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Quality Assurance implementation and application in Distance Education

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Abstract: Due to the recent developments in the delivery of teaching-learning processes when COVID-19 hit the world with a health crisis and pandemic, it is crucial to look into the quality of courses delivered via online means or through distance education modality. This paper examines implementation and application of quality assurance (QA) landscape in Distance Education (DE). A documentary review using bibliographic inquiry is used as a methodology approach to gather relevant information to address the study questions. Previous studies on QA in DE are examined and arranged into themes using thematic analysis. Findings revealed that most of the literature on QA in DE in Africa and Asia based on the reviewed Open and Distance Learning (ODL) institutions are basically dealing with frameworks, outcomes and performance, instructional design, student services and challenges as well as parity in terms of quality with the traditional institutions. Therefore, this paper concludes that more studies are needed for QA in DE to match the post-COVID-19 trends on improving QA. This implies that there is a need to expand research on QA in DE to include areas of artificial intelligence.

Keywords: distance education, quality assurance, bibliographic inquiry, Africa, Asia

Highlights

What is already known about this topic:
- QA measures in most countries are generally designed for conventional higher education institutions and not for open learning system and DE.
- Concern over the quality of DE delivered.

What this paper contributes:
- QA implementation and application in DE particularly ODL institutions in Africa and Asia.
- The extent of implementation and application of QA best practices and standards to some DE institutions in Africa and Asia.
- Highlight outcomes, performances and challenges of implementing QA measures.

Implications for theory, practice and/or policy:
- Policy implication: Policy makers to encourage more research on QA in DE that matches post COVID-19 trends like artificial intelligence.
- Practical implication: Education practitioners to also put emphasis on implementation and application of QA in DE which undergo regular evaluation so as to determine any shortfalls or challenges for immediate corrections.

Introduction

There has been an individual and social need to improve the quality of what people learn over many years of schooling. Several efforts and initiatives have been made at the national, regional, and international level with regard to Quality Assurance (QA) in Distance Education (DE), including e-learning (Jung, 2022; Jung et al., 2011; Kihwelo, 2013) while Arthur-Nyarko et al. (2020) emphasized on digitizing distance learning materials. In fact, Saritas et al. (2022) revealed that online course meetings in terms of video meetings and screen sharing differed among departments when assessing as well as evaluating the activities conducted in Learning Management Systems (LMS). Worldwide, the number of universities have increased with India having the most universities recording 5,350 universities in July 2023 (Statista, 2023). Over the last few years, there has also been a substantial growth in DE providers and operators in Asia but also in Africa (Commonwealth of Learning, 2019). For Asia, notable open universities include The Open University of China in China, Open University of Japan in Japan and the Indira Ghandi National Open University in India (Kanwar & Mishra, 2023) while in Africa, there is the National Open University of Nigeria in Nigeria, University of South Africa (UNISA) in South Africa (Kanwar & Mishra, 2023) and The Open University of Tanzania in Tanzania (Mkwizu & Ngaruko, 2020) that offer DE. In 2016, Latchem noted that there is more concern about QA in areas like teaching and learning, Massive Open Online Course (MOOCs) and e-learning (Latchem, 2016). In Africa, DE exists in the form of ODL universities as cited in Mkwizu and Mtae (2021), Mkwizu and Ngaruko (2019, 2020) and also open schooling mentioned in studies such as Mkwizu (2022).

Other concerns have been with the phenomenal expansion of DE and an increasing dependency on DE to provide education, particularly higher education where there has been growing public concern over the quality of DE delivered (Jung et al., 2011) especially that most of the QA measures in most countries are generally designed for conventional higher education institutions and not for open learning system and DE. For example, studies by Aguti et al. (2021), Ferdousi et al. (2022) and Zuhairi et al. (2020) are few that investigated QA in open learning systems and DE. Ferdoui et al. (2022) found that there are challenges and experiences in the evolution of QA practices for ODL in terms of people, place and programs. The study by Ferdousi et al. (2022) is confined to studying QA in ODL of one developing nation only hence advocated for more research.

Hence, the goal of this paper is to develop a better understanding of the current development of QA and to offer policy makers directions for developing and elaborating QA systems for DE in their own jurisdictions. Therefore, the main objective of this paper is to understand the extent of implementation and application of QA best practices and standards to some DE institutions. The specific objectives are i) to identify the QA frameworks employed by DE institutions, ii) to examine how DE institutions apply QA measures in delivering teaching-learning processes, iii) to outline the outcomes and performance of DE institutions in terms of QA, iv) to identify the challenges faced by DE institutions in implementing QA measures. Based on these specific objectives, this paper attempts to find answers to the following questions:

i.   What are the QA frameworks employed by DE institutions?
ii.   How are DE institutions applying QA measures in the delivery of teaching-learning processes?
iii. What are the outcomes and performance of DE institutions in terms of QA?
iv.   What are the challenges faced by DE institution in implementing QA measures?

Distance Education

Distance Education (DE) is a terminology covered by various scholars. Faibisoff and Willis (1987) mentioned that DE is considered by educators as an innovative approach to teaching students in the 21st Century. Past studies namely, McIsaac and Gunawardena (1996) and Keegan (2002) have commonly defined DE as a structured learning whereby the student and instructor are separated by time and space. Conversely, the definition of DE is more of ODL (Saykih, 2018). However, Fidalgo et al.

(2020) noted that there are types of DE such as DE based on online learning like MOOCs. While Duman (2023) noted that DE has pedagogical challenges as well as difficulties in maintaining quality due to increment in students' enrolment, the study by Altwaijry et al. (2021) perceives DE from a learning point of view by stating that it is a long-standing concept in higher education. Therefore, DE in this study refers to various forms of technology/media-supported education, such as e-learning.

Quality Assurance

Lei and Mokhtar (2023) opined that QA in education is key due to developments related to monetary assessments. On the other hand, previous organisations such as UNESCO provided the definition of QA to assist in conceptualising the term from an education perspective. Hence, a wide spectrum of definitions of academic quality has been used and are hereby presented according to the Glossary of Terms and Definition of Quality Assurance and Accreditation according to UNESCO (2004).

Quality as excellence

Is a traditional academic view, according to which only the best standards of excellence (usually meaning a high level of difficulty and of complexity of a program, the seriousness of the student testing procedures, etc.) are understood as revealing true academic quality.

Quality as fitness for purpose

A concept that stresses the need to meet or conform to generally accepted standards such as those defined by an accreditation or QA body, the focus being on the efficiency of the processes at work in the institution or program in fulfilling the stated, given objectives and mission. Sometimes quality in this sense is labeled as: (i) a value for money approach owing to the (implicit) focus on how the inputs are efficiently used by the processes and mechanisms involved or (ii) the value-added approach when results are evaluated in terms of changes obtained through various educational processes (e.g., teaching and learning processes). A variant of the latter is the quality as transformation approach, which is strongly student centered. It considers quality as a transformational process within which the better a higher education institution is, the better it achieves the goal of empowering students with specific skills, knowledge, and attitudes that enable them to live and work in a knowledge society.

Quality as fitness of purpose is also a concept that focuses on the defined objectives and mission of the institution or program with no check of the fitness of the processes themselves in regard to any external objectives or expectations. Within this approach, one may distinguish alternative approaches developed in the 1990s: (i) quality as threshold whereby certain norms and criteria are set and any program or institution has to reach them in order to be considered to be of quality. In many European higher education systems, a variant defining quality as a basic/minimum standard, closely linked to accreditation, is used. In this case, the starting point is that of specifying a set of minimum standards to be met by an institution or program and to generate the basis for the development of quality-improvement mechanisms; (ii) quality as consumer satisfaction: quality perceived as closely linked to the growing importance of market forces in higher education, that focuses on the importance of the external expectations of consumers (students, families, society at large) and other stakeholders.

Quality as enhancement or improvement

Focuses on the continuous search for permanent improvement, stressing the responsibility of the higher education institution to make the best use of its institutional autonomy and freedom. Achieving quality is central to the academic ethos and to the idea that academics themselves know best what quality is.

Quality Assessment/Quality Review

Indicates the actual process of external evaluation (reviewing, measuring, judging) of the quality of higher education institutions and programs. It consists of those techniques, mechanisms, and activities that are carried out by an external body in order to evaluate the quality of the higher education processes, practices, programs, and services. Some aspects are important when defining and operating with the concept of quality assessment: (i) the context (national, institutional); (ii) the methods (self-assessment, assessment by peer review, site visits); (iii) the levels (system, institution, department, individual); (iv) the mechanisms (rewards, policies, structures, cultures); (v) certain quality values attached to quality assessment such as academic values, traditional values (focusing upon the subject field), managerial values (focusing on procedures and practices); pedagogical values (focusing on staff and their teaching skills and classroom practice); employment values (emphasizing graduate output characteristics and learning outcomes).

Quality Assurance

An all-embracing term of Quality Assurance (QA) refers to an ongoing, continuous process of evaluating (assessing, monitoring, guaranteeing, maintaining, and improving) the quality of a higher education system, institutions, or programs. Likewise, QA is conceptualized from a teaching point of view in terms of QA tools as indicated in Afolabi (2019). The concept of QA is defined as the process of verifying whether products or services meet or exceed customer expectations (Ruiz & Junio-Sabio, 2012). Javed and Alenezi (2023) defined QA from a sustainability lens and thus extending the concept of QA to sustainable quality management that emphasises on continuous imporvement in the long term for purposes of enhancing the overall performance of an organization. As a regulatory mechanism, QA focuses on both accountability and improvement, providing information and judgments (not ranking) through an agreed upon and consistent process and well-established criteria. Many systems make a distinction between internal quality assurance (i.e., intra-institutional practices in view of monitoring and improving the quality of higher education) and external quality assurance (i.e., inter- or supra-institutional schemes of assuring the quality of higher education institutions and programs).

Additionally, the QA activities depend on the existence of the necessary institutional mechanisms preferably sustained by a solid quality culture. Quality management, quality enhancement, quality control, and quality assessment are means through which quality assurance is ensured. The scope of QA is determined by the shape and size of the higher education system. Indeed, QA varies from accreditation, in the sense that the former is only a prerequisite for the latter. In practice, the relationship between the two varies a great deal from one country to another. Both imply various consequences such as the capacity to operate and to provide educational services, the capacity to award officially recognized degrees, and the right to be funded by the state. The QA is often considered as a part of the quality management of higher education, while sometimes the two terms are used synonymously.

Purposes of Quality Assurance

Brennan (1999) has suggested seven purposes for QA in higher education:
  (1) ensuring accountability for public funds,
  (2) improving the quality of educational provision,
  (3) stimulating competition within and between institutions,
  (4) verifying the quality of new institutions,
  (5) assigning institutional status,
  (6) underwriting transfer of authority between the state and institutions, and
  (7) facilitating international comparisons.

Given the purposes of QA, most countries make their quality assurance reports public, some countries, either the final outcome on the status of accreditation or audits only or limit sharing the reports to those

within institutions and QA authorities. Conversely, Schellekens et al. (2023) found that in the Netherlands, the quality assurance can include dashboards to gain insights into the assessment programme and its alignment with underlying assessments.

Methodology

Research Design and Methods

This paper examines the QA landscape in distance education particularly the extent of QA implementation and application among selected ODL institutions using documentary review with a bibliographic inquiry. This paper's investigation revolves around the questions of i) What are the QA framework/systems for DE at the higher education level? ii) How are DE institutions applying QA measures in the delivering teaching and learning processes? iii) What are the outcomes and performance of DE institutions in terms of QA? and iv) What are the challenges faced by DE Institutions in implementing QA measures? The documentary review and bibliography inquiry are done using journal articles, books, book chapters and reports as displayed in Table 1 with a total of only 14 relevant reviewed literature from 2005 to 2022 that address the questions of this study were included. This study sourced 8 journal articles from African Journal Online (AJOL), Asian Journal of Distance Education (AsianJDE), African Education Research Journal, Asian Association of Open Universities Journal, Journal of Social Sciences, and the International Review of Research in ODL. For books that were relevant, the selected book (1 book) is from SAGE Publications India Pvt Ltd while the (2 book chapters) are from Springer Link, and Spectrum Books Ltd. The 3 reports were sourced from the database of Asian Development Bank, Commonwealth of Learning (COL) and also from HAQAA Initiatives. In addition, the HAQAA Initiatives deemed fit since it is dealing specifically with harmonizing African higher education QA and accreditation.

Table 1. List of journal articles, reports and books on QA and DE in Africa and Asia (2005-2022)

No	Title	Source	Type of literature
1	Quality assurance in distance learning teacher preparation institute in Nigeria.	Afolabi (2019)	Journal article
2	Higher Education Across Asia: An Overview of Issues and Strategies.	ADB (2011)	Report
3	Quality assurance measures in distance learning at University of Ghana.	Badu-Nyarko (2013)	Journal article
4	Evolution of quality assurance practices in enhancing the quality of open and distance education in a developing nation: a case study.	Ferdousi et al. (2022)	Journal article
5	African Standards and Guidelines for Quality Assurance in Higher Education (ASG-QA).	HAQAA Initiative (2017)	Report
6	Quality assurance in online, open and distance education.	Jung (2022)	Book chapter
7	Quality assurance in Asian Distance Education: Diverse approaches and common culture.	Jung et al. (2011)	Journal article
8	Quality Assurance in Distance Education and E-Learning: Challenges and Solutions from Asia.	Jung et al. (2013)	Book
9	Quality assurance systems in open and distance learning: A search for normative judgement.	Kihwelo (2013)	Journal article
10	Quality practices: An Open Distance Learning perspective.	Ramdass and Nemavhola (2018)	Journal article

11	Quality Assurance: Good Practices in ODL in Sub-Saharan Africa.	Romeela (2019)	Report
12	Towards achieving quality distance education, challenges and opportunities: The case of the Zimbabwe Open University.	Shava and Ndebele (2014)	Journal article
13	The Quality Assurance Process in the Nigerian University System.	Uvah (2005)	Book chapter
14	Implementing quality assurance system for open and distance learning in three Asian open universities: Philippines, Indonesia and Pakistan	Zuhairi et al. (2020)	Journal article

Analysis

This paper's documentary analysis and bibliographic inquiry involves a critical review of related literature in QA implementation and application in DE. Using the related literature review provides research synthesis and thematic analysis of QA about DE in order to generate themes that addresses the paper's research questions. The thematic analysis using the deductive approach was done manually and did not involve any software. The thematic analysis considered the six steps including familiarity with the reviewed literature as displayed in Table 1. Therefore, this paper summarised and interpreted the selected reviewed literature to avail the relevant themes in addressing the questions of this paper.

Similar studies such as Dawadi (2020) investigated aspects of education related to English language teaching using six steps of thematic analysis which are familiarity with data, coding, searching for themes, reviewing themes, naming themes and writing the report. Whereas Dawadi (2020) applied thematic analysis in teaching English, this paper applies thematic analysis in examining aspects of QA in ODL. Additionally, Dawadi (2020) opined that in thematic analysis involving the use of deductive approach allows for data analysis related to themes emerging from the review of literature done for the study or the research questions designed for the study.

Limitations

This paper's limitation is on the use of documentary review, bibliography inquiry and thematic analysis to investigate QA in DE within Asia and Africa from 2005 to 2022. The documentary and bibliography inquiry were mainly from journal articles, book, book chapters and reports from searched sources such as AJOL, AsianJDE, SAGE Publications India Pvt Ltd, Spectrum Books Ltd, COL and HAQAA Initiatives. Therefore, future studies can expand to other search sources or databases. Furthermore, the scope of this paper is on implementation and application of QA in DE particularly Open and Distance Learning (ODL) institutions.

Findings and Discussions

In general, the findings revealed that most of the literature on QA in DE for African and Asia from the reviewed ODL institutions basically deal with frameworks, outcomes and performance, instructional design, student services and challenges as well as parity in terms of quality with the traditional institutions. Further findings based on research questions are indicated and discussed;

Quality Assurance Frameworks employed by DE Institutions

The DE Institutions have employed a number of QA in the education systems. For example, In Bangladesh, the QA practices have been deployed by the Bangladesh Open University (BOU) to

improve the performance of the institution (Ferdousi et al., 2022). The findings from the qualitative study of 17 interviewees revealed that QA is indeed being deployed and practiced from 2013 to 2022 for the case of BOU and it is considered as Phase III at maturity level although they faced challenges such as employees' acceptance of the QA practices while others stated that it helped to improve the quality of academic and administrative staff. The QA practices such as allowing to compete for research grants attracted and motivated external researchers to conduct collaborative research with BOU (Ferdousi et al., 2022). The deployment of such initiatives go hand in hand with Mkwizu and Ngaruko (2019) who emphasized on collaborative research among ODL institutions within Africa. The emphasis by Mkwizu and Ngaruko (2019) for research collaboration can extend beyond Africa and be emulated in other continents as evident during the pandemic and it is now still trending even after the global pandemic where a number of published journal articles have involved two authors and more such as Bozkurt and Sharma (2023) and Garcha et al. (2020).

Countries like the Philippines, Indonesia, Pakistan and Tanzania have DE institutions that have deployed QA. Zuhairi et al. (2020) conducted a study on QA for Asian Open Universities in the Philippines, Indonesia and Pakistan using qualitative approach to investigate the implementation of QA in ODL. This is evident that there is QA employment by Open Universities which are DE institutions. Additionally, in employment of QA in DE institutions, Zuhairi et al. (2020) found that QA quality begins with the aspects of inner self, multidimensional but also perceived as a continuous (improvement, mechanism, assessment, effort) to exceed the expectations of students and stakeholders. Similarly, in Africa, there are Open Universities as noted in the study by Mkwizu and Ngaruko (2019). Within Africa, there is QA employment in DE institutions as indicated by Uvah (2005).

In general, this paper has found that the QA frameworks employed by DE in both Asia and Africa from the mentioned ODL institutions are focused on "improving institution performance", "improving quality of academic and administrative staff", "competing for research grants", and "motivating external researchers to conduct collaborative research".

DE Institutions in applying QA measures in Delivering Teaching and Learning processes

At the regional level, the Asian Association of Open Universities (AAOU) has come up with its own statement of Best Practices and its Quality Assurance elements which consists of ten (10) areas as follows:
- Policy and planning
- Internal Management
- Learner's and learner's profile
- Infrastructure, media and learning resources
- Learner Assessment and Evaluation
- Research and community services
- Human resources
- Learner support
- Program design and development
- Course design and development

As universities make a transition from traditional ODL to e-learning, there is a huge gap in the faculty capacity to deal with the new delivery modes. Lack of training for staff in external and internal QA standards and indicators is a major stumbling block in developing "cultures of quality." Another frequently cited challenge is that many ministries and accreditation bodies use standards and indicators that have been developed for conventional universities and do not serve the purpose of ODL or e-learning well. Most QA processes cover formal education but do not consider the non-formal or informal programs (Jung et al., 2013).

Various DE providers across the globe have varying QA systems and procedures. For instance, the Virtual University of Pakistan builds quality into student assessment whereas Japan's Kumamoto University, India's Indira Gandhi National Open University, the Open University of China, and the University of the Philippines Open University adopt a mixture of instructional systems design strategies and support services to develop and implement quality ODL programs. In most cases, the educational bodies agencies cover both face-to-face and DE institutions when it comes the application of quality assurance.

This is particularly true in the study made by the Asian Development Bank (ADB) in 2011 when it states that in Indonesia, Malaysia, Philippines, and Thailand, QA has long been considered one of the main pillars of higher education development. However, the level of quality development among countries in this region is still quite diverse. Malaysia and Indonesia in particular are generally advanced in setting up clear guidelines for HEIs and systematic internal quality mechanisms. QA in Indonesia and Malaysia has been developed with the aim of creating a reference point for national qualifications (though it should be noted that a whole category of HEIs exists without accreditation). Some countries like Philippines, Thailand, and the private universities of Indonesia have monitoring mechanisms that duplicate accreditation processes. Cambodia, Lao PDR, Mongolia, Viet Nam have only recently established formal QA agencies; the development of QA in these countries has lagged behind others in the region due to more centralized government control (ADB, 2011).

About half of the countries across Southeast Asia have national QA systems that either operate under the umbrella of the ministries of education or are independent but partly funded by the government. These include Cambodia (Accreditation Committee of Cambodia), Indonesia (Badan Akreditasi Nasional Perguruan Tinggi), Malaysia (Malaysian Qualifications Agency), Philippines (Agency of Chartered Colleges and Universities in the Philippines; Philippine Accrediting Association of Schools, Colleges and Universities), Thailand (Office for National Education Standards and Quality Assessment), and Viet Nam (Department of Education Testing and Accreditation). QA systems vary in design, but several have proven to be effective in establishing quality standards and in ensuring that these standards are met. In the Philippines, for example, the Commission on Higher Education (CHED) constantly updates policies, standards, and guidelines (PSGs) of curricular programs in various disciplines. HEIs are compelled to use the PSGs as minimum standards when offering degree programs. The compliance of HEIs with the PSGs is monitored by the regional offices of CHED and by CHED technical panels and technical committees. It is generally agreed by many HEIs, and also by countries that have mature QA systems such as Indonesia, Malaysia, and Thailand, that QA should be internally driven, should be institutionalized within each country's standard procedures, and could also involve external parties. (ADB, 2011).

In Africa, HAQAA Initiatives draft report of 2017 noted that open and distance learning (ODL) and e-learning along with other forms of technology-enhanced delivery are increasing but cited challenges associated with the provision of quality higher education (HAQAA Initiatives, 2017). This implies that even the delivery of teaching and learning processes have challenges. The report opines that the adoption of the African Standards and Guidelines for Quality Assurance in Higher Education (ASG-QA) is an alternative to ensuring quality higher education but also quality assurance agencies in Africa to implement good quality assurance practices (HAQAA Initiatives, 2017). Furthermore, for teaching and learning processes, the HAQAA Initiative advises that the ASG-QA should be applied in cognizant with existing qualifications frameworks and credit transfer and accumulation systems operational in the African continent because these can act as catalysts to enhance transparency and mutual trust in the provision of higher education. The HAQAA Initiative (2017) suggests that QA measures teaching and learning standards can be focused on;
- Teaching and learning strategies that are student-centered and flexible
- Motivate students' self-reflection and engagement in the learning process
- The environment and resources are appropriate and adequate to support each student

- There are systems in place for periodic monitoring and evaluation of the teaching and learning approaches for quality improvement
- There are mechanisms for monitoring and evaluation of the results of postgraduate management systems against international best practices
- For ODL there should be i) The decision on the medium or media of delivery should consider the accessibility to the learners; cost of using it, both by the institution at installation and maintenance as well as learner cost; teaching strengths in relation to specific content; capacity in creating Inter-activity; organizational requirements for development; novelty; and speed within which it can be set up. ii) There are residential sessions to provide general orientation and introduction to the course materials at the commencement of the course; iii) There are special residential sessions for difficult aspects of the course during the program/course; and iv) There are residential sessions to provide some revision work to students before examinations.

In 2019, Afolabi added that there is a need for teacher education programs of Distance Learning Institute at the University of Lagos in Nigeria to strengthen management commitment and leadership for better implementation of QA. On the other hand, Ramdass and Nemavhola (2018) mentioned that even though QA is adopted for purposes of accountability in South African higher education, it is clear that the adaptation is difficult due to the quality culture which is characterized with fear of audits. Hence, the issue of quality culture needs to be tackled in order to improve the delivery of teaching and learning processes within an ODL setting.

From this paper, it shows that within Africa and Asia, the DE institutions commonly face the culture of quality as an obstacle when applying QA measures in delivering teaching and learning processes. The issue of quality culture is evident in Jung et al. (2013) and Ramdass and Nemavhola (2018). This paper has found that in Asia the PSGs is in place while for Africa there is a suggestion for ASG-QA.

Outcomes and Performance of DE Institutions in terms of QA

The rapid growth of private higher education in many countries has often led to downward pressure on instructional quality. Many countries across the region face problems of limited capacity and limited resources to regulate, monitor, and ensure the quality of private colleges and universities. Similarly, some countries still need to clarify and differentiate what indicators of quality should be used for different types of HEIs (ADB, 2011).

Unlike traditional institutions, OUs have the natural characters of openness, flexibility and capacity to reach wider audience through open, distance and online learning. QA has been an important instrument to improve the quality of ODL with large number of students. An earlier study on QA in Asian ODL system has revealed variability in terms of the level of QA policy integration in the overall national QA in higher education policy framework as well as QA purpose, policy frameworks, methods and instruments, despite obvious commonalities that underpin their QA efforts (Jung et al., 2011).

While ODE institutions should undoubtedly consider both internal and external accreditation and QA requirements and standards in various areas, they need to place quality in pedagogical dimensions such as course design and development, learning support, and assessment and evaluation at the center of the accreditation and QA system as these dimensions define the quality for student learning (Conrad, 2002; Daniel et al., 2008; Marciniak, 2018). This can be achieved by specifying procedures for courses/material design and development; involving both internal and external experts; considering changing needs and demands of learners; offering suitable training for faculty, tutors, and other support staff on a regular and continuous basis; and relating teaching and learning and learner supports to learning outcomes (Jung, 2013).

In Singapore, the public and private sector institutions are subjected to different regimes of quality assurance (QA) and statutory oversight (Jung et al., 2013). UniSIM's academic QA framework applies

to the whole academic value chain, from admission through delivery of program to graduation. Further, the academic standards of Singapore's UNISIM are ensured by the following:

- Outcome-based programs translated into outcome-based courses, with clearly defined levels of outcomes captured in a definitive program document;
- External assessments by subject specialists for all courses;
- Outcome-based examination process incorporating monitoring, moderation, and the oversight of an external examiner (EE) for each program.
- Annual review of teaching and learning, including student feedback, AF feedback, student progression, and achievement; and
- Periodic internal and external academic audits of programs.

For University of Terbuka (UT) in Indonesia, as the only state open university established in 1984, it has since consistently followed the rules, guidelines and procedures set by its parent Ministries of Education and Culture and of Finance to offer study programs to its ODL students. A systematic approach to QA in UT formally began in 2001 with the establishment of a QA Committee, and then followed in 2003 by the establishment of a QA Center, a unit dedicated to managing the implementation of a comprehensive QA system. UT began to adopt the Asian Association of Open Universities (AAOU) QA Framework 2001 as quality policies for implementation (Zuhairi et al., 2020). Furthermore, quality review at UT was completed in 2023 and UT received recognition to share best practices in QA with all the members of the International Council for Open and Distance Education (ICDE) in a virtual event titled 'Ask the ICDE Experts: Quality Models in Regional Frameworks (UT, 2023).

The QA policies consist of nine components, comprising one hundred and seven statements of best practice as follows. 1. Policy and planning (seven statements) 2. Human resource recruitment and development 3. Management and administration 4. Learners where there is a system of collecting detailed information about learners and using this information to inform all aspects of policy and planning, program and course development, support services, and the overall processes of teaching–learning. 5. Program design and development; particularly, programs are designed and developed with the needs of learners, employers, and society in mind; to encourage access to quality education; and set in place assessment methods appropriate to the aims and objectives of the programs. 6. Course design and development 7. Learning support 8. Assessment of student learning 9. Media for learning.

In Thailand, there is no QA system specifically designed for distance education (DE) institutions, as Sukhothai Thammathirat Open University (STOU) is the only university in the country that teaches solely via DE. STOU is subject to the external QA evaluation instruments and standards that are designed primarily for other HEIs in Thailand. STOU has ensured that all the internal and external QA elements are integrated into an overarching framework aimed at achieving a high level of educational quality in compliance with the National Education Act, Ministry of Education's Bylaws (Ministry of Education 2010) on Criteria for Offering and Managing Degree Programs via Distance Education, B.E. 2548 (2005), the Circular on Guidelines for Offering and Managing Degree Programs via Distance Education, B.E. 2548 (2005) (Ministry of Education 2005), national quality standards, and the goals and philosophy of the University. The QA process in STOU addresses the following:

- Developing curricula that comply with the Ministry of Education's Thailand Qualification Framework (TQF) of higher education;
- Implementing the concept of systematic courses in the form of block courses of six credits, each combining theory with practical experience such as assigned activities, work-based practical experience, pre-study and post-study evaluation and final examinations;
- Appointing a Course Production and Administration Team (CPAT) for each course to plan, prepare and produce course materials, and teach and evaluate the classes;
- Providing an information system allowing students to study on their own through the integration of printed core materials and supplementary media accessible to all students, such as video, audio, and electronic resources; and

- Providing supplementary media through interactive distance learning activities, radio and television broadcasts, computer-assisted instruction, e-learning, tutorial sessions, e-seminars, teleconference, and real and virtual practical experience programs.

In the case of the Open University of Hong Kong (OUHK), which was established by the government in 1989 but became self-financing after four years of operation, the government mandated that after attaining self-accrediting status and university title in 1997, it should continue to submit itself to an Institutional Review every five years to ensure that it was continuing to operate effectively and in accordance with its Ordinance. the OUHK "bought in" expertise and administrative systems (including QA systems) from the Open University, UK (OUUK) and other reputable distance learning universities.

Meanwhile, the Cyber Universities in South Korea, it has become crucial to assure their educational quality in order to maintain the value of the degrees awarded and the standard of Korean higher education in general. Ministry of Education, Science and Technology (MEST) has devised a two-part system for QA: initial institutional accreditation and periodic academic monitoring (Hwang et al., 2010). Once a cyber university is established, it is subject to regular monitoring and evaluation by MEST. The evaluation included six areas: educational planning, teaching and learning, human resources, material resources, management and administration, and educational outcomes. These evaluation areas were derived from the educational system model for cyber universities.

The outcome and performance of QA in DE in Africa is indicated in the Commonwealth of Learning article on good practices in ODL in Sub-Saharan Africa (Romeela, 2019). The study by Romeela (2019) examined case studies from (Botswana Open University, University of Eswatini, National University of Lesotho, University of Zambia and University of Namibia) in Sub-Saharan Africa. The findings indicated that the QA practices are different for each of the institutions in Sub-Saharan Africa and therefore, the outcome and performance are different due to the institutions being at different levels in terms of QA implementation. However, the study by Romeela (2019) noted that for institutions with well implemented National Quality Assurance frameworks, the issue of self-review processes is better. For example, when evaluating guidelines for diverse and dispersed groups of students, the University of Namibia looked at assessing areas such as quality of ODL management, quality of student administration, quality of student support, quality of teaching and learning facilitation, quality of materials development and quality of eLearning – online facilitation as well as online and blended course design (Romeela, 2019).

It is clear that from the reviewed literature that the outcome and performance of DE institutions in Africa and Asia in terms of QA face challenges however, the common good practices are hinged on having national QA frameworks, evaluation, designed QA systems and policies.

Challenges faced by DE Institutions in implementing QA measures

The implementation of QA has been indicated in past studies as having various challenges. One of the challenges in implementing QA in DE is the aspects of people, place and program as indicated by Ferdousi et al. (2022). Furthermore, the QA implementation has challenges depending on the phase of implementation (Ferdousi et al., 2022). For instance, the case of DE Institutions in Bangladesh is that adoption and upgrading of QA practices were slow and there was resistance by Faculty and staff members (Ferdousi et al., 2022).

Other challenges faced by DE institutions particularly in the Philippines, Indonesia, and Pakistan include embracing delicate processes of ODL transformation into online digital system (Zuhairi et al., 2022). Due to the pandemic, DE institutions are faced with more challenges in implementing QA in order to meet students' and stakeholders' expectations on quality since some of the students have limited access to technologies and online services as well as the need to train students and staff on new technologies for learning purposes (Zuhairi et al., 2022).

In Africa, for instance, the study by Shava and Ndebele (2014) conducted a qualitative study to investigate challenges faced by DE within an Open and Distance Learning settings in QA for Zimbabwe. The major challenges that the Zimbabwe Open University (ZOU) face in the implementation of QA includes management mechanisms, facilities and inadequate resources (Shave & Ndebele, 2014).

From an ODL perspective, the study by (2018) used qualitative method and the findings revealed that the elements of quality such as instructional design and student support are crucial and the challenge is mostly about quality culture by the Department of Higher Education and Training such as resisting change (Ramdass & Nemavhola, 2018). The major recommendation to remedy these challenges in the context of South Africa is to implement Total Quality Management (TQM) which puts emphasis on various issues like training, workshops and management commitment (Ramadass & Nemavhola, 2018).

Ghana also has challenges in implementing QA in DE as indicated in the study by Badu-Nyarko (2013). Using descriptive approach through personal observation and informal interviews, the study found that there were challenges which include lack of rules and regulations on distance learning and online registration for the students (Badu-Nyarko, 2013). In view of the challenges in implementing QA at the University of Ghana, Badu-Nyarko (2013) recommended for regular seminars as a remedy to encourage student's interaction and critical thinking. Similarly, a study in Tanzania by Kihwelo (2013) examined QA in the context of ODL and findings indicate that challenges exist such as lack of home-grown QA framework and reliable ICT as well as inadequate experts in ODL.

Despite the various challenges in implementing QA in DE, other scholars and in particular (Jung, 2022) are advocating for the creation of a globally-oriented QA system which can accommodate locally-adaptive QA system with the ability to reflect socio-cultural diversity in QA concepts and practices.

This paper shows that there are core challenges faced by DE particularly ODL institutions in the implementation of QA for both Asia and Africa and these are mainly themed as "Slow adoption and upgrading of QA practices", "Resistance by Faculty and Staff members", "Not enough embrace on the delicate processes of ODL transformation into online digital system", "Limited access to technologies and online services", "Management mechanisms", "Inadequate facilities and resources", "Quality culture by the Department of Higher Education", "Lack of online rules and regulations", "Lack of home-grown QA frameworks", "Reliable ICT", and "Inadequate experts in ODL".

Conclusion and Suggestions

The conclusion in this paper is that the findings of QA implementation and application in DE has shown that there is literature concentration on frameworks, outcomes and performance, instructional design, student services and challenges as well as parity in terms of quality with the traditional institutions. Further findings have shown that the QA frameworks employed by DE in both Asia and Africa based on reviewed ODL institutions are focused on "*improving institution performance*", "*improving quality of academic and administrative staff*", "*competing for research grants*", and "*motivating external researchers to conduct collaborative research*". In addition, this paper shows that DE institutions in Africa and Asia both face the culture of quality as an obstacle when applying QA measures in delivering teaching and learning processes. The QA measures include the use of PSGs for Asia and the suggestion of ASG-QA for Africa. Furthermore, the outcomes and performance of DE institutions in Africa and Asia in terms of QA have common good practices which reflected on national QA frameworks, evaluation, designed QA systems and policies.

In terms of challenges for implementing QA in DE, this paper concludes that the core challenges are "*Slow adoption and upgrading of QA practices*", "*Resistance by Faculty and Staff members*", "*Not enough embrace on the delicate processes of ODL transformation into online digital system*", "*Limited access to technologies and online services*", "*Management mechanisms*", "*Inadequate facilities and*

resources", "*Quality culture by the Department of Higher Education*", "*Lack of online rules and regulations*", "*Lack of home-grown QA frameworks*", "*Reliable ICT",* and *"Inadequate experts in ODL*" .

The policy implication of this paper's outcome is for policy makers to encourage more research on QA in DE that matches post COVID-19 trends like artificial intelligence. This means that policy makers along with educational practitioners can instill research projects on QA in DE to include areas of artificial intelligence. The practical implication is for education practitioners to also put emphasis on implementation and application of QA in DE which undergo regular evaluation so as to determine any shortfalls or challenges for immediate corrections. In addition, future research may also explore the relevance of locally established QA in DE institutions.

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