

Assessment of the Experiences of Higher Education Institution on Online Learning: The Case of Some Selected Institutions

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Abstract:

Thanks to COVID-19, e-learning has become one of the platforms for the teaching-learning activity in Ethiopia. Many high schools and higher institutions tried to manage to not disrupt the academic calendar by providing learning materials, mainly focusing on contents and exercises, via an electronic platform, Telegram. E-learning, also referred to as online learning, is an educational technological tool embracing self-motivation, communication, efficiency, and technology and it is becoming the default of 5th generation of Distance Education. In online learning, active engagements of the learner and the instructor are expected while the teaching-learning process is going on. The engagement can be either using off video text exchanging or video conferencing on platforms like Zoom, Microsoft Teams, MOODLE, etc.

This study was designed to assess the experiences of selected HEIs (American College of Technology, Yardstick International College, ET Online College, and Unity University) in their establishing phase of the online learning program. Structured interview questions were forwarded to the principals of the institutions to get answers to the research questions which were framed from the rubrics of HERQA. The study found out that 'digital contents' seemed to be lacking the attributes which are ascribed by the experts of the field.

Keywords: online learning; higher learning institutions; digital content; learning management system, MOODLE (Modular Object-Oriented Dynamic Learning Environment).

JEL Classification: I23; O33; O36.

Introduction

Assessing the experiences of higher education institutions on online learning is crucial, especially in the context of the rapid shift to remote and online education in recent times. Such assessments provide valuable insights into the effectiveness of online learning methods, the challenges faced, and the opportunities for improvement.

It is boldly believed that the future for most of the developing countries depends on how quickly and effectively a national system of education can be developed. This implies a radical change of direction, content, and method in the existing education systems.

Having understood the above said facts and challenged by shortage of qualified and competent experts at various levels of education, Ethiopia has embarked on an urgent expansion and enrolment in Higher Education Institutions (HEIs) to improve education quality, access, affordability, equity, and efficiency (EEDR, 2018-2030). Such engagements have created a fertile ground for the expansion of distance learning (DL) in Higher Education

Institutions (Clemence 2015) and according to Heydenrych and Prinsloo (2010), online learning has been labelled as the third generation of the former (five generations of DE have been labelled till this day).

Conducting a comprehensive assessment of the experiences of higher education institutions with online learning, valuable insights can be gained to enhance the quality and effectiveness of online education delivery and support student success in the virtual learning environment.

This paper tried to assess the experiences of some selected Higher Learning Institutions of Ethiopia in the establishing phase of the online learning program. It is recently that the approach has received acceptance by the Ministry of Education and so far, seven HLIs have received accreditation to run the system only for master's degree programs. It was, therefore, to identify the challenges they faced and best experiences they have acquired (if any) that this research was conducted. It is believed that those HLIs which are required to function using the approach can learn from them and desist repeating same mistakes.

1. Literature Review

According to Heydenrych and Prinsloo (2010), distance education (DE) has gone through different phases of development which characterize its five generations, and E-learning/online learning is labeled its 3rd Generation where the provision of distance learning using open educational resources like MOOCs has become into practice to support lifelong learning through eliminating barriers in the learning process, provide equality of opportunity in education, and most importantly, ensure the liberalization of knowledge. Similarly, other dynamic learning environments like MOODLE are integrated with the Learning Management System to teach many who have got access to connectivity via the interactive platforms zoom, Microsoft Teams, etc. (Maslov et al., 2021)

Other generations of DE are 1st Generation - Correspondence Education/Content Learning, it is known as classical correspondence model in which learning the contents of the courses dominated; 2nd Generation - Multimedia Course Materials/SSS, and it is also understood as when multimedia course materials and other forms of student support services were considered. 4th Generation - it is when Interactive Self Pace Learning has been in place aggressively. Here, m-Learning (mobile learning), iTV (interactive TV), VOD (Video on demand), PVR (Personal video recording), and EPG (Electronic program guide) have been the platforms for knowledge sharing. 5th Generation - it is also called as Networked DE, as it uses social media /Mainstreaming for reaching larger number of learners.

Remtulla (2007) discussed that E-learning/online learning is a great solution for the future education. e-learning pioneer (Luskin, 2001) explains: 'e' as exiting, energetic, enthusiastic, emotional, extended, and educational. E-learning is an educational technological tool which embraces self-motivation, communication, efficiency, and technology. With the power of www, learning has become to be easily accessible only on condition you have internet connection and knowledge of handling computer.

Education became accessible online anytime and anywhere. Learners have been not only sharing files, but information has been exchanged across the web worldwide in a single click. Information and Communication Technologies (ICT), internet-based applications like WWW, e-mail, teleconferencing, Computer Supported Collaborative Learning (CSCL) and Learning Management Systems (LMS) are building their bases in the field of learning. The rapid developments in technology and pedagogies redefined the structure of education and its processes. E-learning has enabled the learners to interact 'face to face' all over the world breaking geographical barriers as it is most efficient method of distributing information in a cost-efficient method and can reach large scale virtually at same time (Luskin 2001). Time is no more constrained, - Just in Time - approach makes e-learning truly global (Spector and Davidson, 2000, as cited in Oswal and Sharma, 2022).

A true e-learning strategy requires focus on technology, effective and efficient learning, leadership, culture, talent and thus recognizing the changes in the organization. According to (Spector and Davidson 2000, as cited in Oswal and Sharma, 2022), a single and simple approach of using technology cannot bring success in learning. It demands for integrated learning approach. To meet the demand for complex learning, higher flexibility and long-term learning, new approaches of e-learning need to be search out.

Principals running HLIs in the developing countries like Ethiopia believe that if they secure internet connectivity and the necessary gadgets, they can provide courses to the needy using at least the social media Telegram and in sending learning materials via e-mails. This is of course the misunderstanding that many have between the approaches e-learning and online learning. Every online learning is also called as an e-learning while every e-learning set up is not necessarily an online system. In an online learning, there should be an active/live engagement of the learner and the instructor while the teaching-learning process is going on. The engagement can be either using off video text exchanging or video conferencing on the platforms like Zoom, Microsoft Teams, MOODLE, etc. and the digital content, a property of the digital age, that exists in the form of digital data needs to be in the form of words, pictures, audios, videos, site or social visitor's questions, answers to visitor's questions, etc.

According to COL (2004), HLIs should make sure that the physical facility is as to the standard, the leadership and organizational structure of the faculty of ODL be defined and displayed so that learners can access the types of support.

They need from, the curriculum of the courses should be worked out and managed as designed by the country's regulating body, the digital contents have to be prepared in different forms for learners to access them without difficulties, and the learning management system should easily be integrated with the platforms that facilitate interaction of the learner with the courses, with the instructors and with their fellow students. This proposition is also concurred by ETA (Ethiopian Training Authority) and its rubrics of assessment for accreditation leans against these facts.

2. Research Methodology and Description of the Study

A descriptive survey design was used to answer the main research question logically and systematically as the major purpose of descriptive research is describing the state of affairs as it exists, it answers the who, what, where, when and the how questions.

A qualitative approach was applied to get responses to the research questions. Structured interview questions were used to gather the required data from three purposely selected HLIs which have been engaged in online learning program and one university which is on the way to get accreditation for running online learning program for master's students.

While visits were carried at the HLIs for experience sharing program, interviews were made using structured interview questions which enabled this researcher to answer the research questions. The questions were constructed based on the checklist prepared by HERQA and mainly the principals of the Colleges provided the feedbacks to the questions. The colleges where visiting was made were ET Online College, Yardstick International College, and American College of Technology. The experience of Unity University was also taken as an input to the study. The responses collected from the interviewees were categorized based on their types and were organized into themes to enable the study to give descriptions as outlined by the rubrics of HERQA.

Regarding physical facility

Three of the Colleges have secured well designed building on rental basis. UU has got its own building and is working on designing it for the required purpose. EOC -has got internet connection having its services from abroad (USA); ACT & YIC have got services from Ethio Telecom. UU has been working to secure the required capacity of internet from Ethio Telecom. Three of the institutions secured a generator on rental basis; however, UU has got its own 50kv generator for operating the program without disruption.

Regarding leadership and organizational structure

Three of the colleges could manage developing an organizational structure consisting of JD to each position holder. UU has been finalizing preparing the structure and recruiting staff at same time. Three of the colleges managed to establish offices for the required heads; they, however, haven't deployed Internal Quality Audit yet which is a key unit to carry self-evaluation. UU has established an internal audit unit consisting of members; faculty deans, instructional designer, ICT expert and web designer, and audio-video recorder and editor. The unit has been working on checking the appropriateness of the digital packages using a checklist developed internally.

The checklist has consisted of minimally expected constructs that the recordings should satisfy.

Concerning recruiting a principal with a qualification as expected by a governing body, ACT & EOC have managed to recruit more than what was expected (PhD holders) and YIC, met the minima. Both ACT and YIC were handling conventional programs and they found it easy to adapt the policy for online program with the inclusion of new staff assignments and JD. EOC however incepted the policy manuals based on the requirements of HERQA. Like YIC and ACT, UU has been adapting the regular program's policies to suit to the online learning program.

Three of the colleges got to have recruited principals having teaching experiences at college and university level and managerial exposure at the conventional program of the college. Same is true for UU.

In relation to getting the curriculum organized for the programs undergoing

Three of the colleges adapted the regular program curricula with the inclusion of packages as advised by the governing body. Same has been true for UU. Though there were advance organizers both in ACT & EOC curricula, they were not uniformly incorporated for all the courses. In YIC, the access devices seemed to be properly organized as it has been engaged in DE. It seemed to be same as that of the first two though UU has got a faculty for DE.

Concerning organizing a digital content

- *Understanding: There is a clear theoretical understanding of the concept.* Three of the colleges understood it as any document being shared electronically either in text (pdf files), audio, video, and pictures forms. Same understanding is there at UU.
- *Experiences on preparation.* Course preparation in text, creating PPTs for each course, recording while presentation being made in audio and video formats (ACT & YIC) and only in audio formats (EOC). A person professional in the field of IT has been assigned to digitize the text materials, and recorded packages. UU same as to ACT and YIC

Getting a studio

Three of the colleges have got their own studios for recordings; however, EOC records for audio packages, task being managed by permanently recruited IT professional. ACT records for video packages and task managed being outsourced to an IT professional and YIC records audio and video packages and the task being managed by

an ICT professional recruited permanently. UU has been recording both audio & video packages at its studio by permanently recruited professional in camera & video recordings.

Participation

ACT- the courses & PPTs were written by instructors teaching for the regular class, edited by the department handling the courses and composed the digital packages to be uploaded into the system by ICT professional. No graphic designers participated in the process.

EOC - Once the courses & PPTs were written both by internal and par timers, the packages were edited by the principal (PhD holder); no graphic designer was involved; texts were converted into pdf, audio packages were cared by IT professional and uploaded to the LMS by IT professional in USA.

YIC - same as to EOC except for the editing work was carried by the department and packages were in audio and video formats; LMS has been managed being outsourced domestically.

UU - the courses were written both by internal and par timers, edited by subject and language editors then the clean copies have been restructured with the inclusion of the necessary access devices/advance organizers; PPTs were renovated by instructional designer (expert in ODL) with the inclusion of in-house style, and the packages are waiting to be composed for multimedia display, *i.e.*, to be written & prepared in a hypertext.

3. Dealing with the Learning Management System (LMS)

Dealing with a Learning Management System (LMS) involves effectively managing and utilizing the system to facilitate online learning. Our attention is paid for the following aspects in relation to dealing with an LMS:

- Platform chosen for LMS. Three of the colleges have been engaged with MOODLE (Modular Object-Oriented Dynamic Learning Environment - meaning - besides being an acronym, it refers to "tinkering", "insight", and "creativity" as well as to correspond to an available domain name). UU has been searching for a platform for deploying the operation
- Precautions taken to protect the digitized content from unexpected attack. Three of the colleges have managed securing the digitized materials through the system admin.
- Experience on failure of the program (loss of electronic documents:
 - YIC - faced a loss of the digitized packages but enabled to get it from the backups already managed to secure.
 - EOC - failure in internet connection has been managed immediately without much delay to keep the training going by experts living abroad; and had no experience in loss of materials.
 - ACT - no loss experienced till now but disruption of internet connection because of power failure has been managed with automatic reconnection made using generator.
- Managing a database centre. EOC & ACT have got their own database centre and server; YIC has been using other organization's server on rental basis
- Securing a standard web site. Three of the colleges have managed to secure their own web sites to establish the portal of online learning. It is where different functionalities of the portal are customized with plugins.

Learning Management System has become an indispensable means for higher education institutions and organizations. It empowers educators to create engaging learning experiences, offers students flexible learning opportunities, streamlines administrative tasks, and facilitates data-driven decision making.

The literature provides innovative uses of LMS tools, such as integrating external applications, gamification, virtual labs, and simulations aiming to enhance learning experiences and outcomes (Turnbull, Chugh, and Luck, 2020). Also, the literature highlights the importance of aligning LMS usage with pedagogical approaches (Dindar

et al., 2021). Effective integration of LMS tools can enhance student engagement, collaboration, and active learning. Course design principles for online and blended learning are explored, focusing on how to structure content, activities, assessments, and interactions within the LMS (Sharma and Shree 2023).

Learning Management System is a critical tool that empowers educators, engages learners, and streamlines administrative tasks as following key points emphasizes:

- LMS serves as centralized learning hub where educators can create, manage, and deliver course content to students. It provides a digital repository for all learning materials, including lecture notes, multimedia resources, readings, and assessments. This centralization ensures that students have easy access to all course-related information in one place.
- LMS enables institutions to offer flexible learning opportunities, such as blended learning or fully online courses. Students can access course materials and participate in discussions and assignments at their own pace and convenience, promoting a more personalized learning experience.
- With features like discussion forums, chat tools, and virtual classrooms, the LMS fosters interactive learning experiences. Students can actively engage with peers and instructors, facilitating collaborative learning and knowledge sharing.
- LMS streamlines the assessment process by automating quizzes, tests, and assignments. It allows instructors to provide timely feedback to students, enhancing the learning process and encouraging continuous improvement.
- LMS provides valuable insights into student performance, progress, and engagement. Instructors can monitor student activity, identify struggling students, and intervene with additional support when necessary.
- Utilizing an LMS optimizes resource utilization and reduces administrative burdens. It minimizes the need for physical materials, such as paper-based handouts, and simplifies administrative tasks like grade tracking and attendance recording.
- LMS facilitates seamless communication between students, faculty, and administrators. Announcements, notifications, and emails can be delivered through the platform, ensuring that all stakeholders stay informed.

Embracing the potential of the LMS enables institutions to stay at the forefront of modern education and adapt to the evolving needs of learners in the digital age.

Conclusion

Assessing the experiences of higher education institutions (HEIs) with online learning is an important area of research, especially in light of the increased adoption of online education due to the COVID-19 pandemic. Conducting an assessment of these experiences can provide valuable insights into the effectiveness, challenges, and opportunities of online learning in the higher education sector.

- Regarding physical facility: The colleges addressed in this study satisfied the minimal expectation required to be engaged in online learning program for Second Degree Program.
- Regarding leadership and organizational structure. Three of the colleges managed developing an organizational structure consisting of JD to each position holder; they have not established an IQA yet; Unity University has secured for effective work management in developing a checklist consisting of minimally expected constructs that the recordings should satisfy. Three of the colleges got to have recruited principals having teaching experiences at college and university level and managerial exposure at the conventional program of the college. Same is true for UU.
- In relation to getting the curriculum organized for the programs undergoing. The colleges adapted the regular program curricula with the inclusion of packages as advised by the governing body. Same has

been true for UU. Advance organizers/Access devices were incorporated in ACT, EOC & UU curricula, though not uniformly built. In YIC, however, the access devices seemed to be properly organized.

- Organizing a digital content. Theoretically, there seemed to be an understanding of a digital content; in practice, however, there were found only audio packages (EOC) uploaded to the LMS to define online program. It is required to synchronize in live discussion and a synchronized the digital contents (in all formats, especially in video format) to be accessed while the learner is in his/her offline. The courses were written both by internal and par timers working for the conventional program provided only a format to follow for preparing the course materials.
- Referring to the LMS. MOODLE has been the choice of the colleges as it is a free downloadable software and is enabling its users to customize it for different functionalities. Server (data base center) has been secured to be owned and in rental basis. No serious problem has faced the colleges so far regarding loss of digitized materials. No online portal could be established without a web site; hence, the colleges have managed creating the latter so that different functionalities of the former were customized with plugins.

It is important to adopt a mixed-methods approach, combining qualitative and quantitative research methods, to gather data and insights from multiple perspectives, including faculty, students, administrators, and support staff. This will help provide a comprehensive assessment of the experiences of HEIs with online learning and generate evidence-based recommendations for improving the quality and effectiveness of online education in the future.

Credit Authorship Contribution Statement

This work has been jointly collaborated and accomplished. The corresponding author Tessema, Aderajew Mihret has conceived the idea, contributed to writing whereas PhD Professor Nicola-Gavrilă, Laura has drafted the entire manuscript and contributed to the content of the research, and therefore, take joint credit and ownership of the entire work.

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Conflict of Interest Statement

The author declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. There is no conflict of interest that could hamper this study.

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