-day activities were demanding quite different skills-sets. In short, the *lives* of learners and staff changed. All these dimensions of change and the extent to which the proposed TLA framework was applied successfully, remained a matter for continuous monitoring and review, and future research. Departmental management teams were to review implementation regularly to ensure quality and to address problems. The impact of this plan in action was that the aim of assuring continuity of the academic year was achieved. Business continuity in the Faculty was assured, but the question remains as to its quality and long-term benefits. The institution's other faculties were in the same boat, facing the same challenges but striving to meet the directives from the Teaching and Learning Directorate at DUT and the DHET. Staff were anxious but willing to salvage the situation and make a success of it, through a process driven by HoDs. Data packages for online work and devices were provided to staff and students. The lines of communication with students remained open. Academic Programme changes were formally motivated, approved and implemented. Training for staff on the new modes were scheduled regularly and networks of support made available. On a larger scale, a COVID Task Team to deal with COVID protocols was instituted, offering almost daily updates and feedback to the entire community; the academic calendar was revisited and revised, and budget interchange to support online learning activated, while seeking further funds to support students and staff.

CONCLUDING REMARKS

The Covid-19 pandemic at onset, particularly, clearly posed challenges that required innovative and drastic measures

from all sectors globally. Higher education continues to face some unique challenges and these are keenly debated and felt at DUT. The FAI, led by the Executive Dean, delved deep into the circumstances, the challenges and the options available to enable continuity of the academic programme during lockdown, against the larger context; its self-reflective inquiry led to action and changed lives. Its teaching and learning framework took a BL approach, while cognisant of the challenges for both staff and students. No doubt the complexities of the crisis will continue to unravel, opening up further areas for monitoring and evaluation in particular. Meanwhile, departments have readied themselves for online teaching and are encouraged to share information and expertise, thus developing the culture of helping in a crisis. This, the Faculty felt, was the least anyone could do, for now, for continuity under the Covid-19 crisis at DUT.

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