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Quality Assurance and Quality Indicators in Open and Distance Education: Context, Concerns and Challenges

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ABSTRACT

Quality has become a matter of major importance for higher education institutions generally, but particularly so for institutions involved in open and distance learning (ODL) (Higher Education Council, 1997; Twigg, 2000; Western Cooperative for Educational Telecommunications, 2003). Quality assurance for distance higher education is one of the main concerns among institutions and stakeholders today. The emergence of open and distance education has introduced various dimensions about quality assurance in this environment and the inevitability of the development of some quality assurance principles, benchmarks and guidelines. Distance learning today is seen as a subset of distributed learning, focusing on students who may be separated in time and space from their peers and the instructor. The new forms and meanings it is acquiring, its convergence with traditional learning and its global impact have posed several challenges as for education, it has caused a serious 'concern for quality'. Some think that quality assurance practices for open and distance education are essentially the same as those used for traditional education. Others argue that open and distance education tests conventional assumptions and hence the present mechanisms of quality assurance are not adequate to ensure the quality of open distance education. This paper examines the differences in meaning between quality, quality assurance and Total Quality Management processes in higher education which are generally issues of concern for both on-campus and online delivery of courses. The paper further examined the historical development of open and distance education worldwide. Finally the paper examined the various quality assurance indicators in open and distance learning environments and the various challenges facing them.

Keywords: Quality assurance; Total Quality Management; quality management; open and distance education; virtual university

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INTRODUCTION

The Meaning of Quality, Quality Assurance and Quality Control

The concept of quality is often very difficult to define and has remained rather elusive especially in the context of Higher education where institutions have broad autonomy to decide on their own visions and missions. When we talk of quality it sometimes implies a certain relative measure against a common standard. Quality in education means different things to different people and perceived differently by various professional organisations who often use the term. Quality has to do with the standard of something when compared with other things. Quality control is therefore directed at determining the extent to which a product meets that standard. Thus, for example, Quality in a higher education programme could thus mean quality of graduates it produces and quality of learning processes it provides for. Hence it is important to have the quality indicators related to the products and processes involved in higher education clearly formulated.

Harvey and Green (1993) identify five categories or ways of thinking about quality as cited in Watty (2003) key aspects of each of these categories can be summarised as follows:

- *Exception: distinctive, embodies in excellence, passing a minimum set of standards.*
- *Perfection: zero defects, getting things right the first time (focus on process as opposed to inputs and outputs).*
- *Fitness for purpose: relates quality to a purpose, defined by the provider.*
- *Value for money: a focus on efficiency and effectiveness, measuring outputs against inputs. A populist notion of quality (government).*
- *Transformation: a qualitative change; education is about doing something to the student as opposed to something for the consumer. Includes concepts of enhancing and empowering: democratisation of the process, not just outcomes.*

Uvah (2005) while quoting from UNESCO defined quality in higher education as multidimensional concept embracing all functions and activities of a university including teaching, academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. A broad range of factors therefore affect quality in tertiary institutions including their vision and goals, the talent and expertise of the teaching staff, admission and assessment standards, the teaching and learning environment, the employability of its graduates (relevance to the labor market), the quality of the library and laboratories, management effectiveness, governance and leadership.

Quality assurance on the other hand is a planned and systematic review process of an institution or and infrastructure are being met, maintained and enhanced. It is a process directed toward achieving that characteristic. It is the set of activities that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service. According to Mackoww and Witkoski (2005) quality assurance could be regarded as a useful method for improvement, modernization and internationalization of higher education through a procedure to assure and improve the quality of provision as it ensures the quality of academic (teaching –learning process and curriculum) and structural (building and physical facilities) provisions of courses and allow for an objective review of their quality.

In recent times, there has been the need to improve on Quality Assurance so as to enhance productivity and minimise wastage and this gave birth to a proactive and modern approach away from the traditional view of quality control to quality assurance (Cole, 1996, p. 237). This new approach has been variously termed Quality Management (QM), Total Quality (TQ), Total Quality Management (TQM) (West - Burnham, 1992; Cole, 1996; Bush and Coleman, 2000). Total Quality is a process of ensuring that every aspect of the organisation and every employee is focused all the time in meeting and then exceeding customer requirements” (West - Burnham, 1994, p. 172). Cole (1996) sees it as approach that is based on a positive attitude to quality at every level in the organisation. Total quality management refers to systems which are developed to monitor all processes that are part of the work of an organisation. Supporters of total quality management systems believe that their systems are different from earlier ideas of quality control. Instead of only looking at finished products, all the steps of the production process are examined. TQM can be an internal arrangement by each institution to prevent wastage rather than rectify it. It recognizes the autonomy of an institution to handle its own affairs. The main features of TQM according to Cole (1996, p. 242) include, prevention of errors rather than detection and correction, meeting requirements/quality as defined by the customers, review and measure performance, including all quality processes as well as the delivery of the final product or service and quality is everyone's responsibility (including suppliers). A number of different commercial organisations have also developed quality management tools and systems. One of the best known total quality management systems is ISO 9000. ISO stands for International Organization for Standardization. A business or organisation which subscribes to ISO 9000 is provided with a set of procedures which are supposed to cover all the key processes in the business. Under ISO, there is a set of “accreditation and certification” bodies which monitor the key processes of the subscribing organisation, to check that they are operating as they are supposed to. These bodies check that records are kept for all key processes so as to ensure that organisations constantly improve at all levels.

Purposes of Quality Assurance

The foundation of quality assurance consists of standards or criteria for quality that are agreed upon by the communities of interest (e.g., government, higher education institutions, the professions, employers).

- Assists in reform efforts that can help define expectations for higher education institutions and their programs – i.e., what they are expected to become.
- Provides a basis for future planning of higher institutions
- Provides a structure for educational improvement so as to enhance the level of educational quality
- Maximizes communication across education so as to enhance a country's ability to establish comparative data across its system of higher education, and a student's ability to move from secondary to tertiary and within tertiary education.
- Assists users to make better decisions in terms of students, employers and funding, equipment, library facilities, etc,

MODES OF QUALITY ASSURANCE

In institutions of higher learning, there exist three primary modes of quality assurance globally. These are assessment, audit and accreditation.

Mode 1: Assessment

Assessment is an evaluation which results in a grade, whether numeric (e.g., a percentage

or a shorter scale of, for example, 1 through 4); literal (e.g. A to F) or descriptive (excellent, good, satisfactory, unsatisfactory). Assessment asks “how good are your outputs?” Assessment in and of itself typically does not include the dual purpose of quality improvement, which is necessary in a developing context. Further, assessment has a tendency to be more dependent on quantitative rather than qualitative measurement (e.g. it may ask how many books are in the library rather than finding out whether these books are: current, relevant to the curriculum and are read by the students and teaching staff

Mode 2: Audit

An *Audit* is a process of review of an institution or program to determine if its curriculum, staff, and infrastructure meet its stated aims and objectives. It is an evaluation of an institution or its programs in relation to its own mission, goals, and stated standards. The assessors are looking primarily at the success of the institution in achieving its own goals. An audit is therefore a check on what an institution explicitly or implicitly claims about itself. Audit asks, “how well are you doing what you say you are doing?”

An audit focuses on accountability of institutions and programs and usually involves a self-study, peer review and a site visit. Such an evaluation can be self-managed or conducted by external body.

Mode 3: Accreditation

Accreditation can be defined as a process of self-study and external quality review used in higher education to scrutinize an institution and/or its programs for quality standards and need for quality improvement. The process is designed to determine whether or not an institution has met or exceeded the published standards (set by an external body such as a government, national quality assurance agency, or a professional association) for accreditation and to check whether the institution is achieving its mission and stated purpose. The process usually includes a self-evaluation, peer reviews and site visits. The results of an accreditation of a program or an institution may have implications for the institution itself (e.g., permission to operate or eligibility for external funding) and/or its students (e.g. eligibility for grants or a professional degree). An institution or program which is denied accreditation can experience the cessation of public or private funding; its graduates being unqualified to enter the profession; a loss of status in the national higher education community. Accreditation asks such questions as “are you good enough to be approved (to confer degrees)? It has a dual purpose of quality assessment and quality improvement.

In the United States for example, term “accreditation” refers to a process of review and assessment of quality that result in a decision about whether or not to certify the academic standard of an institution while in the United Kingdom “accreditation” refers to a *Code of Practice* by which an institution without its own degree-awarding powers is given authority by a university or other awarding institution to offer its degrees to students meeting the requirements

Accreditation is the most widely used regionally and globally and the most beneficial for purposes of development and capacity building. There exist two types of accreditation. These are:

1. Institutional Accreditation

Institutional accreditation focuses on the institution as a whole, giving attention not only to the overall educational program but to such areas as:

- Mission
- Governance
- Effective Management
- Academic Program
- Teaching Staff
- Learning Resources (library, laboratories, and educational technology)
- Students and Student Services
- Physical Facilities
- Financial Resources

Programmes Accreditation

Academic program accreditation concerns the quality of each program by the standards of:

- Educational objectives
- Curriculum
- Student services
- Quality of faculties
- Quality of facilities
- Administration
- Finance

Major Steps of Accreditation

Global practice in accreditation typically follows four major steps. These are:

1. Development of Standards

Fundamental to the process of accreditation is agreement on a set of standards sponsored by a national accrediting body, which are applied evenly to all institutions of higher education or their programs in the country. These standards, whether institutional or programmatic accreditation follow the component list for institutional accreditation as earlier highlighted.

2. Self-Evaluation

The institution or program under-going the process is asked to respond to the standards in a written report. It is typical that several months are allowed for this process to assure that the self-evaluation includes as much of the community as possible (e.g., administrative and teaching staff, students, employers, etc.)

3. External Review

A team of experts, representative of the national higher education community (and professional community in the case of programmatic accreditation) review the self-evaluation report prepared by the institution as compared to the standards for accreditation and visit the institution/program for purposes of evaluating the extent to which the institution/program is doing what it says it is doing.

4. Accreditation Decision

Based on the self-evaluation and the feedback of the external reviewers, a decision is reached by the national accreditation body as to whether the institution or program is: accredited, not accredited, or is on probation for a certain period of time during which improvements have to be made.

THE HISTORY AND EVOLUTION OF OPEN AND DISTANCE EDUCATION

The dynamics of globalization, plus the introduction of information and communication technologies (ICT), resulted in a tidal wave of information that has, in many cases, overwhelmed many countries around the world in the last few decades. This has resulted in radical changes in the educational needs of individuals and society at large. As a result there have been significant increases in different forms of education notably;

- Distance Education programs that are delivered through satellites, computers, correspondence or other technological means across national boundaries
- Twinning arrangements in which a degree is gained through study in more than one country as a result of agreements between institutions in different countries to offer joint programs
- Study abroad semester or credit earning arrangements similar to the twinning programs
- Branch or satellite campuses set up by an institution in another country to provide its educational programs to foreign students
- Sale of proprietary materials such as books, courseware or testing, together with associated services
- Franchised operations using a third party to give degree – for example a computer company delivering a university computer science degree
- Partnerships for overseas offerings where an institution A in one country enters into a collaborative arrangement with an institution B in another country to provide one or more of its programs to students in B's country
- Free-standing programs operating outside the country of the provider with or without a combination of the above mentioned arrangements
- Corporate Universities
- Virtual Universities

Virtual University for example is just one of the different forms of educational provisions made possible by technological developments. The above-mentioned forms are not exhaustive but they give a flavour of some variants.

Historically, distance education established its roots as a form of instruction at least 150 years ago as a correspondence study (Holberg 1989) and the medium for this type of first generation of distance education was written and printed materials. During this period, distance education was variously known as correspondence study, home study, off campus study, extra mural study, distance study etc. Later, the invention of the radio in the 1920's led to the use of radio-led courses in teaching distance education.

The establishment of the Open University in U.K in 1969 marked the beginning of the second generation type of open and distance education. In particular, the Open University delivered its distance education programmes by complementing this with high quality distance materials. The third generation type of distance education make use of Information and Communication Technology as its basis by offering a two-way communication in various forms (text, graphics, sound moving picture) either synchronous (at the same time or asynchronously (not at the same time), the purpose being to facilitate greater interactivity between the teacher and student, student and student and between student and materials.

In Africa, the landscape of distance education has been increasing. According to Saint (2000), more than 140 public and private institutions provide tertiary distance education services within sub-Saharan Africa, while some 49 of the 54 Africa countries have access to the Internet in their capital cities. The University of South Africa which began its corresponding university in 1946 is today one of the world's largest open distances learning university in the world. As further noted by Saint (2000) some other countries like Kenya, Zambia, Malawi and Botswana have since 1960 used distance education for teacher training programmes while between 1980's and 1990's teacher upgrading were equally undertaken in Benin Republic, Burkina Faso, Burundi, Cameroon, Cote d' Ivoire, Mali, Togo and the Central African Republic, all Francophone countries. Today, several African countries make use of distance education on a scale greater than in Europe but less than many of the Asian countries.

To further boost the spread of distance and open education, the Heads of Government of Commonwealth countries created the Commonwealth of Learning (COL) in 1987 to exploit the know-how and insights on open, distance and technology mediated learning by providing leading edge information, knowledge, training, networking and model building requirements of all their people (Dhanarajan, 2000). As further revealed by Dhanarajan (2000), COL has assisted staff development training, policy formulation, knowledge sharing, collaboration materials development, technology applications, and the implementation of student support systems in non-formal education, basic and post-basic education, continuing and professional education, teacher training and higher education in many commonwealth countries.

Furthermore, the African Virtual University (AVU) which was established in 1997 (Magdalene et al, 2000) to serve countries in sub-Saharan Africa was yet another model of distance education that uses technological mode of instructional delivery, to increase access to educational products and service at reasonable costs, establish partnerships with institutions of higher education for the offering of technology based credit and non-credit undergraduate degree programmes throughout Sub-Saharan Africa through digital satellite transmission. Between 1999 and 2000 over 26 universities in Africa now offer AVU courses. The AVU is today funded by the World Bank.

THE DEVELOPMENT OF OPEN AND DISTANCE EDUCATION IN NIGERIA

The earliest manifestation of distance education in Nigeria was in the form of correspondence education. According to Fagbamiye (2000) the period between 1950's and 1960's saw the emergence of such distance education programmes as the Rapid Result College, Wosley Hall and Pitmans Institute as some of the most popular correspondence institutions in Nigeria. The tuition which originated from these colleges served in preparing most private students for the GCE O/L and A/L examinations as well as the RSA examinations.

Later, in 1974, the University of Lagos with the collaboration of the International Extension College in the U.K established its own correspondence and open studies unit (COSU) which later metamorphosed into COSIT and the Distance Learning Institute (DLI) of the University of Lagos. Fagbamiye (2000) further remarked that this was the first conscious attempt to establish a distance education unit as part of a university in Nigeria. COSU began by offering B.Sc degree programmes in Accounting, Business Administration, Science Education and the Postgraduate Diploma in Education and with the assistance of the Federal Radio Corporation of Nigeria (FRCN), free radio programmes were transmitted regularly. However by the end of 1988, government funding through the National University Commission ceased, so also the free radio broadcast stopped when FRCN went commercial.

Distance education programmes were further boosted in Nigeria with the establishment of the National Teachers Institute (NTI) in 1976. Today, NTI is the only single mode distance education institution in Nigeria. The institute was designed as an agency which very much relies on the Distance Learning System (DLS) to achieve its objectives as spelt out by Decree No. 7 of 1978. Accordingly, the institute is to provide courses of instruction leading to the development, upgrading and certification of teachers (both unqualified and under qualified) as specified in the relevant syllabus and using the distance learning techniques.

Thereafter, the National Open University in Abuja was established in 1983. The University was meant to be an outreach programme that would enable Nigerians to obtain a University degree and such other qualifications from the comfort of their homes and work environment. However, not long after its opening, it was closed down in 1984 by then Buhari's military administration due partially to our inefficient postal services, inadequate qualified manpower to run study centres, high cost of infrastructural facilities and high probability of examination malpractices amongst students and teachers. The defunct National Open University was however silently merged with the University of Abuja which later became the nucleus of the Centre for Distance Learning and Continuing Education established in

February, 1990 as a dual mode institution. In fact, the University of Abuja Decree 110 of 1992 as amended provides that the centre for Distance Learning and continuing Education should:

“Provide Nigerians with opportunities for improving their academic standards through distance learning part-time courses, sandwich programmes and continuing education centres”

According to Fagbamiye (2000) the centre offered courses at first degree level in English, History, Economics, Political Science, Business Administration, Public Administration, Accounting, Geography and Law. Fagbamiye further remarked that initially the centre started with ten study centres, but most of these were later to be closed down due to inadequate funding and infrastructural facilities.

Starting from 1992 to 2002 there began a new era of satellite campuses for distance education such that virtually many universities in Nigeria during this period developed part-time distance education programmes. These universities operate satellite campuses in every major town with study centres for a variety of out-reach programmes. Most of these out-reach programmes were being run under the consultancy service units of the various universities, as a way of generating internal revenues for such universities. These consultancy units acquire all manners of accommodation for the various campuses and employ all sorts of qualified and unqualified lecturers in these centres. Some even employ private consultancy firms whose main objective is to make money to oversee these centres. Many of the outreach centres offer Diploma, Advance Diploma, undergraduate and postgraduate courses.

However, because of nature of academic standards of these programmes and the various degree certificates awarded, prompted the National Universities Commission (NUC) to undertake a verification exercise, whereby they identified fifty-two (52) of the various satellite campuses. The report of the satellite campuses was submitted to the Federal Government, who later decided to close down all the satellite campuses in all universities in year 2002, and thereafter issued new guidelines for the establishment of new satellite campuses. However, one of the viable options to substitute for the proliferation of these satellite campuses was to re-establish the National Open University. Hence, in a bid to tackle the educational problems of Nigeria and to fulfil its commitment to education for all through enhanced open access, the Obasanjo government resuscitated the National Open University of Nigeria (NOUN) and launched it on 1st October, 2002. Today, NOUN is the only Federal Government established single mode university in Nigeria which is dedicated to quality open access education through distance learning for many Nigerians who would not normally have the opportunity to study through the conventional mode of face-to-face, full-time study. The mission of the National Open University (NOUN) was to provide functional, cost-effective, flexible learning which adds life-long value to education for all who seek knowledge” According to the NOUN, a variety of delivery methods were to be used to take education to the people. These include:

- Printed instructional materials, audio, video tapes and CD-Roms. These would be transported by courier companies, NIPOST, and NOUN’s in-house transport division.
- Television and radio broadcast of educational programmes.
- Electric transmission of materials in multimedia (voice, data, graphics, video) over fixed line (telephone or leased lines), terrestrial and VSAT wireless communication systems.

Today, NOUN has so far established study centres in each of the six geopolitical zones, states and local government areas. At its inception NOUN has the following Schools which offer courses leading to the award of a Certificates Diploma, first degree, postgraduate diploma and master degrees programmes

- (i) Schools of Arts and Social Sciences
- (ii) School of Business and Human Resources Management
- (iii) School of Education
- (iv) School of Science & Technology.

To further boost distance and open education in tertiary institutions of learning the National Universities Commission also established the Virtual Institute for Higher Education (VIHEP) in year 2003 as part of the preparation for the eventual take-off of the National Higher Education Pedagogy Centre (NHEPC) in July 2004. The objectives of the institute as elaborated by Okebukola (2003)are as follows:

- To provide academic staff in tertiary institutions in Nigeria especially universities with Internet-based training on modern method of teaching and learning in higher education
- To enhance the knowledge and skills of academic staff on such issues as (a) teaching of large classes; (b) effective utilization of (meagre) resource; (c) modern methods of assessment and evaluation of students’ performance; (d) basic guidance and counseling techniques; (e) basic skills of curriculum development: and (f) techniques for writing winning grant proposals.
- To share experiences among academic staff in Nigerian universities on best practices in university teaching and how to deal with academic and social vices such as examination malpractice, plagiarism and cultism.

- To try out draft training modules for the National Higher Education Pedagogic Centre.

MEANING OF DISTANCE EDUCATION AND OPEN LEARNING

With the history of distance and open learning encompassing so many different environments, so there has been many different definitions put forward in modern literature. According to Holmberg (1989), distance education could be regarded as a special kind of adult education which includes all those teaching methods, the interactive as well as the pre-based self instructional materials, while the basic aim is to increase access to education. Chandler (1990) and Dodds (1991) both defined distance education as any form of organised educational experience in which teaching and learning takes place with the teacher at a distance from the learner most of the time and has only a limited role in the process. Perraton (1991), however viewed distance education as an educational process in which a significant proportion of the teaching is conducted by someone removed in space and time from the learner, while Rumble (1992) went further to say that distance education enables a limited number of teachers to reach a very large number of students, thereby opening the way to endless economy of scale and cost reduction. From these definitions, one could reasonably summarize that traditionally, distance education has three major elements as elaborated by Verdun and Clark (1991). These are:

- Separation of teacher and learner during the learning process
- Use of learning technologies to determine content and connect teacher and learner
- Provision of two way interaction between teacher and learner.

In recent times however, the use of telecommunications technologies to establish and deliver distance education programmes has led to a revision of distance education's formal definitions. Greenberg (1998) for example, defined distance learning as a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance which is designed to encourage learner interaction and certification of learning, while the United States Distance Learning Association (1998) defined distance education as the acquisition of knowledge and skills through mediated information and instruction encompassing all technologies and other forms of learning at a distance. Today, distance education has become globalised, because it has provided for a large number of people in many countries of the world who hitherto had been denied opportunity for formal education to have unlimited access to quality education despite location, time and financial constraints. For this singular reason, distance education has thus tended to lead or promote open learning. Hence, many people who are unable to attend full-time studies are now able to access education in their chosen time and place.

According to Paul (1999) Open learning is characterized by a commitment to helping students especially adults overcome such traditional barriers to post secondary education such as prior academic credentials, time, physical location financial constraints, personal characteristics, social responsibility etc. Open learning as defined by the South African Institute for Distance Education (2001) is an approach to education which seeks to remove all unnecessary barriers to learning, while at the same time providing learners with a reasonable chance of success in an education and training system centred on their specific needs and located in multiple areas of learning. Accordingly, it noted that the concept of open learning was built around the following principles:

- a. learner centredness (i.e. the learners is an active participant by providing him with choices and possibilities to enable him develop problem solving skills and competencies
- b. life long learning (i.e learning should continue throughout life and must be relevant to learner needs and life experiences.
- c. Flexibility in learning through what to learn, how to learn, where to learn and when to learn
- d. Removal of unnecessary barriers to access (e.g.) language, discrimination by race, age, disability, qualifications.
- e. Recognition of prior learning experiences/ competencies which should be accredited for the learner whenever and wherever it is applicable.
- f. Provision of learner's support system in the form of counseling services, access, communication facilities etc.
- g. Expectation of success and cost effectiveness. This involves the provision of opportunities for learners to complete learning programmes successfully.

It is important therefore to note that distance education as well as open learning can both be regarded as a self-paced learning process which makes it possible for all categories of students to plan their study according to the time at their disposal.

Jedega (2000) noted some of the forces which encourage distance and open learning as follows:

- Rapid growth and obsolescence of knowledge and skills
- Delivers instruction independent of time, location, place and space
- Varied learning styles of students

- Accessibility to a variety of people especially those who are disadvantaged, underprivileged, under represented, remote dwellers
- Effectiveness in coping with mass education by using a variety of learning situations such as full time, part-time, graduate and undergraduate, certification and continuing education.
- Financial pressures faced by students and institutions
- Availability and affordability of emerging information technologies for efficient and effective delivery of instruction.

MODELS OF ADMINISTRATION FOR DISTANCE AND OPEN LEARNING

Three major models of administration have been identified for Distance and Open Learning. According to Fagbamiye (2000), these include:

- I. **The Single Mode Institutions** which focuses on one main objective of providing educational opportunities for one type of clientele only (i.e solely devoted to teaching at a distance. Typical examples include National Teachers Institute, Kaduna, The Open University in Britain and the India Ghandi National Open University in India.
- II. **The Dual Mode Institutions** is one that as well as offering regular programmes on campus also makes available a proportion of its courses in a distance education formative institutions which combine distance mode with the conventional face to face mode. Dual mode institutions usually have centralized distance education departments and Institutes with their instructional designs, technology support staff and students services staff. Dual mode institutes have continued to flourish worldwide. Examples can be found in Canada, Australia, South Africa, U.S.A, Kenya. Botswana, Zambia and in Nigeria. Most of our universities in Nigeria such as University of Lagos, Abia State University, Ahmadu Bello University and University of Abuja and dual mode institutions.
- III. **Mixed Mode Institutions.** These are institutions that offer a wider choice of study and maximize flexibility of space and place of study. It usually results from the convergence of face to face and distance modes. Examples include University of Mauritius, Deakin University in Australia.

STRATEGIC PLANNING FOR COURSE DESIGN, DEVELOPMENT, PRODUCTION AND DELIVERY

In distance and open learning, the teacher and the learners are usually separated from each other in time and space. This physical separation means that the learner is on his/her own most of the time, hence in order to reduce this isolation and make learning more meaningful and interactive, effective planning strategies must be put in place for the development and production of study materials which will combine both content and methods of instruction together. Seals and Glasgow (1998) define the different elements of course development and production process as follows:

- (i) **Needs Assessment:** the process of designing what is to be learnt.
- (ii) **Design:** the process of authoring and producing the materials.
- (iii) **Implementation:** the process of installing the instructor in the real world.
- (iv). **Evaluation:** the process of determining the impact of instruction.

This process has been further developed and elaborated by this writer as illustrated in Fig 1

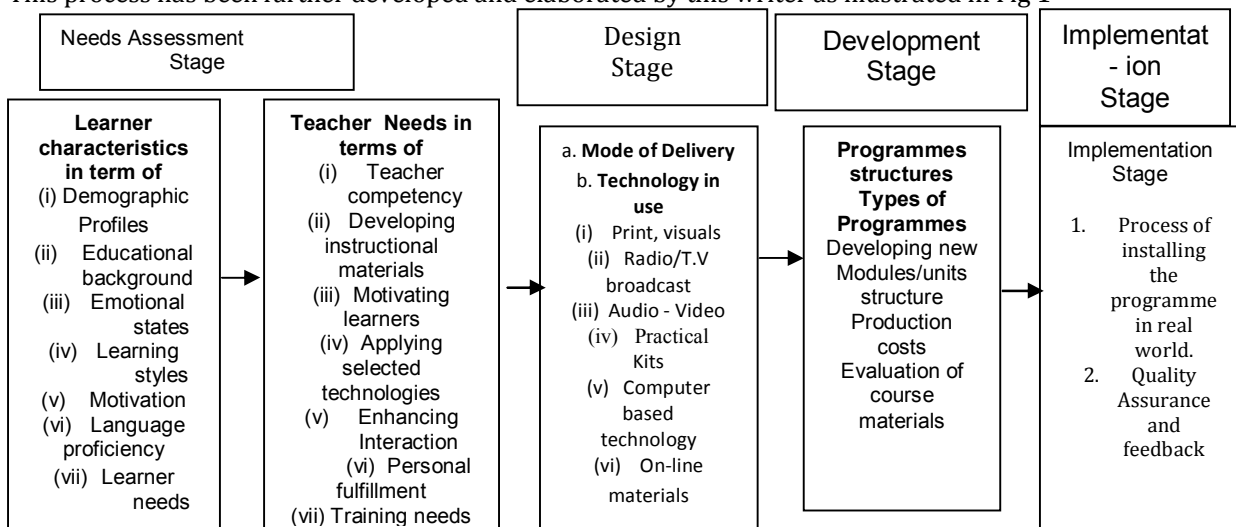


Fig.1- Ogunleye's model for strategic planning of course design, development, production and delivery in Distance and Open Learning.

According to this model, there are four stages in the strategies planning of distance and open education. These are

- (i) Needs Assessment State
- (ii) Design Stage
- (iii) Development Stage
- (iv) Implementation Stage

The details of each stage cannot be fully discussed in this paper.

What is Quality Assurance in Open and Distance Learning?

Quality has always been an issue in open and distance education (ODE) and distance learning (DL). The Commonwealth of Learning (1999) defines quality assurance as approaches to organizing work that;

- ensures the institution's mission and aims are clear and known to all;
- ensures the systems through which work will be done are well thought out, foolproof, and communicated to everyone;
- ensures every one's responsibilities are clear and understood;
- defines and documents the institution's sense of 'quality';
- sets in place systems to check that everything is working to plan; and
- when things go wrong – and they will – there are agreed ways of putting them right.

Quality Assurance should therefore be an integral part of any open and distance learning operational systems and processes. Since the inception of open and distance learning programmes and its subsequent widespread diffusion, it has increased considerably the access to education for many students seeking university education and this reality that has compelled many countries to adopt the distance learning mode as part of their educational system. Hence, starting from the 1990s, quality assurance concerns in distance and higher education has therefore gained serious attention by institutions, stakeholders, and scholars as a result of which many institutions have begun to re-define and re-orient their institutional missions and strategic visions to incorporate and address quality issues. According to Deshpande & Mugridge (1994) and Tait (1997), numerous reports have been published to share ideas, experiences, and articulate the 'how and how not to' and also the 'best practices' of quality assurance implementation in open and distance learning educational contexts from around the world as a result of pressures for quality emerging from both internal and external parties. Internally, open and distance learning institutions are being challenged to undertake continuous improvement from within. Externally, stakeholders (i.e., users, consumers, educational funders) are persistently questioning the quality, accountability, effectiveness and efficiency of educational endeavors in which they have interest. Generally, quality assurance in open and distance learning covers a number of aspects, which includes the physical products, pedagogical processes, production and delivery systems, and philosophy (COL, 1997). Quality of products includes course materials, number of graduates, examination pass rates, admission in further studies, and so forth. Quality of processes covers areas such as learning and teaching processes, advising students, coordinating external course and test item writers, networking with regional offices, managing student information. Quality of production and delivery systems includes course production, print and multimedia production, test item production, scheduling, warehousing and stock control, getting materials to students, and broadcast transmissions. Quality of philosophy covers such things as ODL vision, mission and policy statements, institutional culture, governance, corporate culture, and public image (COL, 1997).

In terms of products, the quality of open and distance learning varies from one institution to another, depending on priorities, resources, size, and the student body of which it aims to serve (COL, 1997). Quality of processes is more difficult to address than products. Various kinds of learning supports may be provided by institutions like tutorial services, organized study groups, library access, and access to learning resources (COL, 1997). Indeed, most open and distance learning students are at liberty to decide for themselves whether or not to use learning resource facilities (COL, 1997) and in some cases, students cannot access learner support facilities – i.e., living far from learner support facilities (Fozdar, Kumar & Kanan, 2006). The challenge for ODL institution, therefore, is not only to ensure learner support that is both accessible and relevant, but also to encourage students to participate in and use of support systems that ensure quality-learning. Management and decision-making processes are similarly difficult to assess. Indeed, it takes some time to observe how the quality of 'decision-making' influences a given institution (COL, 1997).

The challenge of implementing quality assurance in open and distance learning institutions is a monumental task which demands a great deal of effort, patience, socialization and training to ensure that innovation is a productive effort. Changing an organization's mindset is one of the biggest tasks when

undergoing 'innovation'. Such change requires a great deal of courage and commitment of the top leaders of an institution (Daft, 2006).

Koul (2006) remarked that considerable emphasis should be given to the learning design aspect of distance education. He identified ten factors grouped into three dimensions to contribute to quality assurance in open and distance learning. The core dimension includes two factors viz. one, course materials, instructional design, teaching-learning including evaluation practices and learner support services and two, learner centricity of support services, +research and capacity building. While there are several factors under the 'systems' and 'resources'

The quality assurance in open and distance learning in the last two decades has become a very pervasive issue for regulatory agencies in education. However, the first collective effort in this matter was done in 1995, when the International Council of Distance Education (ICDE) arranged a world conference. The main theme of this conference was that how to solve the quality assurance issue in open and distance learning which has become the central agenda of all educational regulatory authorities and distance learning practitioners (Sewart, 1995). The higher education practitioners observed that there is an increased use of distance learning in education sector as a result of which a large number of universities are changing their mode of study from face-to-face to open distance mode or adopting dual mode. Thus, quality assurance has become a challenge for regulatory agencies especially in those higher education institutions, which operate their programmes in dual mode i.e. formal and distance learning. Furthermore, commercial interests within higher education have necessitated that quality assurance agency to provide more information about the quality of those educational services offered by open and distance learning higher educational institutions.

Several different organizations from different countries have developed principles, guidelines, or benchmarks to ensure quality of distance education. For example, the Institute for Higher Education Policy of USA has come out with 24 benchmarks that cover seven aspects considered essential to ensuring excellence in internet-based distance learning. These are, Institutional Support, Course Development, Teaching/Learning, Course Structure, Student Support, Faculty Support and Evaluation and Assessment (IHEP 2000). In the UK, new guidelines for distance learning in higher education have been published by the Quality Assurance Agency (QAA). The guidelines were arranged under six headings: (1) System design, (2) Program design, approval and review, (3) The management of program delivery, (4) Student development and support, (5) Student communication and representation, (6) Student assessment. Each one deals with an aspect where quality assurance is likely to require attention in a particular way when study is by distance learning (QAA 2002). While these are good initiatives to differentiate 'good' from the 'substandard', there are still many issues that are still being debated. In order to make better informed decisions from a research perspective, the American Federation of Teachers and the National Education Association commissioned The Institute for Higher Education Policy to conduct a review of the current research related to distance education. The purpose was to analyze "what the research tells us and does not tell us". The review revealed that too many of the vital issues of concern have gone unanswered and the gaps make the validity and reliability of the research findings questionable (Phipps 1999). However many questions remained unanswered. These include: What are the significant administrative issues affecting quality in distance education? What is the notion of access and how do we define quality of access in distance education? What is the existing quality of access in distance education? What are the best ways to improve the access and quality of access? How is good learning experience defined and with reference to whom or what? Will the cost of implementing the new technology itself be detrimental to access? Can technology replace human contact without significant loss of quality? How do the quality assurance agencies view the distinction between traditional programs and the distance education programs? These questions indicate that even after many decades of pilot projects, deliberations and field experience in open and distance education, assuring the quality of distance education is an uncharted area for many quality assurance agencies.

SOME QUALITY ASSURANCE CONCERNS IN OPEN AND DISTANCE EDUCATION

According to the recently published documents from the UK Quality Assurance Agency (Quality Assurance Agency, 2000, 2000a, 2003), the following are some quality assurance concerns in open and distance education:

(i). How to assess Student/Staff Ratio

The issue of contention here centres on what should be the standard for student/staff ratio in an Open and Distance learning Institutions. For example, in the US the North Central Association of Colleges and Schools (NCACS) in March 1999, accredited Jones International University, the first institution to be accredited by a regional accrediting body that offers its courses and services on a global scale entirely over the Internet. However, it is sad to remark that in the case of the Jones International University,

accredited by both NCACS, of the 56 faculty members employed by the university, two are full-time, and the other part-time members were those who generally hold academic posts at other universities. This situation prompted the American Association of University Professors (AAUP) to send a letter describing its concerns about the accreditation of Jones to the executive director of NCACS. The protest was based upon what they saw as a lack of quality particularly given the high number of adjuncts the university is using. In addition, AAUP cited the short duration of the university's courses, the lack of learning resources – such as libraries and research laboratories – and the small proportion of students who seek degrees from the institution. The implication of this is that distance education may present extraordinary and distinct challenges to the traditional methods of quality assurance in some aspects.

(ii). What Criteria are used for Assessment and Accreditation?

The bone of contention here focuses on whether any assessment and subsequent accreditation should be made with reference to a set of criteria which should be spelt out. In distance learning for example, learners take increased responsibility for control and direction of the learning process. However, if one examines international developments, there is the growing consensus that existing standards and criteria that often focus on learning input fail to acknowledge the many forms that effective learning can take and therefore, the focus needs to be on learning outcomes. The focus on Student Outcomes and Attainment is to see how the institution's graduates meet clear standards of achievement demonstrable through explicit assessments of performance.

(iii). What Benchmarks and indicators are suitable for ODE?

The crux of the problem related to quality assurance of open and distance education lies in identifying suitable benchmarks which will make the assessment clear to both the quality assurance agency and the distance education institutions. For example, without specific indicators the benchmark statement;

“Instructional materials are reviewed periodically to ensure they meet program standards”. This does not tell us whether a particular level of functioning is best or just adequate. To take another example, student support system is mentioned in one of the criteria listed for quality assurance. The corresponding benchmark statement state as follows:

“The institution has good student support services.”

This benchmark statement does not spell out clearly what characterizes effective student support and what indicates different levels of effectiveness. Either quantitatively or qualitatively, for each aspect of assessment, it is essential to spell out what characterizes the different levels of performance. Otherwise, the differences between ‘we also do it’ and ‘we do it well’ may become ambiguous and affect the objectivity of assessment. The indicators of quality and good practices for the traditional institutions are generally well understood and accepted. A traditional quality institution is expected to have a functioning counselling centre and a placement office. Student seminars and projects are aspects to be encouraged under avenues of learning. When it comes to open and distance education the picture is not as clear. This is an area where that we need to take stock of what is possible and under what best conditions.

(iv). Defining ODE boundaries

In recent times, the providers of distance education are integrating more of on-line courses, such that the need for a physical site is decreasing. The crossing of boundaries is giving concerns for quality assurance in open and distance education. This type of borderless and boundary less form of distributed learning has already become a reality and suggest a need for some redefinition of quality and quality assurance mechanisms. In addition, there are still many distance education providers who operate through study centres/sites/campuses spread over in different geographical locations including overseas arrangements. Lester (1991) identified five basic purposes of the site visit– to evaluate the institution or program in the context of the learning environment, to conduct the interviews, to evaluate physical resources, to observe instructional delivery and to examine records. Some of these purposes could be achieved with simple adaptations. Examination of records and documents could be achieved centrally at the administration site for most of the data. However, with boundary less situations, this cannot be possible. The quality of the instructional materials can be assessed independently by subject experts without a site visit and their evaluation may be provided to the assessment team. Evaluation of facilities like library could be easily checked but access to resources in different sites and the responsibility of the provider are also issues of great concern which needs to be further debated. To what extent can the institution be held responsible for the necessary access to resources? How do we define the adequacy of resources? Furthermore, should the quality assurance agency adopt the policy of assessing all activities conducted in the name of the institution in home country as well as abroad under its sponsorship or should it be restricted to the offerings in the home country? For example, will quality assurance agencies visit the overseas sites? What would be the implications for the resource requirement for such a visit? Will the criteria and benchmarks be raised to the international standards? In many countries too, the national quality assurance agencies

have realized that the national regulatory frameworks are not adequate to oversee the distance education provisions when they cross the national borders.

(v). Who will assess?

The next major problem is going to be the “pool of experts” that would assist in assessing quality in open and distance education. Are they going to be traditional experts in higher education who may not be familiar with what could be achieved in successful distance education initiatives or a well-informed group of experts, comfortable with the functioning of distance education in the country and abroad that should be involved in the assessment process.

CHALLENGES OF QUALITY ASSURANCE IN OPEN AND DISTANCE EDUCATION

Open and distance learning programmes is not as effective as full time immersion in a learning community. Learning is most effective when it is a student’s full time-time job (Egbokhare, 2006 quoting Rosenfield, 2000). This is the more reason why quality of programmes must be maintained in order to at least produce a justified learning outcomes. Some of the challenges facing the Open and distance education in developing countries include the following:

1. Cost Effectiveness

The challenge here concerns the production and delivery of the course, module or unit. Are they cost effective? Do student numbers in each presentation, and the number of presentations before revision, make the required investment worthwhile? Would it be more cost effective to buy in a course, direct students elsewhere or work in partnership with other organisations to achieve economies of scale?

2. Appropriate Media

Majority of open and distance learning environments make use of an array of audio, video and textual material, in a variety of ways in teaching; The issue now is what criteria do they adopt in determining which are the most appropriate media for our needs and how do we deploy these in an ODL context. Furthermore, how can institutions make use of the powerful interactive features of Communications and Information Technology to achieve best results?

3. Support and Retention

The challenge of widening participation, bring adults and disadvantages groups into the university, is with us. How can we best support our students and improve retention and what diagnostic / developmental materials will be needed?

4. Training of Staff and Technical Support

The shift from being a conventional, face-to-face teacher, to an online facilitator is not easy. What measures should be put in place to train open and distance education lecturers ? What briefing and training should be provided to transform lecturers into e-Moderators or e-experts? Furthermore, with an increase in part-time students, or full time students who work part time, the need for technical support is highly important. What provision should be made for technical support for students during evenings, weekends and other time zones?

5. Procedures for Testing Students

According to Wellar (2000), in a conventional teaching situation the demeanour of students, quizzical looks and raised hands often signify a problem in communication or understanding. However, in an ODL context this is more difficult – especially if the tutor never sees the student and is separated in time and space! What procedures should be put in place to test or trial test actual materials, systems and procedures before a course is offered to students?

6. Meeting Special Requirements

The Special Educational Needs Disability Act (2001) requires institutions to be anticipatory to put procedures and practices in place in the expectation that those requiring alternative forms of delivery can gain ready access. How can Open and Learning environments meet the needs of communication impaired students? Furthermore, what systems can be put in place to ensure the various media -audio, video, text etc to ensure that the needs of communication impaired students are taken care of?

CONCLUSION

It is not easy to define quality assurance in relation to education, however, without the rapid spread of real quality education, there can hardly be any scope for sustainable development. The various quality indicators highlighted in this paper is core to any higher education course especially those which are aimed at developing professionals in various areas as well as leaders and decision makers in the society. These indicators are also critical to any mode of open and distance education and could be generated through a variety of media and methods. It is important to note that quality assurance can only work when everyone is fully of aware and understands what is involved, and that it takes effort and commitment to make 'quality' happen and can only happen when all stakeholders from students and

frontline staff, to university leadership and government, has input into the system. Quality assurance implementation also requires shared responsibility of all staff and management.

Finally, it should be remarked that quality assurance is essential for improving institutional efficiency and effectiveness, and also increasing public accountability. To meet the challenges of implementing quality assurance systems, institutions must therefore be ready and willing to adapt, change, and innovate. Quality assurance activities must be clear and transparent and, more importantly, they must be achievable and able to meet customer expectations. When quality assurance systems and procedures are clear and activities well defined, it is only then, that open and distance learning institutions will be able to meet high quality standards.

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