Evolution of quality assurance practices in enhancing the quality of open and distance education in a developing nation: a case study

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Abstract

Purpose – The purpose of this study is to look at the challenges and successes that the case institution has had in implementing and maintaining quality assurance (QA) processes. The study also looks into the role of QA techniques in improving an institution's performance in a developing country.

Design/methodology/approach – The research is qualitative. Nine significant persons were interviewed, including the institution's top administration, faculty members and related staff. Data were gathered to learn more about the background, incremental changes and numerous internal and external elements that influenced how QA was approached over time.

Findings – The findings revealed the challenges and experiences of the evolution of QA practices in the case institution. The results show the changes in QA practices regarding three aspects, including people, place and program of case institutions under three phases. During phases I and II, the adoption and upgradation of QA practices were very slow; phase III showed significant improvement in all three aspects. In addition, the positive impact of QA practices is evident in improving the performance of students and teaching and nonteaching staff of the case institution.

Practical implications – The findings of this research could aid open and distance learning (ODL) providers in other developing nations in understanding the challenges of such a system. It may also make it easier for other ODL providers to comprehend the QA-led success in stakeholder confidence, employability and reputation.

Originality/value – The research will give insights into how QA procedures are used and valued in ODL in developing nations.

Keywords Quality assurance, Developing economies, Open and distance education, Bangladesh Open University, Performance

Paper type Case study

1. Introduction

Higher education faces numerous interconnected challenges, including limited access to tertiary level institutions, insufficient funding, inadequate information communication technology (ICT) infrastructure and low research output (Mannan, 2015). Particularly in developing countries, educational systems face a variety of challenges. It includes rising costs

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due to fiscal constraints, a lack of curriculum renewal, a lack of appropriate learning materials, a shortage of trained teachers, an insufficient level of systemic compatibility and inadequate teaching aids, all of which contribute to low-quality and ineffective education (Dhawan, 2020). In addition, natural disasters such as COVID-19 have wreaked havoc on these countries' traditional face-to-face education infrastructures (Churiyah *et al.*, 2020). Additionally, many groups, particularly the rural poor and disadvantaged, including women, have limited access to quality education. However, in these circumstances, the requirement for large numbers of people resulted in the concept of open and distance learning (ODL), which has developed into a critical component of higher education in both developed and developing countries (Alhumaid *et al.*, 2020).

The concept of ODL focuses on open access to education and training to make the learners free from the constraints of time and place and offer flexible learning opportunities to individuals and groups of learners. However, the central purpose of ODL is to provide education to those who lack the opportunity to obtain formal education. In open education, there are no formal classroom practices and students focus on independent study. In addition, learning content, including lectures, is disseminated by correspondence, broadcast using electronic media or provided through a learning management system here. Distance education (DE) is seen as a cost-effective and efficient means of increasing access to education. While DE with its utilization of advanced communication technology is a unique tool to enhance the quality of education in various groups and areas of the country (Arthur-Nyarko *et al.*, 2020), contemporary communication technologies also facilitate the reach of education to a large number of people who can learn in their place, pace and time (Tomasik *et al.*, 2021).

ODL was initially criticized for its poor quality, its lower standards of students who enroll and being detrimental to higher education planning in the country (Stella and Gnanam, 2004). Even after introducing several changes in course materials, curriculum and teaching methods, there is considerable controversy throughout academia and among employers about what constitutes quality in ODL and how to ensure it (Devkota, 2021). Assuring the quality of education is a fundamental aspect of gaining and maintaining credibility for programs, institutions and national higher-education systems worldwide. Despite a long and generally successful track record, ODL is still required to prove that the quality of student learning is at least equivalent to face-to-face teaching (Arkorful and Abaidoo, 2015). A robust quality assurance (QA) system can assist in accomplishing this. However, the interest of stakeholders in ODL has increased interest in QA. While some argue that ODL QA practices are comparable to those used in traditional education, others argue that ODL tests conventional assumptions and thus that current QA mechanisms are insufficient to ensure the quality of ODL (Palvia *et al.*, 2018). On the other hand, QA is not an attempt to create quality but a systematic and comprehensive effort to improve it. QA aims to demonstrate and improve the quality of an institution's methods, educational products and outcomes. It includes developing and producing instructional materials, academic programs, services, support and student learning standards in ODL (Margaryan *et al.*, 2015).

While there are a large number of studies (Hoecht, 2006; Ryan, 2015; Kahveci *et al.*, 2012) that have focused on the practices of QA in the traditional education system, some studies have looked into the same from ODL (Perraton, 2012; Darojat *et al.*, 2015; Kihwelo, 2013; Scull *et al.*, 2011; Stella and Gnanam, 2004). However, while some studies have concentrated on the nature and importance of ODL, some other studies (Darojat *et al.*, 2015; Kihwelo, 2013; Scull *et al.*, 2011; Stella and Gnanam, 2004) have shown the use of QA in the context of ODL. In this respect, while previous studies (Stella and Gnanam, 2004) are mostly based on developed countries, only a few studies (Darojat *et al.*, 2015; Belawati and Zuhairi, 2007) have examined the use of QA in ODL from a developing country's perspective. Available evidence indicates that the acceptance of ODL differs from country to country. In some developed countries,

including the USA, Australia and the UK, stakeholders recognize the off-campus degrees considerably (Stella and Gnanam, 2004), while the situation is different in some European countries where ODL promoters are struggling to gain acceptance of ODL. While the open university was introduced as an Apex Body in a developing country like India, Bangladesh is still concerned about the broader acceptance of ODL despite some positive changes being apparent in recent times during COVID-19 (Churiyah *et al.*, 2020).

However, the focus on a developing country like Bangladesh is necessary due to its unique environment. It differs from developed countries in terms of opportunities, facilities, technological advancement, etc. (Dhawan, 2020). Accordingly, a specific QA strategy is not universally adaptable because the DE "outfit" differs widely from institution to institution and from one country to another. This warrants that the pace of development and process of maintenance of QA in ODL be flexible (Arthur-Nyarko *et al.*, 2020). This study, therefore, explores the experiences of incorporating QA practices in the Bangladesh Open University (BOU), the only open and distance education (ODE) provider in Bangladesh. In addition, this study further contributes to the literature by addressing the following research question:

What are the experiences of BOU in adopting and maintaining QA practices?

Based on the research question, the study addresses the following objectives:

(1) To explore the experiences of BOU in adopting QA practices;

(2) To explore the experiences of BOU in maintaining QA practices;

(3) To explore the impact of QA practices in enhancing the performance of BOU.

2. Context of QA practices in ODL and Bangladesh Open University (BOU)

While quality involves satisfying a defined standard in higher education, the quality of the inputs (e.g. staff, libraries, laboratory equipment and facilities) is generally assumed to determine the quality of its output (i.e. graduates and research).

However, recent studies argue that the quality inputs do not necessarily guarantee quality outputs; instead, it is critical to evaluate the outcome of the education, which is measured by students' learning achievement. A critical educational goal in higher education is to achieve high-quality teaching and learning or pedagogical techniques that result in student learning outcomes. Achieving high-quality teaching and learning requires a multidimensional approach that includes curriculum and course design, learning contexts, feedback, learning outcomes assessment, learning environments and student support services. In an ODL system, a comprehensive and integrated online student support system is mandatory to maintain the quality of ODL. ODL requires more endeavors in logistics, supply chain management and supporting activities, such as laboratories to support effective teaching and learning of science online at a distance. QA in the context of ODL requires a detailed examination of those characteristics that can give credibility to the various programs and products of ODL (Tomasik *et al.*, 2021). With the increasing acceptance of ODL as widening access to education, it has become increasingly necessary that the QA process be developed and maintained if the ODL provision is relevant and more functional than the products recognized in the conventional higher learning in the emerging open learning environment (Amin and Jumani, 2022).

Nevertheless, QA in ODL institutions has gained serious attention from institutions and stakeholders over a couple of decades. Accordingly, institutions began to redefine and revise their institutional missions, strategies and visions that address quality issues. While some studies have concentrated on exchanging ideas and experiences regarding the "best practices of QA implementation" in ODL contexts from around the world (Tait, 1997), other studies examining the use of QA in Asian ODL have revealed significant variation in the level of QA

practices (Devkota, 2021). Therefore, considering the socioeconomic differences, this study focuses on exploring the experiences of BOU in adopting and maintaining the QA practices since its inception.

However, as students' backgrounds and needs diversify, BOU faces increasing pressure to accommodate the students' requests for flexibility. In this context, this institution has implemented QA practices as a cost-effective method and tool for addressing the ODL quality challenge. As in ODL, it is required to keep the quality concept in mind while developing and implementing systems, processes and procedures. In BOU, implementing QA principles in ODL was a monumental task as it required a great deal of effort, patience, socialization and training to ensure that innovation is a productive effort. However, BOU did not formulate a QA policy during its establishment, but the QA evolved along with its maturity. The formulation of the QA policy occurs at a later stage of its establishment based on the learners and institutional experience.

3. Method

BOU was chosen as a case as it is the only university that provides both open and distance education (ODE) in Bangladesh and has experienced many challenges and changes from its inception. The institution was contacted via the registrar (hereafter "organization contact"). In examining the implementation of QA in BOU, 17 interviews were conducted over eight months with the university's key personnel (Table 1) to explore the experiences in adopting and maintaining QA practices since its inception. Interviewees were selected based on their knowledge regarding the implementation of QA, and accordingly, two participants from top-level management, five administrative staff members, nine faculty members and one faculty member associated with the Institutional Quality Assurance Cell (IQAC) were interviewed. Interviewees were required to have had involvement with QA activities in the BOU, to have a minimum of five years' experience with the institution and to be willing to participate in the study. The case institution contact provided his support to find relevant respondents from different departments who met the aforementioned criteria.

A qualitative approach was used to better understand the experiences from the inception to date and the impact of using QA practices in enhancing the performance of the BOU. Using an interview schedule (open-ended questions), data were collected to obtain information

Table 1.
List of participants

Participant	Details
Participant 1	Top management 1
Participant 2	Top management 2
Participant 3	Administrative personnel 1
Participant 4	Administrative personnel 2
Participant 5	Administrative personnel 3
Participant 6	Faculty member 1
Participant 7	Faculty member 2
Participant 8	Faculty member 3
Participant 9	Faculty member and member of the IQAC
Participant 10	Administrative personnel 4
Participant 11	Faculty member 4
Participant 12	Faculty member 5
Participant 13	Administrative personnel 5
Participant 14	Faculty member 6
Participant 15	Faculty member 7
Participant 16	Faculty member 8
Participant 17	Faculty member 9

concerning the context, gradual changes and various internal and external factors that brought such changes. The researchers collected data.

Meetings were held on the BOU campus using an interview guide. In order to gain an insight into the implementation process of QA, BOU's internal documents covering the last 10 years were also analyzed. The documents included BOU's meeting minutes, brochures and quality manuals. Prior consent was taken from the interviewees. Participants were offered the opportunity to interview in Bangla. Three participants chose to have the interviews conducted in Bangla, and the remaining participants chose the interviews to be conducted in English.

While participants were allowed to be interviewed in both Bangla and English, many respondents responded in English, and only a few respondents gave their responses in Bangla. Accordingly, the Bangla interviews were transcribed and translated. Data were analyzed using NVivo software (NVivo is a software program used for qualitative research, and it facilitates the analysis of text, audio, video and image data, including interviews, focus groups, surveys, social media and journal articles). While at the early stage of data analysis, the data were grouped into many codes. Finally, these codes were specifically categorized into different time phases such as phase I, phase II and phase III. The documents used included meeting minutes, bulletins and institutions' websites.

Furthermore, evidence was also collected from other records, including the University Grants Commission's (UGC's) instructions. The triangulation method was incorporated where the responses of the interviews and the documents collected from various sources and observations were compared (McKinnon *et al.*, 2000). Using multiple data sources reduces the risk of a validity issue because it relates to different research contexts or information about the same comparable research. The reliability was ensured through the use of archival documents.

4. Case study

A case study is a standard research tool in the social sciences. Case studies are investigations into the causes of underlying concepts that focus on a specific person, organization or event. A case study is a detailed and in-depth examination of a person, group or event in contrast to a single vision of an individual obtained from a survey response or an interview; case studies capture a variety of viewpoints. The case study method allows for a better grasp of the subject at hand (Bennett, 2004). It also reduces the possibility of prejudice by diluting the agenda of a single individual. The case study method is always preferable in education research for revealing a complex grasp of underlying phenomena (Yazan, 2015). The research employs the case study technique for the study at hand, based on the preceding explanation. Here, for the underlying objective, the research works with BOU.

4.1 About the Bangladesh Open University

In 1992, BOU was the first and only university established to provide ODE in Bangladesh. As a public university initially, the BOU started with a minimal number of students and staff members, which eventually increased to 29,700 academic staff members and 574,000 students (website). This university uses a flexible mode of education delivery in providing education and training from anywhere at its own pace.

The focus of this university is to promote education through multimedia instruction at all levels of education in science, agriculture, humanities, social science, etc. It offers 56 formal academic programs, along with 19 nonformal programs (environmental protection, basic science, elementary mathematics, agriculture, bank service, marketing management, health nutrition, population and gender issues) where ICTs are the core to provide education. With a blended learning approach, the university's instructional system comprises mainly the development of instructional materials in modular form, delivery of the printed materials to the learners, face-to-face tutoring of students at selected tutorial centers (called study centers),

online tutoring (for both national and international students) and delivery of learning materials through ICTs.

4.2 Phases of changes in QA practices in the BOU

4.2.1 Phase I (embryonic): period from 1992 to 1995. The first phase was the "embryonic" phase for the case institution [1]. From the inception to 1995, this period is considered as the phase I of BOU when QA practices were relatively weak compared to any other period (participant 1). This phase mostly emphasized the initial development of infrastructure including regional centers (RCs) [2] and subregional centers (SRCs) [3] in different parts of the country; study centers as well as administrative and academic building in the main campus. However, BOU faced numerous challenges in hiring desired academic and administrative staff (participant 1). Participants' views reveal that the low acceptance of ODL and lack of expertise in the management of the ODL system were the key challenges and impeding factors in ensuring quality at this phase. Moreover, initially, the tools, techniques and facilities to support every activity were in their infancy.

4.2.2 Phase II (evolution): initial QA framework of BOU (1996–2013). While there was no QA framework found until the early stage of phase II, some extent of QA practices received attention at the later stage of this phase. However, during the second quarter of this phase, BOU adopted an "internal QA framework". In this respect, BOU used to have a "needs analysis framework" to identify the needs and gaps regarding three components, that is, (1) people, (2) programs and (3) place. This framework aimed to identify the desired quality requirements and then analyze the gap between the expectation and reality. As mentioned by participant 1, the "needs analysis framework" includes identifying the QA practices needed for the people (academic staff, administrative staff and students); program (curriculum, module, teaching, learning other processes and procedures) and place (space and facilities).

However, it was revealed by the participants that the top authority, senior administrative staff members and regulatory bodies were vital in making BOU's QA policies and practices. As mentioned by the top management, the critical gap identified by the "need analysis" was the resistance among the faculty and staff to accept any changes. In addition, over the last 2 decades, the top management also mentioned numerous other challenges that affected the case institution in improving the quality of all three aspects, of people, program and process. At this phase, the people component was found to have similar challenges like phase I. Participants viewed that the number of qualified applicants trained in ODE used to be very low for the case institutions. Even at this stage, the administrative staff members were also found lacking in education and training in the ODL system, which is indicated as key inhibiting factors in assuring quality during this stage (participants 5 and 7). In this respect, participant 6 expressed:

> . . . The critical challenge in quality improvement emerged from people with diverse backgrounds. The lack of adequate training to develop the required skill within the staff and academics also challenged the success of the ODL system.

Participants also mentioned that while enhancing quality requires qualified and highly motivated staff and faculty members to ensure quality outcomes, no such rigorous faculty selection process was in place during this phase. Moreover, while teachers' quality largely depended on efficient delivery of lectures, until 2013, the full-time faculty members were only devoted to conducting examinations and other administrative duties in addition to preparing the video lectures and modules. In this regard, participant 5 stated:

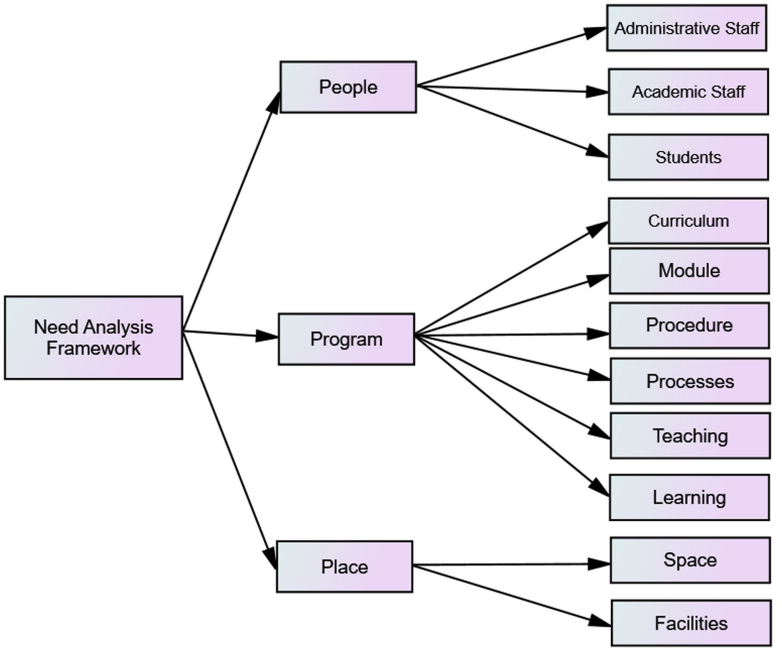
> . . .. classroom delivery is a crucial skill for a faculty member to enrich his[her] knowledge . . . . . till 2013, the faculty members were more involved in preparing modules and undertaking exams and other duties only. It was a significant drawback in enhancing the faculty knowledge and skills.

Moreover, along with other factors, at this phase, the academic position emphasized the academic results only, which led to inappropriate staff in place without relevant education in ODL (see Figure 1). In this regard, participant 7 mentioned:

> . . . the previous selection process failed to ensure quality of staff, ...however, in many cases, staff were found inappropriate for the selected positions.

In addition, the diverse background of students with no admission test also led BOU to produce low-performing graduates. Participants believed that there was a lack of interactive communication between the students and tutors, which is considered one of the critical inhibiting factors against BOU's success (participant 9). However, until this phase, the "study centers" used to facilitate direct interaction between tutors and students only every week. Moreover, with respect to the people aspect, participants viewed that while there was a little arrangement for the development and incentive programs for the faculty members and staff (participants 1 and 8), phase II took a few initiatives, including faculty and staff development through allocating funds for both local and foreign training.

However, while the "quality of people" aspect received little attention, the "program aspect" in this phase received moderate attention. Participants' views revealed that BOU was very selective in selecting the learning programs, and the selections were based on the decisions of significant stakeholders. Every decision regarding a new program had to pass through different committees, including Syndicate and Academic Council. Regarding preparing the modules and designing the curriculum, separate committees used to decide who will prepare the modules and change the curriculum. It is mentioned by participant 9 that the committee members selected the experienced internal and external faculty members from reputed universities and colleges to prepare the modules. However, regarding the reviews of curriculum and modules, participants stated that there was a lack of initiative in regularly



Source(s): Developed on the basis of information provided by the participants

Figure 1.
Internal needs analysis/gap analysis framework of BOU

reviewing the curriculum and modules. In line with what participant 1 expressed, the same curriculum and modules were in use over a long period. In addition, BOU shows a significant lack of faculty research and development in this phase. As expressed by participant 2,

> . . . though the development of a faculty member largely depends on research and training, these were received less priority.

Participants' views also suggest that the lack of research culture was a key to the demotivation of faculty involvement in research. Moreover, the easy promotion was also viewed as an inhibiting factor in this regard.

Moreover, some underminers operate in the shadows to demoralize QA issue processes by creating or exaggerating destructive features of the BOU-implemented change. Other teachers, particularly those who lack a firm understanding of the topic or the willpower to resist, may be readily persuaded to join the negative debate. The BOU's upper management takes the issue of challenging employees seriously. They discuss this conduct in private or public, as appropriate, and determine the underlying causes. Regarding QA practices, BOU established a tone and a standard of conduct. Peer pressures shape it so that tough people become accustomed to it (participants 5 and 9).

Nevertheless, along with the "program" aspect, the "place" also appears to have received moderate attention even though most participants recognized it as a key operational area that must be given attention in improving quality. As the participants viewed, while there were many "study centers" all over Bangladesh with inadequate facilities, the lack of a proper monitoring system was central to the quality problem. In addition, the "RCs" also received less attention from the authority. However, over time, the increased awareness regarding the necessity of physical facilities in increasing the quality of staff members, faculty members and students led the authority to improve the facilities of "RCs," "subregional centers," "study centers" and the main campus.

4.2.3 Phase III (matured): QA practices from the end of 2013 to present. Phase III is considered the most remarkable phase when BOU undertook significant quality initiatives. However, as indicated by the participants, this phase encountered high resistance from various employees, including the academic and administrative staff, in implementing quality-related changes. This phase showed significant changes in terms of all three aspects. With respect to the "people" aspect, BOU showed deep concern. At first, the faculty and staff selection process received the key priority. In line with that, a four-step process was emphasized in selecting teachers. Accordingly, the process includes a written test, viva, presentations and video test. On the other hand, the administrative staff members need to fulfill three requirements: (1) written test, (2) viva and (3) computer skills. As mentioned by participant 5, one of the key reasons for changing the recruitment criteria was to ensure the quality of academic and administrative staff. Moreover, the promotion criteria have also become a little harder than before. Participants' views showed that these changes led to satisfying certain qualifications and skills, thereby improving the overall quality of faculty and staff. In this respect, participants 5 and 2 state:

> . . . although the new selection and promotion processes were highly debated, these proved necessary for improving the quality of academic and administrative staff.

In this stage, emphasis was also given to faculty training and development programs by encouraging them to attend seminars, conferences, workshops and training. Moreover, academic and administrative staff members are both motivated to compete for "research grants," thereby enhancing faculty involvement in research. In this regard, participant 4 expressed:

> . . . the research grant was found as a motivating tool in increasing faculty involvement in research. The fund also motivated external researchers in conducting collaborative research.

Additionally, participants 9 and 16 emphasize the role of ranking in developing the institution's QA practices, notably in the growth of its people and processes. University rankings are growing increasingly popular and have extended globally. According to some scholars, rankings can help ensure that schools and universities are of high quality (Pham, 2018). However, because the assessment tools are not as effective as they could be, mainstream university rankings do not increase the quality of higher education as much as anticipated (Liu, 2020).

In addition, phase III showed significant attention in respect to "program" aspects. Participants' views expressed that while updating the curriculum did not get much priority in phase II, phase III brought remarkable changes. Participants revealed that the curriculum review received key priority where a committee comprising members from different departments used to discuss and thoroughly examine the curriculum for any change and improvements, including the content editing, the mode editing, the language editing, etc. The changes in the curriculum took place from 2014 to 2019 (participant 1) in different academic programs. Moreover, e-learning materials that are very popular with the learners were prepared to complement the self-learning material to enrich the learners' knowledge further. Participants' views suggest that the top management was inclined to continuously update the materials supplied to the distance learners, whether in print or electronic form. Participants' views also expressed that phase III shows considerable interest in equipping learners with better learning tools including high-speed internet, micro-SD cards containing video and audio programs inserted into mobile sets of students, which assist students even when they are off-line. The university also uses YouTube (www.youtube.com/user/bdopenuniversity) and BouTube (www.boutube.com) to help students by providing all necessary textbooks/modules.

Moreover, along with the previous system, a few more technology-based systems and application software programs were introduced to ensure smooth administrative services and provide better online services to students. In addition, at this phase, the expansion of academic programs has also been prioritized. At this stage, study centers in foreign countries received attention. As revealed from participant 3, centers were established in South Korea, four centers in Qatar and more are under consideration in the Middle East.

In addition, participant 7 brings up the issue of massive open online courses (MOOCs) as the key to accelerating the success of BOU's ongoing QA practices. MOOCs can give students access to the knowledge they might not have otherwise. They can also help people who cannot afford college (Al-Rahmi *et al.*, 2019). MOOCs are an excellent way to get a nontraditional education online, and they can work well with traditional university education.

However, suitable and attractive infrastructure at phase III also got critical attention. Although the importance of the "place" aspect in the QA framework sparked various debates, BOU emphasized the development of good infrastructure and facilities to comply with the desired quality requirements. In line with that, BOU focused more on increasing the facilities of "study centers," "RCs" and the main campus. However, in order to comply with the requirements of the government, during the later part of this phase, BOU established an IQAC with the financial and technical assistance from the UGC's Higher Education Quality Enhancement Project (see Figure 2).

The objective of IQAC is to promote a quality culture following national QA guidelines and international practices. Moreover, the focus was to ensure that the university's QA procedures were designed following the Quality Assurance Unit guidelines and national requirements. Additionally, the establishment of this cell focuses on developing, sustaining and enhancing the quality of education and public perception of the university through consistent QA practices and performance. It contributes to the development of the university's image in the eyes of stakeholders by ensuring transparency, accountability and sound management practices in all areas of administration and preparing the university to meet external QA and accreditation requirements. The cell also includes setting development goals and indicators of improvement in the educational and administrative functions of the

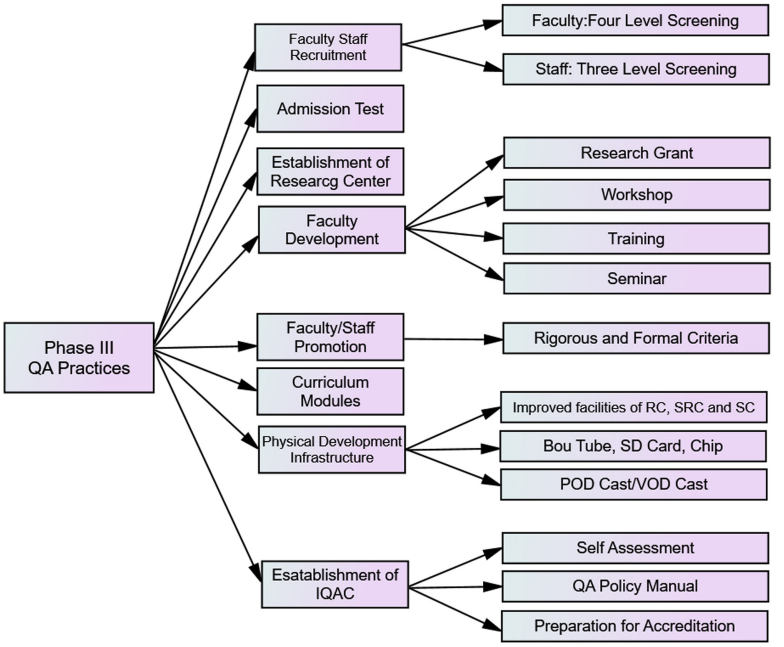


Figure 2.
QA framework during phase III

Source(s): Framework developed based on the discussion of participants

organization. The cell develops the plan to achieve the government's desired goals, including identifying the problems by evaluating the overall features of the university's degree programs, curriculum, methods of teaching, teacher training, research activities and administrative activities. Based on these, BOU emphasized the following QA activities.

Under pressure from UGC, BOU started focusing on QA practices with some additional emphasis on existing QA practices. In line with that, BOU undertook a "self-assessment" by surveying various stakeholders. Followed by that, an "external reviewer" assesses the current QA practices of BOU with a feedback process. Based on the "self-assessment report" and "review report," the case institution prepared their QA policies. However, participants' views expressed that the current focus of BOU is to get accreditation. However, the discussion reveals that the adoption and changes in various QA practices improved all these three aspects. In this respect, participant 3 expressed,

> . . . the continuous QA practices may help BOU increase the ODL program's acceptance to a greater extent.

However, participants indicate that QA practices increased stakeholders' satisfaction, including the students, employers and regulatory bodies. Participants' views also mentioned that increased recognition is one of the critical indicators of the positive consequences of QA practices (see Figure 3).

Figure 3.
IQAC-induced QA practices

Source(s): Framework developed based on the discussion of participants

5. Conclusion, implications and limitations of the study

This study aimed to analyze the experiences of implementing and maintaining the QA practices by BOU. Moreover, the study analyzes the impact of QA practices in enhancing BOU effectiveness. The findings show the importance of the role played by QA in increasing the effectiveness of the institution. The study contributes to two strands of literature: QM studies within the management literature and developing countries. It provides practical evidence on the challenges and experiences and how the emphasis on QA practices changed over time. Specifically, the findings provide an insight into the change that was made to the practices of BOU.

The analysis revealed that the changes in QA practices of the case institution mainly focused on three components, comprising people, program and place under three phases, including phase I, phase II and phase III. The result shows that the nature of ODL is different from that of traditional education, which causes unique challenges for BOU to manage quality. The QA practices in ODL and the traditional system are different in many ways, in terms of the qualification of academic and administrative staff, students' background, mode of education, teaching-learning methods, space and facilities, etc. However, the result reveals that there were no such QA practices during phase I; instead, this phase concentrated more on developing basic infrastructures. The emphasis was more on introducing the new model of the education system – the ODL approach to many students. The key challenges were attracting and recruiting desired candidates for the academic and administrative positions, the low acceptance of ODL and the lack of expertise in the management of the ODL system. The finding has also been supported by the scholars Kihwelo (2013).

The study demonstrated that while the first stage of phase II was found to have no attention to QA practices, the later stage of phase II shows little to moderate attention to various aspects of QA practices. In this phase, a "needs analysis framework" was developed to identify the requirements of QA practices in terms of people (academic staff members, administrative staff members and students); program (curriculum, module, teaching, learning and other processes and procedures) and place (space and facilities). This framework helped the case institution in identifying the challenges, such as inexperienced academic and staff positions, diverse backgrounds of students with no admission test, lack of face-to-face interaction between teachers and students and rigorous recruitment and promotion process, which inhibit the desired quality.

Regarding the programming aspect, findings reveal that while the experienced faculty members from reputed universities were involved in preparing the modules, there was a lack of an initiative in regularly reviewing the curriculum and modules. However, the result shows that while there was little attention with respect to faculty training and research, a moderate level of improvement was mentioned at the later stage of this phase. Moreover, this phase pays moderate attention in increasing the facilities of its regional and study centers.

However, compared to phase I and phase II, phase III showed significant changes in QA practices in terms of all three aspects, including people, process and programs. The participants mentioned changes in terms of faculty recruitment and promotion; review of curriculum and modules; inclusion of modern tools and techniques in the mode of learning and teaching; rigorous training for faculty and staff development and availability of research grants. Finding suggests that following the aforementioned developments, a continuous improvement mechanism is developed after establishing IQAC. The IQAC led BOU in ensuring QA practices according to the national requirements. The analysis suggests that in an effort to enhance the acceptability of ODL to the stakeholders, BOU is preparing to apply for the accreditations. The findings indicate that any improvement is the result of awareness and intention of the top management. When top management understands the need and benefits of assuring quality, they can create a milestone. Therefore, it is imperative for the top

management to create a systematic process to adopt QA practices and monitor the outcome on a regular basis.

The study extends the existing literature by exploring the experiences of implementing and maintaining the QA practices and the impact on the effectiveness of ODE in a developing country like Bangladesh. In particular, the analysis incorporates a qualitative approach to exploring the research objectives. In doing so, the findings assist the regulators and authorities of ODL providers in developing countries in understanding how to enhance the use and effectiveness of QA practices. The focus on a developing country was considered important as the use and effectiveness of QA in developing countries are different from those in developed countries due to the political, social and cultural environment. Moreover, while QA practices are prevalent in developed countries, institutions within developing economies experience difficulties incorporating such practices due to scant facilities, resistance and negligible investment in technologies. Similar results are observed in other developing nations, such as India. Even though institutions in underdeveloped nations endeavor to provide excellent education, each institution has its own contextual goals, norms and laws, budgetary constraints, security concerns and technical legacies (Patra *et al.*, 2022). Consequently, the measures must consider the specific environment of the concerned institution. In addition, developing nations' governments must identify the issues that impede the institution's application of QA procedures and then develop the required measures to overcome these obstacles.

The study also extends the literature by providing an insight into the effectiveness of QA, in terms of increased recognition, employability and satisfaction of stakeholders. This implies that institutions should endeavor to make greater use of QA practices to provide better services, thereby enhancing the institution's image. This finding supports the previous studies by Tsekouras *et al.* (2003).

However, the findings imply that QA is a never-ending process. If institutions simultaneously focus on improving three aspects, including people, processes and programs, it is possible to enhance the effectiveness of the institutions. Therefore, the institutions should endeavor to use QA practices to provide better services, thereby enhancing the institution's image, which also highlights the critical role of QA practices in enhancing performance.

The study has limitations. While the case study aimed to explore the changes in QA practices through a retrospective analysis of organizational participants' views of the changes, there is a possible risk of missing valuable information due to the inability of respondents to recall events. While such concerns were minimized by using multiple data sources, future research may extend the current study by investigating the findings in different research sites.

Notes

1. The time period of each phase is on the basis of the discussion of the participants.
2. Regional centers (RCs) usually organize the admission tests and maintain linkage with study centers including local school, colleges and universities.
3. Here, the "people" refers to the internal and external stakeholders including governing council members, management team members, senior academic and students who are part of QA activities. The "program" refers to the processes, procedures and activities including curricular design, teaching and learning, governance systems, professional development of staff, research, student assessment, staff recruitment, student admission, institutional ceremonies and student support services. "Place" refers to the space and facilities which are required to support every activity.

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