Interactive and Collaborative Distance Learning Approaches: A Decision-Making Framework for Higher Education in Developing Countries

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Abstract Distance learning in higher education has come a long way since the introduction of the World Wide Web in 1990. Today, world-leading universities rely on distance learning as a major source of income and a significant platform from which to deliver an equivalent standard of teaching and assessment to that of physical on-campus education. Recent advancements in information and communication technologies have drastically shifted distance learning toward being a more desirable option. In particular, following the COVID-19 pandemic, unprecedented types of remote and dual-teaching innovations were introduced and, for selected disciplines, even became noticeable competitors to traditional on-campus education. In developing countries, internet-based distance learning is still in its early stages as many countries are facing challenges and obstacles regarding its various aspects, including the level of infrastructures, the availability of electricity, power outages, lack of internet coverage, differences in network coverage between cities and remote areas, etc. Another matter of concern is the availability of skilled technical support staff to follow and manage the process of distance learning. Furthermore, many developing countries still do not recognize qualifications obtained through distance education programs, which is often essential for admission to further study, or for employment.

In this chapter, the status of distance education programs in higher education institutes (HEIs) in developed and developing countries is presented and discussed, with special focus on Syrian HEIs. The impact of the COVID-19 pandemic on the Syrian higher education system is also outlined, as well as the main challenges faced by HEIs in assuring teaching and learning continuity. The findings of a small survey on how selected HEIs in the region and in Europe performed during the pandemic, the challenges they faced in assuring teaching continuity, and their future plans regarding

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course delivery in the post-pandemic era are also presented. Finally, a decision-making framework for higher education management in developing countries to design and implement effective distance learning processes is outlined, while taking into account the various academic and technological capabilities available to these institutions.

Keywords Developing countries · Syria · War · COVID-19 · Higher education · Distance education

1 Introduction

Distance learning in higher education (HE) has come a long way since the introduction of the World Wide Web in 1990. Today, world-leading universities rely on distance learning as a major source of income and a significant platform from which to deliver an equivalent standard of teaching and assessment to that for physical on-campus education.

The challenges surrounding distance learning consist of lack of student engagement, lower appetite to learn, and other interactive and collaborative concerns regarding technologies and infrastructure. While this is mainly due to the remote nature of the learning process and delivery methods, which in most cases amount to asynchronous events, recent advancements in information and communication technologies have drastically shifted distance learning toward a more desirable option. In particular, following the COVID-19 pandemic, unprecedented types of remote and dual-teaching innovations were introduced, and for selected disciples, even became noticeable competitors to traditional on-campus education.

In developing countries, the situation is considerably different from that in developed countries. Internet-based distance learning is still in its early stages as many countries are facing challenges and obstacles regarding infrastructure, the availability of electricity, power outages, lack of internet coverage, differences in network coverage between cities and remote areas, etc. Another matter of concerns is the availability of skilled technical support staff to follow and manage the process of distance learning.

Furthermore, in many developing countries, the recognition of qualifications awarded through distance learning, which is often essential for admission to further study or for employment, is still a complex issue. Many developing countries still do not recognize qualifications obtained through distance education programs, or they are only recognized provided they meet certain conditions [1].

In this chapter, the status of distance education programs in HEIs in developed and developing countries is presented and discussed, with special focus on Syrian HEIs. The impact of the COVID-19 pandemic on the Syrian HE System is also outlined, as well as the main challenges faced by HEIs in assuring teaching and learning continuity. The findings of a small survey on how selected HEIs in the region and in Europe performed during the pandemic, the challenges they faced in

assuring teaching continuity, and their future plans regarding courses delivery in the post-pandemic era are also presented.

Finally, a decision-making framework for higher education management in developing countries to design and implement effective distance learning processes is outlined, while taking into account the various academic and technological capabilities available to these institutions.

2 Distance Learning in Higher Education Before COVID-19

According to U-Multirank data, some 60% of universities reported online learning provisions in their strategic planning prior to COVID-19, while only one-third appeared to provide full online courses in some form [2].

Before the pandemic, the evidence indicated that universities with a greater focus on the fields of education, business studies and economics, as well as larger institutions and those with a broad disciplinary scope, were more likely to offer online programs [2]. Although the majority of universities have recognized the strategic importance of online teaching, only a few have developed fully online educational programs. It is noticeable that, in the fields of engineering and science, the percentage of programs available entirely online is less than 3%, whereas it is much higher in subjects such as business studies (12%) and economics (7%). Furthermore, U-Multirank data show that the availability of interactive learning tools and digital exams is low, indicating that widespread online support has proven difficult for many universities [2].

3 Distance Learning in Higher Education in Developing Countries

Many developing countries still do not recognize qualifications obtained through distance education programs or only recognize them provided they meet certain conditions [1]. For example, in Saudi Arabia, overseas degrees studied through distance learning are not recognized; only qualifications that are studied on a full-time basis and delivered on-campus are recognized. However, in Malaysia, overseas degrees studied through distance learning are accepted if they are recognized in the home state [1].

In India, overseas degrees studied through distance or blended learning are not recognized by the Association of Indian Universities (AIU). In Qatar, overseas degrees studied via distance learning are generally only recognized when awarded by selected universities in Australia, New Zealand, the UK, and the USA. In Oman, distance learning is only recognized for certain MA and PhD programs, and only

when awarded by selected UK, Australian, New Zealand, and US institutions. Students wishing to study at non-Omani institutions are advised to seek written approval from the Omani Ministry of Higher Education, Research, and Innovation prior to enrollment. Only 49 UK universities currently appear on the list of recommended institutes for distance learning [1].

In the UAE, overseas degrees studied through distance learning are recognized if they meet certain criteria. Students are recommended to apply to the Ministry of Education prior to enrolling in an overseas degree program to ensure that the program is recognized and will be granted equivalency upon completion. Distance learning programs in scientific and applied fields may not be recognized in the UAE [1].

4 Distance Education in Higher Education Institutions in Syria

Distance education (DE) in HEIs in Syria exists only in traditional public universities and in the Syrian Virtual University (SVU). In traditional public universities, DE programs are not internet-based; students come to campus on weekends only if they wish to consult with staff. Some digital contents are provided to students (in the form of CDs) to cover certain subjects. For example, DE programs in Damascus University consist of seven programs mainly in humanities (Table 1). The SVU is the only University in Syria that provides online DE programs (undergraduate and postgraduate).

Table 1 Distance education programs in Damascus University

No	Program title	Faculty	Year established	Year of graduation of 1st cohort
1	BSc in Media	Faculty of Media	2001–2002	2004–2005
2	BSc in Translation	Faculty of Literature and Human Sciences	2001–2002	2004–2005
3	BSc in Accounting	Faculty of Economics	2003–2004	2006–2007
4	BSc in Legal Studies	Faculty of Law	2003–2004	2006–2007
5	BSc in Kindergarten	Faculty of Pedagogy	2003–2004	2006–2007
6	BSc in International Studies and Diplomacy	Faculty of Political Sciences	2006–2007	2010–2011
7	BSc in Management of Small and Medium Enterprises	Faculty of Economics	2006–2007	2010–2011

5 Impact of the Pandemic on the Syrian Higher Education System

The COVID-19 pandemic has caused the largest disruption of education in history worldwide, impacting HEIs whether in terms of teaching and learning access, student recruitment, student mobility, and academic and non-academic staff or university operations. The Syrian higher education system was not an exception. In fact, the impact of the pandemic was more severe in Syria because the country was slowly emerging from a prolonged war [3–5].

The main impact of the pandemic was on teaching and learning, and on academic and non-academic staff. No significant impact was reported on student access, student recruitment, or on drop-out rates.

The most important effect was the temporary cessation of face-to-face teaching in all Syrian HEIs for a period that lasted more than two months. Many HEIs tried to switch to distance education (synchronous or asynchronous) during the lockdown with variable degrees of success.

The success of Syrian HEIs in implementing distance education varied considerably, according to the size of the institution and its e-readiness [5]. Public universities with diversified programs and huge numbers of students had considerable difficulties in implementing online programs. Higher institutes and some private universities that had relatively small number of students managed to implement successfully some e-learning courses on their platforms [5].

6 Main Challenges in Moving to Online Education and Assuring Teaching and Learning Continuity

Low connectivity and poor infrastructure as a result of the prolonged crisis, and difficult access to internet and digital devices by many students proved to be major obstacles to implementing viable distant e-learning programs by many HEIs in Syria. The preparedness of academic staff was also an issue of concern as many staff members did not possess the ability or the experience to continue teaching in a virtual modality.

Furthermore, the teaching of subjects that included the development of professional competences through practice (clinics, design, engineering, etc.) was a source of greater uncertainty as universities were not sure how to deal with the online delivery of these subjects.

7 Success Stories in Assuring Teaching and Learning Continuity During the Pandemic

The experiences of two Syrian HEIs who succeeded in assuring teaching continuity during the pandemic, namely the Higher Institute for Applied Sciences and Technology (HIAST), and the Syrian Virtual University (SVU), are described here.

7.1 The Higher Institute for Applied Sciences and Technology (HIAST)

The Higher Institute for Applied Sciences and Technology is an elite institute that accommodates about 350 students spread over 5 years. The very strict admission requirements imposed by the institute mean that only high-achieving students in the Syrian secondary education certificate are admitted to the institute [5, 6].

E-learning was established in HIAST in 2003 long before the COVID-19 crisis. An e-learning platform, called "*e-class*", had been created on the institute's network and servers. It was based on the open-source software *Moodle*. Distance learning was not offered at that time at HIAST, but the platform was used to explore blended learning, and to conduct training courses for workers in remote places.

With the emergence of the COVID-19 pandemic and the start of the implementation of "social distancing" measures, HIAST found in the *e-class's* platform a suitable and familiar alternative to ensure the continuity of the teaching and learning processes.

Factors that contributed to HIAST's success in switching to online education are [5, 7]:

- The familiarity with the e-learning platform that was installed more than 15 years before the pandemic.
- The small number of students in the institute.
- The high quality of the students and student's excellence in technology-related subjects.
- Staff highly trained on the use of technology.
- Provision of continuous technical support for both staff and students.

7.2 The Syrian Virtual University (SVU)

The SVU was established in 2002 by special law and offers distance learning courses delivered entirely online. The SVU consists of three faculties: the Faculty of Information Technology and Communications, the Faculty of Management Sciences, and the Faculty of Humanities. Each faculty provides a number of Bachelor's and Master's programs [8].

The SVU uses its own University Information System (SVUIS) which has been built and developed internally. The e-learning platform is based on LMS Moodle, which was adapted to SVU needs. Distance tutoring is provided in a number of ways including synchronous lectures, recorded lectures, videos, etc. Final exams are not carried out online but rather in certified national and international telecentres [5–10]. National centers are spread throughout Syria and international centers are based in certain locations in the Arab region and Europe [8].

The impact of both the war and the pandemic on the SVU was different compared with other Syrian universities. The war, which began in 2011, had a huge impact on traditional HEIs in general. The damage inflicted on the institutions was huge, including losses of infrastructure, disruption to the academic year, and limited higher education funding. In the case of the SVU, because all its courses are delivered remotely, the impact of the war was significantly less compared with other universities (public or private). In fact, in the early years of the war (2011–2014), many students considered studying at the SVU to be a safe mode of higher education study, which resulted in a significant rise in the total number of enrolled students [5, 12].

The pandemic did not affect the teaching and learning processes at the SVU. Lectures in all programs continued in a normal way. Only final exams (which are usually carried out in certified telecentres) were postponed for a period of two months in Spring 2020 [11]. Regarding admissions and student recruitment, a steep rise in the number of enrolled students at the SVU was observed in the academic years 2019–2020 and 2020–2021 [12]. This significant increase was an expected impact of the pandemic as many students considered studying at the SVU to be a safe mode of study during the pandemic as well.

The most important factor in the success of the SVU during the pandemic was its extensive experience in remote teaching, with instructors having the necessary qualifications, and degrees specifically designed to be taught online.

It is clear from the previous two success stories that HEIs that had their own platforms and digital teaching resources were successful in shifting to online delivery and assuring teaching continuity during the pandemic.

8 Survey of How Universities Performed During the Pandemic, and Their Plans Post-pandemic

A small survey was conducted by the author on how HEIs performed during the pandemic, and the challenges they faced in ensuring teaching continuity. The survey included 15 HEIs in the Middle East region and in Europe. The future plans of HEIs regarding teaching and learning processes post-pandemic were also surveyed.

The study showed that, prior to the pandemic, none of the 12 surveyed HEIs in the Middle East had DE programs and only two of those in Europe had DE programs. All HEIs moved to DE during the pandemic, the majority synchronous; only a few used mixed deliveries (synchronous and asynchronous).

8.1 Main Challenges Faced During the Pandemic

The survey revealed that the main challenges faced by academic staff in moving to DE during the pandemic and the subsequent lockdown were the availability of the necessary digital equipment, staff competencies and the required level of IT skills, access to a reliable and fast internet service, a convenient place to attend the sessions, and being abroad in a different time zone.

The survey also revealed that the main challenges the institutions had to deal with during the online delivery were maintaining student engagement, feedbacks and communicating with students, courses that require practical work (e.g., labs), designing and conducting online exams, and student assessment (course work and exams).

It is interesting to note the diverse methods the surveyed HEIs employed in conducting online student assessments and exams. Some institutions used multiple-choice questions (MCQs) with a limited time to select a choice, whereas other institutions used MCQs with a different set of questions for each student.

Some institutions used open-book exams giving a 48-h window for submission of the exam papers, other institutions opened the exam for a 24-h period and allowed students to stay only for a specified allocated time for each exam.

Only one of the surveyed HEIs reported that exams were canceled and other methods used to assess students.

Most of the surveyed HEIs reported that plagiarism was a real concern and a major challenge that they had to deal with.

8.2 E-Learning Post-pandemic

Regarding the post-pandemic period, the HEIs surveyed had different plans for continuing to deliver some courses remotely.

While some institutions opted for integrating e-learning with face-to-face learning (20% of taught courses totally online, 20–30% blended learning, 50–60% face-to-face), other institutions chose hybrid learning, where all teaching sessions would be available on-campus and online, and students could choose what is suitable for them.

Some institutions allowed staff members to change their modules and include elements delivered online as long as they did not exceed a set limit (30%, synchronous or asynchronous).

Moreover, some institutions left the choice entirely to students so that every student had the option to register as an online student or as an on-campus student.

8.3 Blended Learning

When HEIs were asked specifically whether blended learning will be an option in the post-pandemic period, most of the institutions surveyed indicated that blended learning will stay because technology will help substantially in shaping the future of education. Some institutions revealed that all their developed materials are kept at the disposal of students, and all sessions are available to attend in person, or online (synchronous and asynchronous). Students can mix and match a way that suits their needs as learners.

Although one HEI reported that blended learning had already been implemented, and that hybrid teaching was already used for most courses, one other institution reported that no blended learning was planned as it is not suitable for natural science and engineering courses that include lots of laboratory work.

8.4 Main Challenges to Adopting E-Learning and Distance Education in Developing Countries

When the HEIs were asked about the main challenges hindering the adoption of e-learning and distance education in universities in developing countries, most institutions raised the issues of the availability of adequate infrastructure such as electricity and telephone lines, as well as access to the digital equipment and internet connections necessary to support online learning. Some institutions focused their attention on the lack of technological expertise by teaching staff to produce e-learning and e-content and stressed the need for staff training, not only on how to use online tools but also on how to design modules, assessment methods and exercises that are suitable for an online environment.

Surprisingly, only one institution raised the issue of getting the regulatory authorities to recognize that distance learning is important and will significantly help in talent development and in access to higher education.

8.5 Comparison with the Findings of the UNESCO Report

The findings of this small survey are consistent with those of a UNESCO report published on July 2021 on the "Response of Arab Countries to Educational Needs during the COVID-19 Pandemic" [13]. The report included a survey conducted by UNESCO and addressed the governmental/formal educational institutions in schools, high schools, institutes, and universities, during the period between the 2nd of June and the 12th of June 2020. Several Arab countries responded to the questionnaire in which a total of 13,483 participants submitted responses.

The UNESCO report showed that the weakness of the infrastructure caused a serious obstacle that prevented some learners from pursuing their education and following up with their classes. It also showed that, in some Arab countries, at least half of learners were unable to pursue distance learning due to power outages or lack of internet coverage. Responses to questionnaires also indicated major differences in network coverage among cities and remote areas [13].

Regarding staff competencies, the UNESCO report revealed that many teaching staff members did not have the required digital skills to keep in pace with the distance learning process, and many of them did not have an appropriate home environment for distance learning.

The UNESCO questionnaires also showed that the process of assessment and evaluation of student achievements was a challenge in the distance learning process, in terms of ensuring transparency and promotion standards. Teaching staff used various forms for assessment, some adopted direct evaluation during the educational process, and others used electronic assessments through available electronic applications. Only a very small portion (6%) indicated that no assessment was done [13].

The results also showed that more than half of the sample included in the questionnaire (13,483 participants) supported the integration between traditional learning and distance learning.

9 Effective Approaches to Distance-Learning by UK-Based World-Leading Universities

This section reviews the latest distance-learning practices that were reshaped and adopted during the COVID-19 pandemic by several UK-based Universities. The University of Leicester is presented as an example of how a world-class university designed and employed a hybrid, embedded, and blended learning approach during the pandemic across different distance learning programs. In 2022, the University of Leicester was ranked 23rd out of 766 universities in the world, and 4th in the UK according to the Times Higher Education Impact Ranking [14]. The University also received positive feedback and recognition from both students and other HE institutions regarding the way distance learning strategies were administered and delivered [15].

The following review covers a high-level analysis of the pedagogical pillars of distance learning. This paper considered the following areas essential to ensure an optimal implementation and delivery processes for distance-based teaching, assessment, instructions, and management strategies.

9.1 Teaching Approaches and Assessment Strategies

In a previous paper [5], key approaches to remote formative and summative assessment were discussed in terms of dual (on-campus and off-site) delivery and management. This paper builds on these aspects by highlighting a decision-making framework for distance learning assessment delivery, feedback, and administrative process. The framework covers the following areas:

- Learning:
  - Helping students to work more efficiently online, by constructing a bespoke learners Guide to Digital Learning.
  - Engaging with students as partners to improve learning processes through various semester-long Q&As and dedicated feedback sessions.
  - Supporting students to adequately transition to higher education by developing a remotely accessed transitions toolkit.
  - Ensuring distance-learning students are aware of all additional academic skills and online support available through the dedicated operations team.
  - Enabling students to choose guidance-related personal, careers, and placement tutors, and others involved in pastoral support related to learning.
  - Ensuring students effectively utilize the wide range of remote learning features to facilitate different teaching styles and opportunities [16].
- Teaching:
  - Module convenors teaching practice:

    Creating a platform for distance learning module leaders to prepare to teach online through a self-study site for an introduction to distance learning in HE.
    Developing teaching strategies with program directors through the university-available and approved online methods.
    Designing an effective research-inspired, innovative, and adaptive curriculum which is scalable to accommodate the requirements of students from different parts of the world and with different backgrounds.
    Utilizing and making the most of the available digital learning environments, such as Blackboard, Top Hat and Reflect, which support distance learning [17].
    Evaluating and improving module leaders' practice through peer-enhancement exercises.
    Drawing on successful case studies, from on-campus learning practices, that are considered applicable and beneficial to distance learning.
    Ensuring that distance learning learning materials are designed for an inclusive, compassionate, and accessible curriculum [18].

- Module convenors professional development:

  Ensuring that all academic staff are taking the next step to gain HEA fellowships and the appropriate teaching certificates in their region for education excellence.
  Reflecting on previous teaching and learning experiences through the support and development of creative online practices.
  Identifying the optimal and scalable approaches to employ in large distance classrooms, in what is referred to as MOOC (Massive Open Online Courses) [19].

- Assessment and Feedback:
  - Employing a bespoke catalogue of assessments to support the development of students' skills, engagement, and confidence.
  - Selecting appropriate assessment and feedback strategies as set by program directors and the education committee for on-campus processes.
  - Adapting the same assessments for online delivery and feedback release and follow-up procedures [20].
  - Ensuring all assessments align with the university assessment strategy for on-campus programs.
  - Ensuring both convenors and students fully comprehend the feedback charter principles and allow frequent Q&A sessions to address any shortcoming [21].

9.2 Instructions, Administrative Operations, and Streamlined Processes

One example of a multi-option and fluid process to manage distance learning programs, is a popular DL course at the University of Leicester, titled: "Advanced Computer Science MSc, PGCert, by distance learning". This degree includes six modules and a dissertation project, which can be completed in two years. Students can decide to study over two terms by selecting three modules each semester. Alternatively, students can select the same number of modules over three terms by taking two modules each semester [22].

In addition, students can follow another path which allows them to study four courses without a project over one academic year, and then attain a Postgraduate Certificate (PGCert) at the end. Students can also upgrade from the PGCert to the former MSc either during or after the course.

It is important to mention here that the admission process for this program allows students to align their interests via pre-defined paths if their educational needs are very specific. For instance, if students are not certain whether distance learning is right for them, another option is available to study any individual module as a CPD course (short course) and attain a certificate of completion afterward. This will contribute toward an MSc or PGCert if students start their course within two years of enrolling.

9.3 Supervision, Personal Tutoring, and Accessibility of Projects

One of the key educational aspects of any program, whether at a distance or on-campus, is the completion of larger projects in the final year, or one other year. These activities normally include groups of students working together, which involves dedicated and frequent supervision by an academic member of staff, scheduling of meetings, and the provision of feedback throughout the project's different milestones.

In reference to distance learning, these activities become more critical given that the only method of delivery is through the internet, which must take place strictly through the licensed platforms that are available to the university. This is considered mandatory and essential in order to abide by data protection laws and other legal procedures [23]. Other similar meetings such as personal tutoring and accessibility support, must follow a similar approach, which could cause a challenge for universities when delivering distance learning programs. On this account, solutions and recommendations are outlined as follows:

- Communicating and connecting with students on a personal level from different time zones, using available technologies to overcome potential barriers for disadvantaged parts of the world that are located in a different time zone.
- Building a relationship, understanding expectations, and undertaking each project or tutoring session as an isolated case to shed light on different student skills and knowledge levels.
- Producing regular and frequent formative exercises that are designed to specifically act as a replacement for conventional face-to-face learning and instant feedback and feedforward communication.
- Addressing isolation in all types and formats of supervision meetings and collaborative activities to give students the feeling of an on-campus community.
- Encouraging informal and formal conversations between students themselves through personal tutoring techniques such as virtual office-door knock, whiteboard collaboration, and other creative tools to incentivize engagement as outlined in the teaching section.

Prestigious international university rankings normally avoid publishing specific rankings regarding distance learning studies [24]. Therefore, prospective students from around the world are left without a concrete reference with which to find the leading online programs available in relation to a particular subject of interest.

According to research by StudyPortals, in which data were collected and analyzed from several high-level international rankings (Times Higher Education, and QS Rankings), the outcome identified which UK universities offer students effective and popular remote degrees [24]. Furthermore, these institutions provide different types of program from Bachelors, Masters and PhDs to a range of other bespoke programs in some cases, as previously described.

In 2022, StudyPortals identified the top four universities for offering UK-leading distance-learning degrees. These were University College London, the University of

Edinburgh, the University of Manchester, and King's College London. Other universities, such as the University of Warwick and the University of Glasgow, were also recognized for high-level distance learning delivery and degree options. These universities offer a range of distance learning study levels including MSc., M.A., and MBA degrees. Moreover, the most popular distance learning subjects were Neurology, Education, Security, Sports, Business Management, Food Science, History, Law, and Philosophy [25].

The key advantage that these universities have over other institutions offering similar online degrees is their strong collaborative links with industry and both private and public services, which is not considered an easy process to adopt when delivering a fully remote mode of study.

10 Conclusion

Some higher education experts described the COVID-19 pandemic as "a blessing in disguise" because it has thrust universities almost overnight into digital education [26]. It is true that the pandemic has made everybody more open to digital education, including regulators, students and faculties; however, in developing countries, significant challenges remain to be overcome before viable digital education programs can be implemented.

Achieving equality among all learners and achieving learning opportunities for all remains the main challenge for educational systems in developing countries, especially in light of the crises and conflicts that these countries are experiencing. Moreover, low incomes in some developing countries, poor technical capabilities and electricity infrastructure, availability of devices for learners, poor internet networks and different internet coverage between cities and rural areas are all among the challenges faced.

In light of the survey results and the feedback received from many HEIs, it can be concluded that, in the post-pandemic period, most institutions are planning to benefit from the experience gained during the lockdown by integrating in-class traditional learning with distance learning. Blended learning seems to be the option adopted by many HEIs although they differed in the ways of implementing it.

It is of paramount importance for HEIs in developing countries to address the issue of the lack of technological expertise in e-learning and e-content production by teaching staff, and the need for staff training, not only on how to use online tools but also on how to design modules, assessments, and exercises that are suitable for an online environment. Within this context, HEIs in developing countries can benefit from the experience of universities in developed countries, such as the University of Leicester, which has received positive feedback and recognition from both students and other HEIs following the way distance learning strategies were administered and delivered during the pandemic.

The issue of getting the regulatory authorities, in developing countries, to recognize that distance learning is important and will significantly help in talent development and in access to higher education is also of paramount importance and needs to be addressed as well.

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