

Quality Assurance in Kenyan higher education as a tool for keeping pace with the international standards

By
Vundi Nason,
St. Paul's University, Limuru, Kenya
nvundi@spu.ac.ke

Abstract

This paper is a desktop review which presents findings from 32 studies covering quality and Quality Assurance (QA) systems in the Higher Education (HE) sector in the Kenyan context; the choice of the studies was based on relevance, themes and the objectives of the study. The purpose of the paper was to evaluate the determinants of a sustainable quality assurance systems in higher education in Kenya. The selected studies were carefully reviewed, data was gathered and categorized into themes. The emerging patterns from the categorized data was used to answer the research questions. In that regard, this study went beyond the processes of QA, and accreditation to address the question of sustainability which presently stands as one of the key gap in the implementation of QA systems in the HE sector. The main findings of the study are: sustainable QA systems in HE is realizable by addressing the factors identified b) conceptual model is fundamental for clarity and accuracy to avoid confusion and relativism c) the processes of developing and implementing QA should be inclusive and participatory for better results, d) more partnership and collaboration are needed to solve the challenges of implementing QA systems.

Key Words: Higher education, quality assurance, stakeholders, standards, framework, processes.

Statement of the problem

QA agencies have intensified efforts in ensuring quality in higher education, for example the Inter University Council of East Africa (IUCEA) and Commission for University Education (CUE) have provided adequate guidelines for implementing QA systems. The implementation of QA systems in HE institutions have continued to improve access, efficiency, accountability, skill and quality graduates, better utilization of resources, and enlarged proliferation of private institutions. However, there is no clear pathway for making quality assurance systems sustainable in higher education. This study therefore sought to evaluate the determinants of the sustainability of the quality and QA systems in higher education in Kenya.

Research Method

This was a desktop study, the research process entailed careful selection of the literature which comprised of: conference proceedings, journal articles, empirical studies, and books. The selected literature was based on the study aim, topics, relevance, themes, content and context. The search yielded 88 sources; however, only 34 sources met the researcher's criteria and therefore they were selected for the study. The selected literature was critically reviewed, data collected was recorded and grouped in sub-themes, afterwards it was judiciously analyzed and the findings used to answer the research questions. Ethical consideration was carefully observed, for example, the researcher's interpretations and conclusions in each section were carefully checked against the literature reviewed in regard to authors' words, standpoint and meaning in order to enhance reliability and validity.

Research objectives

The study was guided by the four objectives, to:

- 1) Analyze the determinants of sustainable quality assurance systems in higher education
- 2) Evaluate the conceptual model of quality assurance in higher education
- 3) Reflect on the process of implementing sustainable quality assurance in higher education
- 4) Investigate the challenges of implementing a sustainable quality assurance systems in higher education in Kenya.

Research Questions

The study was guided by the following research questions.

- 1) What are the determinants of a sustainable quality assurance systems in higher education in Kenya?
- 2) What comprises the conceptual model of a sustainable quality assurance in higher education in Kenya?
- 3) How can a sustainable quality assurance systems be implemented in higher education in Kenya?
- 4) What are the challenges of implementing a sustainable quality assurance systems in higher education in Kenya?

Theoretical framework

This study was informed by the Total Quality Management Theory (TQM), the theory was preferred because it reflects the main tenets of quality assurance (continuous improvement, customer focus, team involvement and data driven), burgeoning literature attested to the relevance of the TQM theory (Koskela et al, 2019; Zairi, 2013). TQM begun in the 20th century as a management tool to enhance competition among organizations, and to improve customers' satisfaction. TQM was introduced into the U.S. in 1980 for the purposes of responding to the punitive competition from other industrialist nations, in that regard, TQM focused on enhancement of organizational effectiveness and competitiveness through efficacious implementation of good management tools and drivers (Bagga and Haque, 2020). Eight years earlier, Masejane (2012) had carried out a ground breaking empirical study in South Africa, and established that for the TQM to succeed, it depended on the commitment of the top management in supporting the TQM implementation, development of a relevant framework and ,strategy of TQM to the customers' needs, empowerment of employees at all levels, grafting organizational culture into the overall management practices and theory, putting in place systems that enhance high levels of quality and operational performance, maintenance of communication channels, commitment to the principles of continuous improvement of services, performance and products, and finally, the willingness of stakeholders to effectively satisfy the customers' needs and demands. In Kenya, Otieno (2017) conducted an empirical study and established that the TQM practices influenced the organizational performance positively, focused on enhanced customers' satisfaction, the top managements' commitment had a great influence on the organizational performance, finally, stakeholders and employee engagement and involvement enhanced continuous organizational improvement.

Literature Review

Globally, the growth of the university and hitherto the higher educational sector has recorded a tremendous growth and development. However, despite the incredible growth, to continue improving processes and products, meeting the stakeholders' needs, provision for a consistent assessment of learning design, content and pedagogy calls for a common framework for a quality assurance model (Ryan, 2015; Otieno, 2017). Nguyen et al (2021) has the same notion, he thus states,

Assuring quality in higher education has been a major strategic issue around the world in recent decades. A variety of quality assurance mechanisms, including accreditation, assessment, audit, peer review, and benchmarking, have been implemented in many countries for the purpose of quality control, accountability and quality improvement...

Thus Quality Assurance (QA) in higher education focuses on implementation to enhance and assure quality higher education, accreditation, assessment, peer review, and benchmarking at the global level. According to Kadhhila and Lipumbu (2019), QA systems have a critical role in higher education. For example, it focuses on improvement, efficiency, systematic review of processes, products, and maintenance of quality in the higher educational sector.

What is quality assurance?

The discussion on quality enhancement requires some groundwork to define quality assurance, therefore the question "What is quality assurance?" is necessary and foundational (Tanweer and Mubashar, 2016). Attempts to define quality assurance (QA) in the context of higher education has not been easy given the integrative, and complex nature of the concept (Kahveci et al, 2012; Penbek et al, 2011). According to their empirical study, Schindler et al (2015, p.41) make the same conclusion by stating,

Undoubtedly, defining quality continues to be difficult, with some asserting that quality cannot be defined and others asserting that quality is subjective and dependent upon individuals' perspectives.

Therefore, the concept of quality has attracted a wide variety of interpretations, making it more elusive to define with precision. Besides, the concept is also multidimensional, and dynamic; it is ever changing (Schindler et al, 2015; Harvey, 2014). Despite the difficulties in arriving to a universally accepted definition, there has been great efforts to define the phenomenon of quality assurance. According to Penbek et al (2012), QA is the process of maintaining reliable and consistent standards used as criteria for ensuring success in course, programme and institution. From their classical work, the definition given by NAAC and COL (2007) is worth noting, they define QA as the process whereby everyone in the organization participates in the enhancement and maintenance of quality, promotion of understanding and ownership, and management of regular checks of validity of the systems. Most particularly, the participatory approach mooted in the last definition comes out strong, it is only through the support and active participation of all stakeholders in institutions and organizations that will make QA successful in achieving its objectives and the desired end. In conclusion, Quality Matters (2014) and Quality Assurance Agency for Higher Education (2014) raise key elements of a good definition of QA in higher education: QA is about processes, policies, and external actions by accredited bodies; maintenance and enhancement of quality that pertain to accountability, and finally, the fulfilment of organizational purposes in higher education. The definition of QA by ISO 9000 (2015) is worth noting before leaving this section. It defines QA as the part of quality management that is driven

by the enhancement of stakeholders' trust and satisfaction of their interests, demands and requirements. That definition makes QA systems to be people centered, and integral to all aspects of quality indicators in regard to HE sector.

Empirical studies

One of the groundbreaking empirical studies was done by Tisindidou et al (2010) in Greece, the aim of the study was to identify the quality determinants in HE. The study lists four top quality determinants of quality in the HE sector: a) accessible academic staff with top class qualifications, teaching versed with relevant academic skills like mentorship and supervision, staff possessing advanced research skills, and with links in the industry; b) students access to administrative services marked by quick response, friendly admins, access to information, clear guidelines, clear guidelines and advice, access to IT support, and accessibility to updated and informative website; c) accessible library services: well stocked with recent books and journals, easy borrowing series, and functional E-library series; d) Curriculum structure: accessible high quality educational materials, specialization and elective models, good content, weekly timetable, periodically reviewed programmes.

Vykydal et el (2020) carried out an empirical study in Czech Republic and established that for quality to be realized in HE, the following determinants were foundational:

- a) In the HE, there has to be an established QA system with a determined period 5 years, have evaluation teams and both internal and external experts
- b) The QA systems to be supported by the top management
- c) Good conceptual framework of the QA for consistency and understandability
- d) Periodical benchmark within the region

The last example of empirical studies is the study by Muchura & Bett, (2018) in Kenya; the purpose of the study was to establish the effect of the total quality management on customer satisfaction in the HE. The study established that: customer focus was one of the leading drivers for enhancement of quality in the HE, therefore the study concluded that QA systems in the HE should focus on the conformance to the unique cluster of customer requirements and continuous improvement.

The determinants of quality assurance in higher education

Globally, the universities are putting diverse measures in place to enhance quality and excellence, thus it is not about quantity but quality. In Great Britain, issues of quality assurance in education were initiated in 1964; in Kenya it began with the establishment of the Commission for Higher Education (CHE) in 1985 to regulate quality assurance in higher education. Although Kenya has experienced a tremendous growth in the higher education; however, despite the rapid expansion of higher education, concerns have been raised about the degrading quality of education. According to an empirical study by McCowan (2018) the factors responsible for the declining quality of education include: inadequate and poor physical infrastructure in most institutions of higher learning; alarming mismatch between curricula, and job market; low qualifications among academic staff; demotivated teaching staff often leading to moonlighting in numerous institutions of learning. However, in the initial beginning it was only concerned with the regulation of private universities in matters of enhancement and maintenance of high academic quality standards

(McCowan, 2018). According to Kagundu and Marwa (2017), through their empirical study they established that: higher education institutions (HEIs) were at different levels in the process of growing quality assurance; moreover among the dimensions surveyed, the study showed that the weakest dimensions in quality in Kenya's HEIs were research and publication; creativity and innovation followed by governance and management; for full realization of the potential of quality assurance systems HEIs must ensure the adoption of more integrative approaches; most HEIs had been benchmarking to establish the necessary ingredients of quality assurance; for more effectiveness, individual HEIs needed to do more to empower their Quality Assurance Persons through enactment of good policies and procedures; finally, HEIs should strengthen the implementation, and accountability mechanisms, and culture of continual improvement of improvement of systems.

According to McCowan (2018), the need for high academic standards in higher education cannot be overemphasized, for example, they are essential to a university's efforts in producing high-quality research, enhancement of quality teaching and learning, and production of high-quality graduates for global service. Furthermore, QA fundamentally facilitates the monitoring of the institutional processes, performance achievements, and installation of the mechanisms for continuous improvement of processes (Husain and Hossain, 2016). Through being proactive, QA enhances validity thus reducing the chances and scope for variability (Gamange et al, 2020; Harvey 2014). Additionally, QA lays the necessary framework to enable each institution in higher education to conduct critical audits for the determination of institutions compliance and fulfilment of the baseline of the international, national, and institutional quality standards in relation to its operations. The authentic results of the audit are critical in driving accountability and quality improvement, effective marketing of programmes and students' attraction, and application of research (Universities UK, 2020). According to UNESCO (2018), establishment of QA systems is fundamental to the enabling and sustenance of already experienced globally augmented mobility of both staff and student, economic and sustainable development, and finally graduates' employability.

The evaluation of the conceptual model of quality assurance systems in higher education

There is consensus among scholars that QA systems in HE require accurate and consistent descriptions of all the concepts that constitute quality, its implementation and improvement (Garira, 2020). Accordingly, the phenomenon of conceptual framework helps to explain the meaning of the key elements in QA, for the purposes of enhancing consistency, defining role, and the relationships of the key elements to improve quality (Parmelli et al, 2021). Without conceptual framework, core terms in QA remain oblique, and cannot be used consistently. In that regard, conceptual frameworks establish the shared QA vision, purpose and direction for programs, courses, quality teaching, student performance, service, and unit accountability. A good conceptual framework is knowledge-based, well-articulated, coherent, and consistent with the HE institutions vision and mission (Bisaso, 2017). It should be stated categorically that the more clearer the concepts and terminologies are and their indicators, the more quality in HE will be enhanced in HE; that is fundamental to guaranteeing sustainability in the QA activities and practices. Therefore, the conceptual framework seeks to inform the due processes through which relevant goals are developed and articulated to ensure QA systems and models are achieved (Kodkrls et al, 2019; Ryan, 2015; Zairi, 2013). Thus in essence, the essential purpose of conceptual framework in QA is to provide diverse tools to enhance the understanding of the cross-national QA policy, and the

relevant mechanisms for implementation (Tanweer and Mubashar, 2016). According to Parmelli et al (2021), conceptual framework has three underpinning elements:

a) Quality indicators

These are the constructs that are related to structures, processes and outcomes; their overall purpose include monitoring and evaluation, improvement of quality in HE; and finally identification of gaps to be filled in pursuit of quality improvement. Using the quality indicators, institutions may proceed to establish performance measures, assessment of quality, management, development tools, program development and seamless implementation of quality, and continuous improvement. It should be mentioned that quality indicators are developed in the context of student needs, interests and demands, for example, learning, and acquisition of skills that enhance accessibility to the job markets.

b) Performance measures

In performance measure, the move is to qualify the performance of quality in the HE sector. To be effective in that purpose, relevant tools and instruments are developed that have the capacity to describe and measure performance effectively. For example, elements of practice performance must be identified, and the performance measures should be related and directly connected to with quality indicators.

c) Performance indicators

Performance indicators are defined simply as the performance estimates that are associated with specific and tangible quality indicators (Mazise, 2011). Putting the above sections together, quality indicators can be defined as the constructs mainly used as a guide for monitoring, evaluation, and improvement of the quality structures, processes and outcomes of HE services; and performance measures. Furthermore, performance indicators can also be used as tools that quantify or describe measurable elements of practice performance, and quantifiable measurable units of practice guided quality guidelines (Siringi, 2019).

Put together contributions by (Veiga, 2017; Siringi, 2019; Garira, 2020 and Nguyen, 2021), the main quality assurance conceptual framework can be summarized in the following summary:

Stakeholders	Inputs	Processes	Outputs
Students	Give the numbers Entry qualifications	Academic programmes, Services by university	Grades scored Employment statistics Credit hours covered
Teaching staff	Expertise, skills, experience	Teaching loads, class sizes, services and support	Publications, successful grant generation,
The university	Educational resources, facilities and their accessibility	Support, policies, procedures and governance	Statistics on resources available, participation by actors

Job Market	Job creation, internships, expected skills	Training on the job, mentorship, contracts	Employment, salaries, remunerations
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Source: compiled from literature review

Reflection on the process of implementation of a sustainable QA systems in H.E

Reflection is conceptualized as the process of thinking plainly and with a view of promoting clear understanding, and thinking about professional practices. Good reflection is grounded in experience, value, observation, and self-assessment activities (McCowan, 2018). Any beneficial conceptualization has to fit in the institutional context and purpose, be timely and relevant to enhance quality improvement. However, despite the gains made in the sub-Saharan African countries in the HE, the sector continues to experience huge impairments, for example: inadequate funding and infrastructure, low staffing and research output, mass student enrolment, and incomplete graduate employable skills. In a very unique way, sub-Saharan African institutions of HE have a taunting challenge to develop their own conceptual frameworks that reflect their realities, experience and contexts; primarily most of the institutions have tended to copy QA frameworks developed from other countries in the world (Alabi and Mba, 2012; Kettunen, 2008). Agreeably, Siringi (2019) opines that for the universities to achieve the national development objectives, enhanced quality, excellence, research and innovation, adequate infrastructural establishment, customers' value of money, QA systems remains the effective vehicle for the university. Therefore for effectiveness development and implementation of a local conceptual framework is one of the fundamental processes that underpin sustainability of the QA systems in the HE (Grarira, 2020).

Different institutions in HE have diverse experiences in the realization of QA systems, however most of them do have distinct commonalities. For example, according to Shuib et al (2007), the Malayan university used the following pathway to build its QA systems: a) The institution begun by instilling the culture of quality b) increase awareness and education on QA matters to all the stakeholders both internal and external c) supporting the faculties with the preparation of database d) giving support and assistance in coordinating internal and external review processes. Venkantraman (2006) suggests 5 steps that constitute a pathway towards the realization of QA in the HE institutions: a) The establishment of as strong and working partnership between all stakeholders in the HE sector b) The desired QA system should focus on satisfying the desires and expectations of the students, then those of the other stakeholders, c) Capacity building for all the stakeholders focusing on innovation, improvement, and management of change, d) Strong integration of all the partners both internal and external, e) Good management of the human resource: mutual respect, motivation and rewarding of staff in the HE institutions.

Challenges of implementing QA systems in the HE sector

Globally, the implementation of QA systems in the HE has not been smooth, for example, Zavale et al (2016) cites challenges like rapid expansion and continual diversification of the institutions in the HE sector. Besides the rapid growth of universities both public and private, these institutions experience similar challenges: lack of adequate qualified personnel like senior lecturers and

professors due to inadequate capacity to remunerate the senior staff adequately. Thus the few senior academic staff are thinly spread in critical services like supervision of postgraduate students, conducting research, mentorship and curriculum reviews; such overloading of the senior staff leads to dissatisfied services and products (Masejane, 2012; Ryan, 2015). According to Alabi and Mba (2012), some of the institutions in HE illegally ended up engaging unqualified staff due to the shortage of highly qualified academic staff. Lack of access to adequate funding especially in the sub-Saharan African countries has been a great inhibition in implementing QA systems, thus most of QA initiatives remain unimplemented due to lack of funding. Political interference in the governance of HE institutions has been a problem especially among the developing countries, a powerful government minister in the education docket may end up disrupting the processes of the HE to the extent of interfering with the quality especially when the institutions are denied their autonomy. According to Atibuni and Olema (2021), other challenges in implementing QA include lack of awareness by the stakeholders of the importance of the QA systems; poor institutional leadership, lack of adequate support from the institutional administration, and finally demotivated staff in the HE sector (Zairi, 2013). Some of the challenges undermining the implementation of effective QA systems are directly caused by the institutions in HE; for example, due to competition for students recruitment and retention, these institutions deliberately lower quality standards to get more students. In that regard, Harvey (2014) sees such challenges as self-induced, and politicization in the HE sector. Finally, Atibuni and Olema (2021) posit that the HE institutions from the developing countries tend to borrow QA frameworks from the West. Unfortunately the borrowed frameworks may never resonate well within the local context and demands, and may not deliver the needed quality in the HE (Koskela et al, 2019).

The Commission for University Education (CUE) is the vehicle mandated by the Kenyan Government to implement quality and QA systems and processes in the HE institutions (Republic of Kenya, 2017; Otieno, 2017; Siringi, 2019). However, the Kenyan situation regarding to the status of the HE is no exceptional, for example Odhiambo (2011), in his empirical study whose aim was to examine the challenges facing HE institutions in implementing quality and QA systems noted that HE was in decline because of challenges like a) inadequate funding in HE institutions both Public and Private; b) high staff turnover, and brain drain, c) political interference especially where politically instigated expansion of the public universities (the so called campuses that have proved unsustainable resource wise) c) Rapid expansion of the HE, and negative aspects of globalization d) West that may not be relevant in regard to the local context and needs. According to Kagonda and Marwa (2017), rating quality issues and QA systems in Kenya is not easy because each Kenyan HE institution was at a different level of growing quality; but the study was able to identify key quality challenges in most institutions showed major weaknesses in two areas: firstly, research, publications and innovations; and secondly in governance and management, the same sentiments are shared other scholars (Nyaoga et al, 2010; George, 2014; Parmelli et al, 2021; Odhiambo, 2011).

FINDINGS

1) The determinants of sustainable quality assurance systems in higher education

The literature reviewed had consensus that sustainable QA systems in HE are as a result of careful development guided by predetermined criteria, and there is not a single universal pathway. For example, the QA should be holistic and participatory, and supported by the top management

(Gamage et al, 2020; UNESCO, 2018, McCowan, 2018; Kagondu and Marwa, 2017). According to Nguyen et al (2021, pp.630 – 631) they argue that the process to establish a sustainable QA requires: creation of adequate awareness within the institution about the need for quality and process for establishing QA systems, supportive institutional leaders and managers, support for the academics and students, establishment of responsible and enthused team of internal quality assurance staff. Finally, Husain and Hossain (2016) identified the key driving forces of sustainable QA systems as: (1) Increased collaboration of among universities in the region, and globally (2) Development of relevant policies to address quality gaps in HE, (2) development of policy framework as foundational to the internationalization of education in the HE institutions; (3) Enhancement of the exchange of staff and credit transfer, and (4) Making policies to enhance job market penetration globally.

2) Construction of a conceptual model of quality assurance in higher education

Construction of a sustainable QA, it requires accuracy and consistency in the descriptions of all the concepts that constitute quality, for implementation and improvement of quality and QA systems in the HE. Moreover, it helps in definition of roles, meaning and interactions of the key elements for improving quality (Garira, 2020; Parmelli et al, 2021; Kodkrls et al, 2019; Tanweer and Mubashar, 2016). In particular Parmelli et al (2021, p.7) identified the three key elements in the conceptual model as a) quality indicators, b) performance measures, and c) performance indicators. The HE institutions therefore need to construct a sound conceptual model of QA as the fundamental basis of developing a sustainable QA system.

3) The process of implementing sustainable quality assurance in higher education

The process of the implementation of QA systems takes different pathways and trends. For example, Atibuni and Olema (2021) sees four steps: a) Creation of QA systems awareness to create understanding among all stakeholders in the HE institutions b) Creation of the QA systems, c) Capacity building of the QA teams d) Developing the relevant QA instruments and their implementation e) Developing a strategy/process development. According to Kohoulek (2009), the process of implementing a sustainable QA includes a) Develop an agreed set of standards, procedures and guidelines on quality assurance b) Explore ways of ensuring an adequate peer review system for quality assurance and/or accreditation agencies or bodies c) Coordinate with the governments' regulating bodies. The framework developed by Venkantraman (2006) offers a 5 steps framework that summarizes a more inclusive pathway towards the implementation of a sustainable QA in the HE institutions: a) The establishment of as strong and working partnership between all stakeholders in the HE sector b) The desired QA system should focus on satisfying the desires and expectations of the students, then those of the other stakeholders, c) Capacity building for all the stakeholders focusing on innovation, improvement, and management of change, d) Strong integration of all the partners both internal and external, e) Good management of the human resource: mutual respect, motivation and rewarding of staff in the HE institutions. The elements of sustainability in the approach include: engagement and capacity building of the stakeholders, collaboration and broad participation at different levels, good leadership and management of the resources, holistic approach and mutual respect (Muchura and Beth, 2018; Koskela and Viranj Kumar, 2019; Garira, 2020).

4) The challenges of implementing a sustainable quality assurance systems in higher education

The implementation of QA systems globally has had overwhelming challenges due to varied reasons which differ from region to region, country, and continent. According to some scholars (Zavale et al, 2016; Ryan, 2015, Alibuni and Olema, 2021, Koskela et al, 2019), most common challenges have been rapid expansion and continued diversification of the institutions in the HE; lack of adequate qualified academic staff, lack of adequate qualified academic staff; lack of awareness about QA in the HE institutions. Odhiambo (2011) and Kagondu and Marwa outline challenges that fit in the sub-Saharan African countries and Kenya in particular: political interference, foreign borrowed QA models that do not adequately address local institutional needs, content and context; lack of clear conceptual models that fall short of providing clarity and consistency when dealing with key concepts in the QA; high staff turnover of the academic staff and brain drain; and inadequate funding for the QA directorate in the HE institutions.

DISCUSSION

This study examined journal articles, papers, previous research addressing QA issues in the HE institutions. The predominant themes included determinants of sustainable QA systems in the HE, conceptual models of QA in the HE, processes of implementing QA in HE and the challenges of implementing QA in the HE sector. The data from the selected literature was after critically reviewing the sources, was used to address the key concerns from the main themes as articulated in the study aim, research questions and study objectives.

From the literature reviewed, the institutions in HE were at different levels of developing QA systems; however the factors determining a sustainable QA systems in the HE were evident, and therefore they could be adopted for more efficiency and improvement. The necessity for a sound conceptual model as the basis of enhancing clarity and consistency is fundamental for the implementation and improvement of quality and QA system in HE sector.

The implementation of sustainable QA systems is challenging, however, it is upon each institution in the HE to have a homegrown QA system in order to address their unique situations, needs and context. The borrowed QA systems either from other countries, regions or from institutions may fall short of being relevant and useful. The other challenges noted in the implementation process of QA systems can be addressed through collaboration and partnership from within and without the HE institutions. Finally, a successful process of the QA processes enhanced engagement, consultation and broad participation are all fundamental; all the relevant stakeholders must be brought on board for them to own the process and product envisioned in the QA system.

RECOMMENDATIONS

The study makes the following recommendations to all the stakeholders involved with the enhancement and realization of quality and QA systems within the HE institutions.

- 1) The fundamental determinants of sustainable QA systems need to be fully addressed for better results
- 2) A sound conceptual model of QA needs to be carefully constructed for the purposes of consistency and accuracy purposes
- 3) The entire process of the implementation of QA systems should be approached from a very participatory method to ensure representation, holism, and ownership by the stakeholders

- 4) The challenges threatening the implementation process of the QA need to be tackled through a broad collaboration and partnership.

Conclusion

Continuous improvement of quality and QA systems in HEIs is not a onetime occurrence but a process. In essence, realization of a sustainable quality assurance system both internal and external is fundamental to the development of processes and practices and in essence a culture of quality in the HEIs. Thus, a sustainable culture of quality enhances co-operation and collaboration among all stakeholders such as, students, faculty, non-teaching staff and the industry. This study has examined the determinants of sustainability for adoption among the HE institutions.

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