

Higher Education Response to COVID-19 in Uganda: Regulatory Tools and Adaptive Institutions

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INTRODUCTION

Higher education (HE) systems and institutions have embraced virtual means for continuity of the core activities during the COVID-19 pandemic. The COVID-19 pandemic has affected the governance of teaching and learning in unprecedented ways with the emergence of new regulatory frameworks to steer teaching and learning. Higher education institutions (HEIs) in different countries have adapted to the changes coordinated by national accreditation agencies to sustain the interface between HEIs and different stakeholders (Nandy et al., 2021). In sub-Saharan Africa, there was glaring evidence of unpreparedness of the HE systems to remain open and deliver teaching and learning during the pandemic. Most of the

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systems were closed as HEIs retreated to audit their infrastructural and human resource capacities as well as student readiness (Mtebe et al., 2021; Osabwa, 2022). Uganda was no exception in this regard.

Teaching, as one of the core mandates of HEIs, encompassing curriculum, delivery methods technologies, assessment, learning experiences and related student support services were reimagined in Uganda during the COVID-19 pandemic, as cited elsewhere by scholars such as Hattke and Frost (2018). Regulatory tools such as the Open/Online, Distance and e-Learning (ODeL) guidelines are policy instruments initiated by buffer bodies such as the accreditation and quality assurance agencies and to which HEIs have responded (Scott, 2018). This form of shared governance in teaching and learning has been a consequence of the developments associated with New Public Management (NPM) or neoliberal reforms beginning in the 1990s (Bisaso, 2017). The reforms granted HEIs autonomy in academic matters but increased accountability demands to the state and the market.

The National Council for Higher Education (NCHE) in Uganda was established by the Universities and Other Tertiary Institutions Act 2001, to regulate the HE sub-sector through programme and institutional accreditation processes, including licensing private universities and recommending the establishment of new public universities. It also contributes to knowledge generation through tracer studies and the annual reports on the state of the HE in Uganda (Bisaso, 2010; Kasozi, 2016). Under this neoliberal dispensation, the governance of teaching and learning at the institutional (meso) level has been transformed to include the university council and its committees, for example, on quality assurance; the university senate; and the college/faculty/school boards and associated committees. Managerial governance has been strengthened through the office of the vice chancellor, the deputy vice chancellor, academic affairs, the principals, the deputy principals, deans, associate deans, heads of department, and the non-positional leadership category comprising programme coordinators, course coordinators, timetable coordinators, examination coordinators (Bisaso, 2010) and recently, e-learning coordinators. However, previous research has questioned the efficacy of such shared governance in universities in Uganda albeit at the level of university council (Nabaho, 2019).

Tackling the COVID-19 pandemic by the governments of the United States, where the effects of COVID-19 were more devastating, and China, which was the pioneer country to report COVID-19 infections and

pronounce restrictions including travel, included taking a multi-level governance approach anchored on both national policy coordination and responses by subnational structures, actors and initiatives (Liu et al., 2021). Apparently, HE governance and policy are increasingly becoming multi-level and multi-actor because of the changes associated with New Public Management (NPM) (Chou et al., 2017). One of the ways to assure the uptake of policy under multi-level arrangements is to blend the top-down approach (e.g., regulatory tools) and the bottom-up approach (e.g., implementation by the institutions) (Gaus et al., 2019). Ordinarily, on the face of it, the meso level will endeavour to respond to the macrolevel priorities. However, multi-level strategies can also elicit responsiveness at different institutional levels within the HEI as such levels attempt to meet their respective and sometimes peculiar stakeholders' interests (Stensaker & Fumasoli, 2017). Certainly, the demands of regulatory agencies may not be responded to by only the institutional (meso) level but are rather cascaded to the micro level as well. Therefore, as the ODeL Guidelines are responded to by the institution, it is at the level of the academic unit (school or department) where accredited programmes of study are hosted and the academic staff who are key implementers are appointed/ hired. Accordingly, the key question that would be posed in the situation is, what were the responses of HEIs to the regulatory tools on the delivery of academic programmes through Open, Distance and e-Learning (ODeL) during the COVID-19 pandemic? By default, the hierarchal structure of HE governance hinged on the constructs of central authorities (the regulatory body), which created the framework and under which universities and other HEIs organised their responses. The next sections highlight the theoretical perspective, the methodology, results, and discussion and conclusions, respectively.

THEORETICAL PERSPECTIVE

The study is informed by neo-institutional theory (DiMaggio & Powell, 1983) which argues that the survival of organisations hinges on their capacity to respond appropriately to environmental pressures. First, the "coercive forces" are reflected as state influences or mechanisms to respond, exemplified by the emergency guidelines on ODeL, designed and rolled out by NCHE. Indeed, the guidelines can be considered "coercive forces", since this was not a selective undertaking that any HEI could either choose or not, but rather a directive issued to the existing HEIs to

adhere to, as a means of ensuring continuity of learning during the COVID-19 pandemic. HEIs therefore had limited options, but to respond to the call, although feasibly only for those capable of doing so. Second, the chapter analyses the mimetic forces through which institutions model their individual strategies to adapt to the ODeL system. Third, the normative forces where established parameters of ODeL appropriateness to which universities comply are examined. As a complementary framework, multi-level governance (MLG) (Fumasoli, 2015) is used to analyse how the different actors perform different roles that may create or contribute to the tensions.

There are three elements in the MLG framework adapted to understand how the actors have participated in the operationalisation of ODeL. First, there is the organisational structure in which actors are situated and derive an informal or formal mandate to act. As universities opt for ODeL, structures emerge to coordinate or formalise the operationalisation of ODeL within the university. Whereas establishment of such structures is a requirement of the regulatory framework, how different actors execute their roles to operationalise ODeL will vary in centralised and dispersed structures. The design of the MLG framework recognised to a large extent the principles of institutional autonomy and academic freedom, meaning that while it (the framework) set its baseline requirements, in essence, the adaptation by each university or HEI was premised on its existing capacity, needs and other attendant features, though in conformance to the set standards. Second, MLG highlights membership and organisational identity enacted through recruitment, induction and other socialisation processes. With new demands of ODeL, multiple actors redefine their roles and identities by either recruitment of new actors or reorganisation of the existing membership; hence new criteria, new contracts and new terms of service determine how ODeL is mainstreamed differently in universities. Third, organisational centrality contributes to the operational capacity of the university on the basis of location in a metropolitan area, capital city or a peripheral area where external actors contribute relevant resources or trigger learning as actors in the organisational interface with other actors in external organisations. Overall, as Lawrence et al. (2011) argue, institutional work, which mainstreaming of ODeL is, can and should be understood as an emergent process driven by individual and collective actions that affect institutional processes and can contribute to institutional change.

Methodology

The methodology adopted for the study entailed a qualitative multiple case study that involved analysis of the ODeL Guidelines, and the assessment tool for ODeL readiness and its deployment to the respective HEIs. A review of the applications or expressions of readiness to roll out the ODeL system by three HEIs was conducted. They included a public university, located in the capital city, Kampala; a private for-profit university located in the capital city; and a faith-based university located in a periurban setting. The public university is the oldest and largest, and it has had several initiatives to deploy e-learning in teaching and learning. The private for-profit university has a high number of international students and a sizeable student population. The faith-based university is one of the oldest private universities in the country that uses second-generation and fourth-generation distance education modalities. We used thematic analysis to anchor the elements of neo-institutional theory on the macro/regulatory tools and the elements of the multi-governance framework to elaborate the responses at the institutional (meso) level.

The Higher Education System in Uganda

Structure

Uganda's HE system has witnessed massive expansion from the 1990s when neoliberal policies were adopted and the provision of HE was liberalised, making it possible for both the private sector and state to offer it. Currently, HE includes universities, other Degree Awarding Institutions (ODAIs) and Other Tertiary Institutions (OTIs). It is worth noting that universities and ODAIs are permitted to offer programmes up to doctorate levels, whereas OTIs are limited to diploma qualifications only. According to the NCHE publication, the "State of Higher Education in 2020", the total number of HEIs increased by four up from 233 in 2017/18 to 237 in 2018/19. There are 9 public universities, 44 private universities and 10 ODAIs, while OTIs increased from 172 to 176 (National Council for Higher Education [NCHE], 2020).

Generally, the statistics show that in 2018/19, total student enrolment in all institutions increased from 261,087 to 275,254 representing a significant increase of 5.43% from the previous year. Universities still had the highest number of registered students at 192,346 (NCHE, 2020). In 2018/19, the NCHE received a total of 1206 programmes, reviewed 1141 of them and accredited 335, or 29.4%. However, the programmes accredited in 2018/19 were fewer compared to 2017/18 when 471 were accredited (NCHE, 2020).

Regulation of Higher Education

HE provision in Uganda is regulated by the Universities and Other Tertiary Institutions Act 2001, amended, which ensures the maintenance of minimum standards within the operations and functions of the HE training institutions. "Minimum Standards" cover a number of areas, including programme development, admission criteria into the training institutions, the academic qualifications of staff, and infrastructure and facilities among others. There is a strong conviction about the principles of autonomy and academic freedom of the HEIs, in which the regulatory frameworks observe the ability of the training institutions to operate above the set threshold of the approved minimum standards, below which they cannot drop. However, as indicated in the response rate of the percentage of the universities and HEIs that eventually embraced the ODeL system, it is worth noting that the design and development of many minimum standards in the Ugandan HE system tend to adopt practices existing elsewhere, including the ones set by UNESCO, among others. The challenge such requirements pose in practice is the notion of a system having set standards not being able to attained by a number of its universities and other HEIs.

HEIs are required to set up acceptable structures of governance and management with all the desired organs such as the senate/academic board, governing council, staff and student association. These institutions are protected by the respective status of individual HE training institutions in conformity with the NCHE provisions. The NCHE is the body mandated to regulate the provision and conduct of HE in Uganda. It is responsible for the issuing of licences of operation to private universities and recommends to the Minister of Education and Sports on the establishment of a public university. In addition, NCHE accredits all academic programmes offered by universities and other tertiary institutions. The Universities and Other Tertiary Institutions Act, 2001, provided for the establishment of NCHE in 2002 after the government granted institutional autonomy to HEIs.

THE EMERGENCY ODEL SYSTEM

Evolution of the Emergency ODeL System

The NCHE, a body mandated to regulate the provision of HE in Uganda, held purposeful planning meetings, virtually (zoom platform) with the heads/representatives of HEIs in May 2020, following the country's lockdown, in response to the spiralling COVID-19 infections. The meetings enabled the concerned stakeholders (the Ministry of Education and Sports, NCHE and HEIs) to review the situation and implement appropriate policies. The Ministry of Education and Sports is the line ministry that is mandated to provide oversight roles in both the strategic, policy and financial disbursement in the entire sector. The NCHE, on the other hand, is the body responsible for regulating the establishment of all HEIs (including universities), to ensure the quality of teaching, learning and research. The HEIs themselves form part of the HE value chain; they are seen as critical stakeholders, since they are the policy implementers, whose function is to brainstorm and agree on strategies for the recommencement of learning activities through alternative means.

It became apparent that the ODeL mode of delivery was preferred as the alternative means of enabling the continuation of HE in the circumstances, largely due to it being able to offer a blended approach to learning activities (both through online and physical contact). It was unanimously agreed that the ODeL system of learning provision is globally recognised; it was seen as a worthy mechanism for flexible learning, because of its numerous benefits not only as a teaching and learning system, but its focus on learners, as well as providing for continuous engagements between the instructor and learners as and when desirable.

It is important to note that the government of Uganda closed schools and HEIs in March 2020 as a measure to curb the spread of the COVID-19 pandemic. Meanwhile, the Ministry of Education and Sports, and specifically the NCHE, sought for possible alternative approaches within the existing policy provisions and drafted the emergency ODeL Guidelines with the aim of resuming learning at the tertiary education level. As expressed in the subsequent sections, there were several administrative procedures followed by both public and private HEIs in order to roll out emergency ODeL.

Overview of the Implementation of the Emergency ODeL System

Of the 275 HEIs in Uganda, a total of 47 HEIs applied and were eventually approved to roll out the ODeL system. This translates to 17% of HEIs being operational during the COVID-19 lockdown, implying that a significant proportion of the student population was involved in learning of any kind at the time, as the 17% involved the largest institutions. The implementation of the ODeL system within the eligible HEIs was premised on the applications being made to NCHE for consideration to roll out an ODeL system during the lockdown. Upon receipt of the application from the HEIs, the necessary quality assurance checks were conducted, including requiring an officer from the institution to demonstrate the institution's technological capability to provide teaching and learning remotely. If the NCHE approved the application from a HEI, permission was then granted for it to roll out the emergency ODeL system. The validity of the permission was capped at 12 months, or lasting for the duration of the crisis, as determined by the relevant authorities. All HEIs that would have been granted permission to offer the emergency ODeL were required to apply for renewal of the same at least 2 months before the expiry of the initial period of 12 months, to allow for the smooth continuity of operations, in case the pandemic persisted beyond 12 months. Moreover, the NCHE continued to monitor and evaluate the new schedule of teaching and learning, either online or physically where possible. Additionally, records of the teaching and learning sessions completed through the emergency ODeL system were required to be compiled for verification by the NCHE.

The Approved ODeL Minimum Standards

It is worth noting that prior to the emergence of COVID-19 pandemic, the NCHE had designed and approved the ODeL minimum standards, in 2019 while considering that traditional HEIs had offered programmes in the face-to-face mode of learning, where the lecturer physically interacted with learners in the delivery, practicum and discussions, among others. However, because of the increased demand for access, and the need to ensure lifelong learning through opportunities for progression, many HEIs globally opened up opportunities through the adoption of the ODeL system to operate as an additional mode of learning (i.e., before the onset of the pandemic). In addition, it was observed that there was a growing number of HEIs in Uganda that had proposed offering programmes or were already offering programmes using the ODeL mode of learning. As indicated, some universities and other HEIs had ventured into the idea of embracing the use of ODeL within their operations prior to the emergence of the COVID-19 pandemic, mainly for delivery of their learning processes, but were not to a large extent regulated by the NCHE. However, COVID-19 necessitated the need for the NCHE to holistically review its strategy on the use of ODeL by every HEI in order to assure credence of the said approach. What was required, however, was the notion that the quality of the trainee's education, whether being taught through the ODeL system, or the traditional mode of learning, was to be assured and sustained. In addition, the NCHE developed the ODeL minimum standards to aid its accreditation of the programmes to be rolled out through the ODeL means of instruction. Moreover, the approved ODeL minimum standards were designed to enable the NCHE to ensure that HEIs that sought to operate under the planned ODeL arrangement met the required parameters. In essence, the main objective of the developed minimum standards for ODeL was to regulate and develop standards for the distance and online learning mode of learning while ensuring the quality of the graduates in the learning process.

The ODeL minimum standards, therefore, provide the benchmarks for all aspects of learning under ODeL, including conventional distance education, e-learning provision and interactive CD-ROMs, blended learning and all the recognised components of virtual learning. With the minimum standards, the emphasis is geared towards the students in ensuring that quality in all aspects is not compromised. ODeL should ensure maximum interaction between the learners and the tutors, even where physical engagement is not possible. The ODeL minimum standards thus provide for, among other things, needs assessment, management of the ODeL, infrastructure and ICT support, the design of the courses and assessment of the programmes. In principle, the ODeL minimum standards were designed to guarantee the desired basic quality controls, below which programmes cannot be offered in HE. It is therefore a quality assurance measure that can be used by the national council to assess ODeL implementation by HEIs, as well as being used by HEIs in ascertaining the standard expectations for the different programmes that they offer under the ODeL mode of learning.

The Emergency ODeL Guidelines: Adaptations by HEIs

Given the widespread readiness to reopen, expressed by the majority of HEIs, the NCHE designed and provided Emergency ODeL Guidelines for enabling HEIs to recommence remote teaching and learning activities during the lockdown beginning in March 2020. The main objective of the Emergency ODeL Guidelines was to aid HEIs in resuming their teaching and learning activities remotely, since students and lecturers would be able to interact without necessarily coming into contact during the lockdown. The guidelines required every HEI intending to adopt the OdeL system, to avail to the NCHE, evidence of a number of requirements as follows, prior to consideration of their application. The existence of the COVID-19 Standard Operating Procedures (SOPs), which was issued by the Ministry of Health, was the first requirement parameter to be demonstrated by the HEIs, as a precursor for consideration to implement the Emergency ODeL Guidelines. Any HEI which demonstrated the existence of the COVID-19 was required to clarify the arrangements on the ground at the applying institution, so as to mitigate the safety concerns in case a student, staff or NCHE official did pay a visit. Whereas the initial minimum standards for implementing ODeL in 2019 provided for the existence of highlevel ODeL infrastructure to support teaching and learning, on the contrary, the Emergency ODeL Guidelines of 2020 stipulated that HEIs intending to implement ODeL in the circumstances needed to demonstrate the availability of a structure and details of their proposed ODeL model, including the equipment (e.g., flash discs, the learning management system, data provision) or the available logistical arrangements of how materials would be delivered to learners. This was because the emergence of the COVID-19 pandemic did not avail much time and preparedness for HEIs to launch and implement ODeL in accordance with the 2020 minimum standards; therefore, the Emergency provision allowed for the participation in the use of ODeL by many HEIs, due to less stringent requirements in the Emergency period.

Additionally, intending HEIs wishing to roll out the Emergency ODeL were required to showcase the list of programmes, previously accredited by NCHE, since the guidelines would only support the rolling out of accredited programmes. Furthermore, all HEIs wishing to participate in the Emergency ODeL project needed to avail to the regulator, a list of staff qualified and ready to support the rolling out of the programmes through the envisaged ODeL system and details of the students to be engaged in the new learning system. However, due to the chaotic nature of how students were dispersed during the lockdown, it was thus imperative that all HEIs wishing to participate in the Emergency ODeL arrangement provided evidence of having traced the students, demonstrated by a survey on the students' readiness for the ODeL teaching and learning as well as the learning support technologies they possessed, such as smartphones, laptops and internet access. The HEIs were also required to request an undertaking from students indicating their willingness to participate in the proposed arrangement. In the case of students being unable to access emergency ODeL teaching and learning, the institution would indicate its proposed mitigation measures of redress for time and learning lost.

What was interesting from the perspective of what the Emergency ODeL system required from the HEIs was their strategic interventions for covering the learning content missed during the lockdown. Indeed, it may be observed that the overall arrangement for the HEIs' continued operations meant that learning activities would not be reduced, but would be executed as planned, with all the initial learning contents successfully completed. To achieve the aforementioned goal, it was thus imperative that HEIs which were set to operate under the challenging conditions during the COVID-19 pandemic did not take decisions without the approval of the higher authorities, as has been the tradition. Therefore, it was still a requirement, notwithstanding the limitations occasioned by the lockdown measures, that all the participating HEIs obtain the needed approvals from their respective Senates and Councils. What was important in the circumstances was the adoption of the use of the seemingly little-known Zoom facility for hosting consultative meetings of NCHE with the available HEIs, as the only possible medium. In essence, decisions, including those relating to teaching, would not be legally challenged, since they would have been authentically done.

Moreover, to highlight the notion of availing access to learners of all categories, HEIs were required to guarantee the principle of equal inclusivity in any undertaking they proposed in the Emergency ODeL arrangement. Specifically, each participating HEI needed to avail in their applications, the principles and guidelines of how the ODeL system would run, including equity and quality assurances. This was deemed critical because the emergency ODeL Guidelines would aim to ensure that there was unhindered access to education, as afforded by new media and other technologies (phones, radios and TVs) and through blended means. Furthermore, the applying HEIs were required to provide clarity on how they would address the issues of students who were not able to acquire electronic devices, data and network coverage, since the embracement of the ODeL means of learning was in the early stages of development, prior to the lockdown period, meaning a good number of learners might not have acquired the learning features described above. Related to inclusivity, the Emergency ODeL arrangement set out the assurance of mainstreaming disability and gender in all COVID-19 response recovery actions, as non-negotiable. Indeed, this was important to underscore the level of participation by all the learners in the HE system.

The other key supporting requirements for continued teaching and learning under the Emergency ODeL arrangement was the availability of pre-training, for both staff and learners, to be offered prior to embarking on the ODeL system. The idea of doing so was to provide some induction to all participants in the perceived new way of academic activities. However, being a new dimension, the evaluation mechanism for Emergency ODeL assessment of learning activities, as a means of continuous assessment during the teaching and learning process, was deemed critical. Specifically, participating HEIs which desired to administer final examinations virtually were required to avail proof of their relevant examination control mechanisms: staff trained to deliver examinations online, security and cheating avoidance lockdown browser, face recognition software and any other relevant examination security features. In the absence of the above proof, final examinations could only be done on campus, when institutions re-opened.

HEIs were also required to demonstrate the existence of the learning support mechanisms. These included pre-recorded audios and real-time instructional support, either through phone messages or through phone calls. To aid the feasibility of the students' support, it was deemed necessary that a student's communication mechanism needed to exist, during the proposed schedule of ODeL provision. This would ensure that the voice of all participating learners reached the HEI authorities for appropriate actions.

The evolution of the Emergency ODeL system of operation was contextualised by the NCHE as a learning curve, since the entire arrangement was designed to offer a stopgap measure during the lockdown period. The NCHE method of policy and regulatory design is factored on peer-based principles, since its technical arm collaborates with the identified external resource persons, normally experts in specified disciplines in HEIs and other agencies. Nevertheless, framers of the new approach provided for some progressive features in the Emergency ODeL dispensation, including requirements for HEIs to demonstrate evidence of their ODeL capability, such as the recording and documentation mechanisms for post viewing by the learners. While the lockdown period was not indefinite, the onus was on the participating HEIs to ensure that the duration of learning activities under the new arrangement, was definitive, hence the need for the HEIs to avail a strategy of completion of the practicum, for programmes which required practical engagements such as medicine and engineering, ordinarily not possible virtually. The other fundamental requirements from the HEIs wishing to partake in the Emergency ODeL system of learning were the existence of the internal quality assurance measures, including the required human resources to provide the necessary support and the attendant budget to support the alternative schedule of teaching and learning, and evidence of the capability to mitigate cyber risks. Additionally, HEIs, under the Emergency ODeL arrangement, were required to respect the relevant laws and regulations such as the Data Protection and Privacy Act 2019.

In summary, the Emergency ODeL system of learning provided the freedom for HEIs to develop customised manuals, or guidelines, over and above the minimum threshold provided under the Emergency ODeL arrangement, but in all cases, they were required to submit copies of all proposals to the regulator (NCHE), for quality controls. These would include an action plan indicating how teaching and learning would take place, as well as assessment of how both practical and theoretical aspects of the programme would be implemented during the lockdown. At the same time, HEIs were encouraged to network with each other and exchange information and best practices, where applicable.

DISCUSSION AND CONCLUSION

This section links the theoretical perspective and the responses of HEIs to the regulatory tools on the delivery of academic programmes through ODeL during the COVID-19 pandemic.

Emerging Isomorphic Dynamics and Patterns in the Higher Education System

From the onset, the regulatory tools for ODeL consisted of a collaborative engagement between the regulator (NCHE) and the HEIs aimed at mapping out possibilities for continuation of teaching and learning as well as other activities during the COVID-19 instigated lockdown. The planning meetings convened by NCHE with heads/representatives of the HEIs demanded for the HEIs specific criteria and requirements that had to be met before the rolling out of the ODeL system. Perhaps it is such compliance or accountability demands that account for the meagre uptake of delivery through the ODeL system. The ODeL Guidelines and the criteria for assessment were developed by a team of experts from NCHE and HEIs competent in ODeL, computer science and HE, among other relevant disciplines. This points to the professional standardisation of ODeL requirements which the HEIs had to meet before obtaining permission for the delivery of academic programmes. Therefore, the HEIs engaged in institutional self-assessment based on the Emergency ODeL Guidelines and assessment parameters before submitting an expression of interest to implement the ODeL system.

Apparently the regulatory/coercive requirements only affected a few institutions that were perhaps sufficiently endowed to adapt the ODeL approaches as per the NCHE Emergency ODeL Guidelines. This was due to the fact that the envisaged ODeL system that was being rolled out was perhaps deemed not appropriate for supporting certain fields of study like medicine and engineering, which require more practical-oriented approaches. In much the same way, although there are many private universities, these thrive on tuition fees in the context of general low participation in HE and specifically, the highest number of fee-paying students is enrolled in public HE in Uganda. Moreover, private HEIs were further constrained because they had to invest in ODeL, train the teaching and technology support staff in ODeL approaches in addition to meeting the wage bill amidst a partially shut down economy.

Towards Operationalisation of the NCHE Minimum Standards on ODeL Methodologies

Through the isomorphic lens, continuity in the use of ODeL approaches by HEIs is guaranteed but as a requirement, any institutional effort to sustainably shift from Emergency ODeL to more entrenched adoption of the earlier approved minimum standards on ODeL methodologies developed in 2019 prior to the lockdown of March 2020 was encouraged by the NCHE as the regulator. As expressed in this chapter, three case HEIs in Uganda were studied and the extent of adaptation to the requirements for rolling out emergency ODeL are examined. First, the public university is the oldest and largest university in the country established in 1922. It is a comprehensive university with a range of fields of study including medicine, engineering, agriculture, law, natural sciences, business and management sciences, humanities and social sciences, and education, among other fields. In the early 1990s, the university adopted the distance learning mode to complement the face-to-face approach, hence transforming a dual mode university. Recently, some programmes delivered in online mode were mounted. Enrolment exceeds 35,000 students in approximately 200 undergraduate and graduate programmes.

Second, the private for-profit university was established in the early 2000s by an entrepreneur. It was chartered in 2009 and has two campuses: one in the capital, and the other in the western region. It is profiled as one of the universities with the highest number of international students in the country. The university is relatively comprehensive with academic and professional programmes in the fields of health sciences, law, engineering, business, education and the humanities. A total of 193 programmes were to be delivered using the emergency ODeL mode and enrolment of approximately 25,000 students. Third, the private, religiously affiliated university was established in the early 1990s by the Church in Uganda. It was chartered (the highest level of institutional recognition for private universities granted by the President of Uganda) in 2005. Since its founding, it has grown from a single campus located in a peri-urban setting to a multi-campus institution with six campuses in different parts of Uganda, namely, the south, south-west, the north, the west and the capital area. The total enrolment is approximately 5000 students on programmes offered through the distance learning and conventional modes. The university applied to deliver its 100 accredited programmes at postgraduate and undergraduate levels using Emergency ODeL in the distance learning and online modes. Ordinarily the university envisaged leveraging its academic provision on the existing network of branch campuses to ensure continuity of learning. In Table 5.1, a summary of the operationalisation by the case universities is provided.

Tai	ble 5.1 Operatio	inalisation of emergency ODeL by 1	he case higher education ir	stitutions
SN	NCHE Emergency ODeL parameter	Public university	Private for profit	Private religiously affiliated
	ODeL Policy and Institutional Readiness for ODeL	Basic standard operating procedures (SOPs) followed ODEL policy approved in October 2015 (almost 5 years earlier) Institute of Open, Distance and eLearning (IODEL) provides ODeL pedagogical support Directorate of ICT Support established in the early 2000s Directorate of Quality Assurance	Basic standard operating procedures (SOPs) followed ODEL principles and guidelines underpin the running of ODeL are in place. However, University Council was to ratify decision to roll out emergency ODeL ODeL pedagogy support drawn from School of Digital, Distance and e-Learning ICT support unit with four hired staff Quality Assurance	Basis standard operating procedures (SOPs) followed Institutional policy and guidelines approved by Senate and University Council for delivery of all degree programmes/certificate courses programmes/certificate courses in courses ODeL pedagogy support unit that had an c-Learning administrator ICT personnel were required for each branch campus Evidence of quality assurance by the
		established in 2007 Budget allocation by the University to the Institute (IODeL) for ODeL activities	Directorate has monitoring tools to support ODeL Budget funded through an international project on digital learning development	Directorate of Quality Assurance Budget allocation for online delivery but did not cater for traditional distance mode
7	Students and Staff Skills Capacity for ODeL Pedagogy	ODeL programmes offered since 1991 and staff capacity built by IODeL staff	Staff capacity development has been done in basics such as use of pdfs and PowerPoint	Staff capacity development supported by two collaborative international projects on transformative pedagogy Not disaggregated data according to duration of training or skills obtained

Onerationalisation of emergency ODeI, by the case higher education institutions Table 5.1

Students	A total of 12,428 students surveyed	Over 80% of the students	Student readiness for ODeL was at 68%
Readiness for	of whom 75% were ready for	expressed readiness for	while 32% were not ready due to cost
ODeL	emergency ODeL	ODeL approaches	and low connectivity
Approaches	Print material, Zoom e-conferencing	Remedy through compact	Remedy was to distribute hard copies at
	and so on as remedy to poor	discs and printed materials	nearest campuses
	connectivity and cost		
	Zero rating to access the e-learning	Creation of an online	Waive the ICT fee or reimburse students
	platforms, affordable hire purchase of	repository accessible to the	who had already paid
	laptops/computers	international students	
Student ODeL	Few students owning laptops and	Technology ownership by	No survey results on technology
Technology	university entered into agreements	gadget for different	ownership by the students for use during
Ownership and	for hire purchase	students for use during	emergency ODeL
Access Profile	Only 76% own smartphones and 10%	emergency ODeL was not	
	own iPads and tablet computers	evident	
ODeL Teaching	New roadmap for completion of	No clear plan for	Action plan for ODeL-Guidelines of
and Learning	semester two 2019/2020 Emergency	implementation for the 12	Remote Engagement in Academic
	Remote Teaching (ERT) introduced	months	Activities and new calendars/time tables
	to fast-track e-learning		for online learning drawn
	Plan for practicum was decentralised	Plan for the practicum takes	Approved guidelines for Practice-Based,
	to the disciplines but taking blended,	both blended including face	Lab-Based and Work-Based Learning and
	face to face and online modes	to face for small groups	Assessment during COVID-19 period
	No conclusive inclusivity plan but had	No inclusivity plan for the	No written plan or guidelines for
	the idea of purchasing assistive devices	virtual learning environment	inclusiveness of staff or students with
			disability
	Zero-rated access to MTN or Airtel	Equitable access is through	Equitable access to the internet for
	networks for institutional system	alternative formats, for	learning using the platform was
		example, CDs and print	zero-rated by a telecom company MTN
		materials via post	(Mobile Telephone Network)
	The university bought over 100		
	Zoom licences distributed across		
	colleges for teaching and meetings		

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Tal	ble 5.1 (continue	d)		
SN	NCHE Emergency ODeL parameter	Public university	Private for profit	Private religiously affiliated
6	Institutional ODeL Technology	The University's Electronic Learning Environment powered by Moodle was used	Moodle-based Learning Management System	Customised Moodle-based E-Learning
	Capacity	Interactive platform with e-activities as a major tool	More of a content repository and less of an interactive learning platform	Platform with course shells but no content and interactivity. Other platforms used: Google Classroom, Zoom
		Adequate bandwidth depending on the number of users	Low threshold of bandwidth for the 25,000 students	Bandwidth is adequate for current users but not for the entire student population
	ODeL Learner Support	Interactive study materials, communication through a dedicated institutional email address, Twitter, Facebook, Instagram, YouTube platforms, student WhatApp pages as well as College-based social media pages.There are staff assigned the	Notifications are sent on phones when notes are loaded on the platforms, WhatsApp groups for students are in place, personal phone calls and so on.	Sensitisation before use of new tools. Use of emails, WhatsApp forums, telephone calls, Catholic Radio stations to popularise ODeL
8	Assessment and Examination in ODEL Delivered Programmes/ Courses	Online summative assessments, non-graded tasks, for example, take-home assignments, reflections through e-portfoliosPractical examinations in the sciences done at the respective field centres in observance of SOPs	Case study methods, open book examinations and online quizzes are built into the learning management system	Capacity building in online assessment is needed

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The three case universities had to respond to the eight parameters of emergency ODeL as set out by NCHE before permission would be granted. For instance, the universities studied had organised structures for the planning and execution of their ODeL system. The implementation of ODeL was done by institutional management but with evidence of ratification by the University Senate and the University Council (governing board). Where an institution had not met this requirement, the NCHE was advised by the assessors to defer the granting of permission until the requirement was met. This is possibly an indicator of multi-level governance of the teaching and learning function in universities where participation ranged from developing new policies, and new guidelines and operationalisation. Appropriation of the often-limited resources would necessitate a multistakeholder approach and response including the regulator, the Ministry of Health, telecommunication companies, commercial banks and other entities; hence this enabled the continued use of the adopted ODeL approach, by the respective institutions. All three universities adopted Moodlepowered learning management systems which had been customised to the contexts. However, there was limited interactivity, hence making the systems more content depositories. Moreover, the bandwidth was inadequate creating unstable connectivity during peak periods of teaching, assessment or uploading course materials by different users.

Equally important, by the time of rolling out of the emergency ODeL, there was no clear inclusivity plan for users with disability such as the visually impaired. This was an anomaly indicating that the universities only planned to address using generic guidelines where they existed. In addition, the data on the gadgets owned by the learners such as iPads, laptops or smartphones were not aggregated making it difficult to ascertain the estimated number of learners with compatible gadgets for use in learning. Additional data on the readiness of the students for emergency ODeL was required from the private for-profit university since less than 10% of the 25,000 enrolled students had been surveyed. In the public university, it was noticed that up to 100 Zoom licences had been procured, which would host up to 500 participants at the time of teaching or webinar which supplemented efforts to use other tools like Google meet.

Given the evidence of multiple institutional commitment, resumption of teaching in universities was guaranteed and indeed the regulator (NCHE) approved emergency ODeL for 12 months, renewable for the same duration. In essence, the executive director of NCHE purposefully advised HEIs seeking extension of permission for use of Emergency ODeL approaches that "after the COVID-19 lockdown has eased, it will no longer be tenable to run the Emergency ODeL system. Instead, institutions shall be required to apply for implementation of ODeL methodologies using the minimum standards as approved by the National Council for Higher Education" (September/October 2021). Therefore, the Emergency ODeL adopted as a response to the COVID-19 challenge possibly created a momentum for sustainable uptake of ODeL methodologies, as exemplified by all the original applicants, seeking re-approvals. Furthermore, it has been observed that a number of HEIs requested the NCHE to enable them to obtain full ODeL accreditation status for their programmes instead of the emergency approval.

Multi-level Governance: New Structures for COVID-19 and the ODeL System

In the operations of the HEIs, new structures were established as espoused by multi-level governance. From the three HEIs selected for analysis, it is clear that there was compliance with the Ministry of Health's SOPs. Each HEI established an institutional-level COVID-19 Taskforce chaired by the deputy vice-chancellor in charge of finance and administration. This structure was responsible for the planning and implementation of SOPs through the purchase of necessary equipment and ensuring that there was institution-wide compliance. With respect to academic affairs, all the participating HEIs established institution-level committees to fast-track the implementation of e-learning or emergency remote learning. There is evidence that about 5 out of the 47 HEIs-granted permission to roll out emergency ODeL had approved institutional policies on e-learning prior to June 2020 when HEIs were required to respond to the requirements of the regulator.

Whereas such policies had the purpose of establishing units responsible for ODeL and ICT support, it was not surprising that such structures were either understaffed or thrived on redeployment of already existing staff, for instance, IT personnel into new roles of ODeL support personnel. This was common in the private universities or HEIs. Additional roles were assigned to the directorates of quality assurance to perform the monitoring and evaluation tasks related to delivery through the ODeL system. A combination of expertise was deployed to build capacity of staff and the students as part of the institutional responses. The effect of this was evident in the increase in the levels of awareness since it was emergency remote learning rather than the actual development of sound pedagogical materials for use in teaching and learning. Overall, the governance of teaching and learning was altered with new structures, new roles and requirements for the ODeL system. However, there were peculiarities in this pattern especially in the case of the public university whose ODeL policy had been approved and it had already established an Institute of Open, Distance and eLearning (IODeL). In addition, staff in IODeL had pedagogical and technological capacities to train staff from different disciplines to implement the emergency ODeL of the NCHE.

The implementation of the ODeL system demonstrated a drift towards engaging a range of external actors to contribute to institutional work. The HEIs were required to show compliance with the Data Protection and Privacy Act, 2019, as a measure of protecting and securing student and staff data when using the ODeL system. Since the ODeL system required access to affordable internet, the telecommunication companies signed memoranda of understanding with different HEIs to provide zerorated access to institutional e-learning platforms. Similarly, the interconnectedness between the government ministries, the regulator and HEIs shows the importance of multi-stakeholder synergies in confronting a national challenge. For instance, the executive director of the NCHE noted in a request by a HEI to roll out examinations for a cohort of students: "we emphasise to you the need for strict adherence to Standard Operating Procedures (SOPS) as issued by the Ministry of Health and to our guidelines that were circulated to all institutions" (November 2020). Moreover, communication to the students about the proposed ODeL modality was designated to the participating HEIs, who were required to pay attention to such outreach through various media including radio stations, use of the institution's customer care centre as well as the existing social media platforms depending on the category of the HEI.

Lessons Learnt from the Education Response to COVID-19 Pandemic

The adaptive strategies deployed by the HE sector in Uganda during the COVID-19 pandemic were not only unique in approach but provided a respite under the circumstances. This is because, while all sectors of the economy in the country were seemingly stalled during the said period, the evolution of the Emergency ODeL system as a mechanism of resuscitating the learning process in the HE sector meant that teaching and learning activities continued, albeit through unconventional means. Of significance is the realisation that the education process can be attained through alternative approaches, apart from the known conventional means in which learners

attend physically, at a specified facility. The outcome from the success of this approach, in which the nation enthusiastically embraced the use of ODeL in the HE sector, has become a turning point in the conduct, behaviour and perspectives of how the next generation of the HE learning processes may be defined. For the first time in the history of Uganda, the use of a virtual means of learning engagement, including assessment, was slowly accepted as a valid and genuine method. Indeed, this model could be a game changer in providing access to a number of potential learners, who would not otherwise have had the opportunity to attend their desired education because of a variety of reasons. The aforementioned success can be celebrated as a breakthrough, but there appears to be some observed impediments that require attention, in order for ODeL to be fully domesticated. For example, the challenge of internet connectivity across the country is a major barrier in enabling the full-scale adoption of the ODeL system. Uganda, like many developing nations, does not have a seamless internet connection. As a result, learners in remote locations are surely disadvantaged from the effective use of ODeL, due to either intermittent, or no network coverage at all. Coupled with the high cost of data and the supportive gadgets, the realisation of mass enrolment in ODeL is feasible in the short term. Additionally, being a relatively new concept in the country, it has been observed that in a number of cases, the potential ODeL users (students and tutors) do lack the requisite skills and knowledge in the use of ODeL.

In conclusion, the study illuminates the challenge for the NCHE where the uptake on the ODeL system by the recognised HEIs is still relatively low at the time of reporting. Clearly, it is only a handful of HEIs of different categories that can cope with or respond to the isomorphic demands of the regulatory body including the regulatory tool in the form of the Emergency ODeL Guidelines. Certainly, there is a need to build institutional and human capacity for resilience in HEIs that can cope with coercion among other isomorphic requirements. From the study, what is revealing so far, is that within the Ugandan HE spectrum, the ODeL system was adopted by very few institution yet it is the most appropriate learning alternative that should be treated as the most viable, given the uncertainty of the COVID-19 pandemic, Therefore, concerted efforts in motivating a larger number of HEIs to embrace the use of ODeL system is critical, but there is need to first understand the capacities of such HEIs to cope with the demand.

One of the lasting changes to the Uganda HE policy environment post-COVID-19 is the requirement for HEIs to apply for ODeL methodologies using the minimum standards as approved by the NCHE in 2019. Clearly, rolling out the Emergency ODeL as per the guidelines has provided a pathway for the implementation of the minimum standards. All academic/professional programmes embedding ODeL methodologies developed by HEIs and submitted for accreditation at NCHE have to meet the minimum standards. Since the rolling out of Emergency ODeL has been quite satisfactory, it is likely that HEIs will embrace ODeL methodologies. Overall, this study has illuminated an innovative and sustainable approach to the uptake of ODeL as an alternative approach to teaching and learning in HE in a resourceconstrained environment. Linking the regulatory body and the institutional responses provides important lessons for HE systems in Africa and other developing regions that may be grappling with policy implementation.

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