**Distance Education and Open Learning
In Sub-Saharan Africa**

A Literature Survey On Policy And Practice

**Sponsored by
The Commonwealth of Learning**

April 2002

FINAL REPORT

**Distance Education and Open Learning
In Sub-Saharan Africa**

A Literature Survey On Policy And Practice

**Sponsored by
The Commonwealth of Learning**

April 2002

FINAL REPORT

Organised by: *The Commonwealth of Learning*

Supported by: *The Commonwealth of Learning*

Document prepared for: *Association for the Development of Education in Africa
(ADEA)*

CONTENTS

LIST OF CASE STUDIES

LIST OF TABLES

Distance Education and Open Learning in Sub-Saharan Africa

EXECUTIVE SUMMARY

This report is a review of the literature on current developments and prospects in the field of open and distance learning in Sub-Saharan Africa (SSA). Education is seen as a major impetus behind fundamental change or transformation in many societies. This transformation is multi-dimensional in the sense that changes occur across various domains, including the political, cultural, social, economic, individual (intellectual) and technological.

In modern Sub-Saharan African societies, the major agent effecting the process of education has been the traditional education system, whose distinguishing features are face-to-face interaction between teachers and learners, structured courses of study, fixed locations for learning, fixed time-tables and a system of certification. Many nations throughout SSA have realised the paramount significance of this formal education, and have made very serious efforts to provide human and material resources for the purposes of educating the citizenry in this way. However, for various important reasons that fall outside of the scope of this report, **none** of the countries in SSA have fulfilled the promise of providing education to the entire population through the conventional education system.

It is in this context that distance education is viewed as an appropriate method of education delivery. Distance education can be aimed at providing people who have missed an educational opportunity at one level or another a way to recapture what they have lost without necessarily going back to the classroom. In other words, distance education can provide people with a second chance to receive education.

Chapter 1 sets the tone for the report by defining distance education, a concept that is often referred to as correspondence education, home study, independent study, external studies, continuing education, learner centred education, distance learning, flexible learning and distributed learning. This chapter also discusses the meaning of other commonly used terms related to distance education, including open learning (a philosophy that many argue should underpin distance education programmes) recognition of prior learning and current competencies, lifelong learning and autonomous learning.

Essentially, in a distance education setting there is a physical separation between the learners and the teachers or instructional base, whereas in the conventional system the teacher and learners are in a face-to-face situation.

In SSA there is an explosion of interest in distance learning. Chapter 3 explores how distance education can be used to reach a wider and more diverse audience than traditional education, can address the demand for higher education in traditional universities where the demand exceeds the supply by maximising limited resources for increasing intakes, and can provide continuing professional development for working teachers. For example, The Kenya Institute of Education uses an in-service training course for unqualified teachers to improve their teaching effectiveness so they can be promoted. Distance education is also used to meet the demands for lifelong learning amongst the general adult population and to accelerate social development in developing SSA countries.

The remainder of the report examines key aspects of distance education in SSA. The first, management and administration, is outlined in Chapter 4. Proper management and administration systems and structures are vital to ensure that learners receive the support services that they need. The four main modes or models of educational provision in SSA countries are single mode institutions, dual mode institutions, mixed mode institutions and consortia.

Single mode institutions offer only distance education (for example, the University of South Africa). Dual mode institutions provide both face-to-face education and distance education (for example, the Universities of Fort Hare and Western Cape in South Africa, and the Universities of Botswana, Zambia and Nairobi). In mixed mode institutions, the same people design, deliver and administer the distance education programmes as offer conventional programmes (for example, the Universities of the Witwatersrand and Pretoria in South Africa, and the Universities of Mauritius and Eduardo Mondlane in Mozambique). Consortia arrangements involve groups of autonomous institutions combining efforts to offer distance education (for example, African Virtual University and COLISA in South Africa).

The second aspect of distance education, curriculum design, is considered in Chapter 5. The issue is that many distance education institutions in SSA have been using curricula from elsewhere in the world. The values in these imported curricula have often failed to resonate with the values in SSA countries.

Western curricula are not always helpful because there may be no congruence between the prescribed content and the experience of the target audience. "Africanisation" of the curriculum is seen as an antidote to rigid imposition of western models. Institutions in SSA hold the view that any programme designed for the people of SSA should be responsive to the needs and experiences of local learners. For example, there are five indigenous distance learning programmes in non-formal education in five SSA countries (Kenya, Uganda, Zambia, Tanzania and Ghana). Although the curricula of these initiatives vary in terms of design, structure and flexibility, they are alike insofar as they are influenced by the context of the specific countries.

Chapter 6 discusses course production, the third aspect of distance education. Course design and materials should accommodate the characteristics of learners. In many institutions the course production process involves teams of experts such as writers, reviewers, editors, electronic media specialists and graphic artists. In other cases, a course developer needs to be multi-talented. For example, at Makerere University in Uganda, material development involves lecturers who are also writers, reviewers and visual designers or illustrators.

The report explores the fourth aspect of distance education, quality assurance, in Chapter 7. Many institutions have been consciously building quality assurance processes into their distance education programmes. The emerging argument is that institutions should introduce the concept of Total Quality Management, which has two dimensions.

The first dimension of Total Quality Management is quality assurance, which is designed to anticipate problems that might occur so that quality controllers end up with little to reject. The second dimension is quality control, which is a retrospective process of checking the work after it has been done to see if it was up to standard. Many organisations that deal with open and distance learning in SSA have programmes in place to ensure that the kind of education they offer is of high quality. For example at Makerere University in Uganda course materials developed by tutors have to be reviewed and edited by senior members of staff as a matter of policy. For the distance education curriculum to be approved at the universities of Nairobi and Zambia, it has to pass through different committees for assessment and review. In South Africa, a South African National Qualifications Framework has been established for quality assurance purposes.

Learner support, a fifth aspect of distance education, is explored in Chapter 8.

The common understanding among distance education organisations is that because learners are isolated it is extremely important to give them the support they need to achieve their educational goals. This chapter discusses various case studies of learner support systems. The dominant view is that learner support services include a wide range of activities, all of which need to be planned and budgeted for. These activities can be divided into three main groups by the learner needs they address: teaching and learning needs, access and information needs, and social and personal needs.

Chapter 9 examines a sixth aspect of provision, the use of information and communication technology (ICT) in distance education. The potential problems that could accompany the integration of ICTs in distance education, particularly in the developing SSA countries, are identified. The main argument is that extreme caution should be exercised so that ICTs are not used in such a way that they accentuate the disparities between countries and within countries. The advantages of using ICTs outweigh the disadvantages, however. Going online would facilitate the integration of SSA countries into the information society. Joining the information highway is strategic because it would allow SSA to develop a global competitiveness in general and enhance the quality of distance education in particular. An example of the use of ICTs in distance education and open learning is the African Virtual University (AVU) launched by the World Bank. AVU is a tertiary distance learning programme based on the use of interactive telecommunications.

The associations that promote distance education at the continental, regional and national levels are described in Chapter 10. In the African continent, the Association for the Development of Education in Africa (ADEA) promotes education policies, including distance education initiatives. Associations that maintain a regional presence in promoting distance education include the East African Distance Education Association (EADEA), the West African Distance Education Association (WADEA) and the Distance Education Association of Southern Africa (DEASA). The national associations whose activities revolve around the provision of distance education and open learning include the Distance Education Association of Tanzania (DEATA), the Ghana Distance Education Association (GHADEA), the National Association of Distance Education Organisations of South Africa (NADEOSA), the Zambian Association for Distance Education (ZADE) and the Zimbabwe National Association for Distance and Open Learning (ZINADOL).

Chapter 11 outlines the issues present in SSA that must be addressed to advance development of distance education practices.

It also details various projects operating in SSA that are dealing with these issues. Technological initiatives, such as the Acacia Initiative and the African Information Society Initiative (AISI), are likely to have positive spin-offs for SSA countries. The overall growth of a communication and technology infrastructure is conducive to the further expansion of distance education practices.

Online databases of information about distance education are described in Chapter 12. Chapter 13 provides a conclusion.

Attached as an appendix to this report is a set of criteria for quality distance education developed by the South African Department of Education's Centre for Education Technology and Distance Education (CETDE) over the period 1996 – 1998. This document has been very well received both internally, where it has formed the backbone of the South African Qualification Authority's (SAQA's) guidelines for the accreditation of ALL providers, as well as internationally where it strongly influenced the development of draft quality guidelines for the Association of Asian Open Universities (AAOU) in 2001. The criteria provide suggested quality indictors for most of the key issues explored in this report.

1. INTRODUCTION

This research report offers an overall picture and some detailed understanding of various aspects of Open and Distance Learning (ODL) at different levels of education in Sub-Saharan Africa (SSA). It begins to engage with these issues by providing the rationale for the study. It then moves on to discuss the ways in which the data were collected.

Since it is possible to interpret terms such as distance education and open learning (and other related concepts) in different ways depending on the context, the report seeks to develop a common understanding by examining what open learning and distance education mean from a Sub-Saharan African perspective. The bulk of the report explores the theoretical underpinnings of various aspects of distance education and open learning, contextualising them where possible by looking at practical examples of distance education and open learning interventions in SSA countries.

1.1   RATIONALE

The field of Open and Distance Learning (ODL) is moving from a peripheral form of educational approach and delivery to one that is a central pillar in many countries' and institutions' education plans and delivery. The evolution of information and communication technologies has had a positive effect on the development of distance education and open learning.

It is thought that the African continent, and especially Sub-Saharan Africa (SSA), has struggled to keep track of current educational and technological developments. As a result, many of the countries that have been using distance or correspondence education have continued to employ first generation methodologies (correspondence courses with text-based materials similar to those used in the classroom and delivered through the postal system), while some have introduced second generation methodologies (mainly print-based and characterised by self-instructional design) and third generation methodologies (self-instructional print integrated with audio and video). Very few SSA countries appear to have moved to fourth generation methodologies that use interactive information and communications technology (ICT) to support course delivery and learning.

There are reasons for this state of affairs. Some of these include a mind-set that categorises ODL as second best, an unwillingness to introduce new technologies into education and training systems, a lack of expertise to manage such processes, and insufficient analytical research to inform policy and institutional development. It is in this context that at their first meeting held in Mauritius in April 2000, the ADEA Executive Committee of the Working Group on Distance Education and Open Learning approved a work programme, of which this report forms a part, and identified two priority activities:

- The need for a comprehensive review of literature pertaining to open and distance learning in SSA; and
- The need for in-depth case studies of selected countries focusing on the current state of development of ODL.

This research undertaking should be understood in the context of meeting the first objective, while the second will be addressed in the next phase of the research.

1.2   RESEARCH METHODOLOGY

This literature review was desk based and sought to make use of various regional and national forums and institutional contacts in different countries to gather the information. Attention was paid to all levels of education (primary, secondary, non-formal, tertiary, and adult and continuing education), as well as to all sectors of education, including teacher education and professional training. The writers analyzed information from distance education (DE) and open learning (OL) books, journals, conference proceedings, unpublished reports, and databases and listserves.

The literature review offers insights into various aspects of the state of ODL in SSA, including:

- Administration and management
- Curriculum design
- Course production
- Quality assurance
- Learner support
- Use of information and communication technologies

- Continental, national and regional associations that promote ODL
- Current research being conducted
- Initiatives supporting ODL developments in SSA
- National and regional databases

1.2.1 CONSTRAINTS

The first phase of research involved compiling a comprehensive review of the literature on ODL in SSA. This implied that the study was desk-based and that it was necessary to use various regional and national fora and institutions to gather information. At the beginning we sent an email invitation to contacts made during previous ADEA research as well as contacts on the National Association of Distance Education Organisations of South Africa (NADEOSA) database, requesting suggestions of possible sources of information on ODL in their respective countries. More than sixty email requests for research assistance were dispatched, but only three responses were received (our thanks to Dr. Tom Brown of Pretoria University, Mr. Jerry Beukes of NAMCOL and Ms. Jean Grundling of Technikon Southern Africa).

Information about ODL was retrieved from the COL, SAIDE and GDEnet websites. However, most of the research papers and books that were accessed explored the theoretical issues around aspects of DE. Very limited information was gathered that offered examples of ODL being implemented in SSA. The SAIDE resource centre proved to be a valuable conduit for information, but it also struggles to access contemporary literature on policy and practice in SSA countries. Information gathered from the COL website included speeches by Drs. G. Dhanarajan and H. I. Macdonald, as well as material about DE in SSA written by people in the region, such as Peter Kinyanjui.

In cases where relevant information was detected on the websites, it was often impossible to download. Efforts to get assistance from SSA's two regional distance education associations, EADEA and WADEA, either through the organisations directly or their websites, were to no avail.

During March 2002, a technical committee for the ADEA working group on Distance Education and Open Learning was formed and met in Mauritius to review the reports on Anglophine and Francophone countries. This revised version of the report responds to the recommendations that emerged from this meeting.

As part of the follow up work for this revised draft, the draft report was emailed to some 30 prominent distance education experts in various countries around the continent for comment. About a third of the addresses used proved inaccessible and the email was returned. From the emails we assume were delivered, there was no response either in the form of critical questions or additional case studies. Email has therefore proven to be an unuseful tool for this desk-based research project.

Because the research process unfolded under such difficult circumstances, it was not possible to access the same depth of information on all of the issues we wished to explore.

2. DEFINITIONS

There are differing international interpretations of distance education concepts, as no single definition of open learning or distance education seems to satisfy the various stakeholders involved. Therefore, for the sake of clarity and common understanding, it is necessary to explain from a Sub-Saharan African perspective the meaning of distance education, open learning, flexible learning and other important educational principles that centre around the concept of distance education.

2.1 DISTANCE EDUCATION

As a methodology, **Distance Education** (DE) is generally defined as one in which the learner is separated from the instructional base or teacher, either in space or time, for a significant portion of their learning. In addition, most definitions of distance education pay attention to the following characteristics:

- **Institutional accreditation,** where learning is accredited or certified by some institution or agency;
- **Use of a variety of media,** including print, radio and television broadcasts, video and audio cassettes, computer-based learning and telecommunications;
- **Provision of two-way communication,** which allows for tutor-learner interaction; and
- **Possibility of face-to-face meetings for tutorials,** learner-learner interaction, library study and laboratory or practice sessions.

2.2 OPEN LEARNING

Open Learning (OL) is a philosophy of learning that is based on the principle of flexibility to increase access to and equity in education. An open learning philosophy implies that a provider will try to find a variety of ways to open access to credible learning opportunities to a diverse range of learners. In this context, learners are allowed to determine what they want to learn, how they want to learn, when and where they want to learn, how to get their learning assessed and what to do next in terms of career direction.

In an effort to be flexible, providers of open learning opportunities often incorporate the approaches and methodologies associated with DE and its related delivery strategies. The South African government defines open learning as follows:

> Open learning is an approach which combines the principles of learner-centredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition of prior learning, the provision of learner support, the construction of learning programmes in the expectation that learners can succeed, and the maintenance of rigorous quality assurance over the design of learning materials and support systems. South Africa is able to gain from world-wide experience over several decades in the development of innovative methods of education, including the use of guided self study, and the appropriate use of a variety of media, which give practical expression to open learning principles. (National Department of Education, 1995:9)

2.3   LEARNER-CENTREDNESS

Another concept related to distance education and open learning is **Learner-Centredness,** for which the primary prerequisite is openness. Essentially, this notion emphasises that the learner should be the main focus of educational practice and should play an active role in decision-making affecting his or her learning. Educational provision based on the principles of learner-centredness will not be a one-way communication where information flows only from the source of the knowledge to a passive learner. Instead, the educational practice will encourage independent and critical thinking, and equip the learner with analytical skills and other competencies. Education provision should also take into account the learner's experience and context.

2.4   AUTONOMOUS LEARNING

ODL methodologies encourage learning as a resource in itself and not simply as an end. ODL inherently fosters **Autonomous Learning**. Any teaching/learning process that does not develop learner autonomy can be only a half success at best. In ODL, the separation between the teaching and the learning process places the onus on the learner rather than on the teacher. Academic performance depends not only on proper course design, but also on the acquisition of efficient learning skills, which in turn encourage learner independence. The ability of the ODL model to foster this necessary condition for lifelong training sets tertiary education institutions apart from other institutions (Rumajogee, 2001).

2.5   LIFELONG LEARNING

This brings us to **Lifelong Learning,** which is also central to the notion of openness. The emphasis here is that learning should be an ongoing, permanent practice relevant to the ever-changing needs and experiences of the learners. Learning is perceived to be a process that unfolds throughout life, rather than being limited to childhood.

2.6   RECOGNITION OF PRIOR LEARNING AND CURRENT COMPETENCIES

The last concept that needs clarification is **Recognition of Prior Learning and Current Competencies**. Recognition of and acreditation for learners' prior learning and current competencies is critical.

There is growing understanding of the need to recognize the skills, attitudes and knowledge that people gain through their life experiences in a range of formal, informal and non-formal contexts.

2.7   OTHER COMMON TERMS

Other commonly used terms related to distance education are home study, independent study, correspondence education, learner-centred education, self-instruction, open access, adult education, external studies, distance teaching, distributed learning, technology-based or mediated education and continuing education.

2.8   THE CHANGING FACE OF DISTANCE EDUCATION POLICY AND PRACTICE

A danger inherent in providing definitions is that they suggest fixed positions. In particular, attempts to "define" distance education inevitably run the risk of suggesting a complete separation from more traditional forms of provision, a situation that is far from the case in distance education generally. As the recent National Plan for Higher Education (NPHE) in South Africa observes, "Higher education programmes … increasingly exist on a continuum spanning distance programmes on the one end and face-to-face programmes on the other." (National Department of Education, 2001: 60).

The final version of the NPHE continues to offer mixed messages about distance education, which stem in part from a lack of clarity about what the plan conceives distance education to be. This has profound consequences for funding. Many programmes that would normally be called distance education because large parts of the learning happen when learners are separated from their tutors, go by other names ("resource-based learning", "mixed mode", "part-time", etc.), partly, we believe, to escape the label of DE and to attract more favourable funding. Placing DE provision at the opposite end of a continuum from contact provision suggests a conceptualisation of DE as either totally independent study or, at best, correspondence study. However, as the report goes on to note, DE providers are increasingly using a wide range of other support strategies.

The NPHE raises particular concerns with regard to "virtual" universities, maintaining:

> They cannot replace the traditional contact higher education institutions where scholarship, research, teaching and service are valued in equal measure where the focus is on the full range and breadth of disciplines. And more importantly, where knowledge generation and intellectual development are themselves the product of social interaction and engagement. (National Department of Education, 2001: 60)

The above assertion seems to indicate a similar lack of clarity. Is a "virtual" university necessarily devoid of scholarship, research, teaching and service, contact or direct interaction, and does the term necessarily imply a limited curriculum? Is there similar concern about distance education provision more generally?

The purpose of this next section is to help clarify the situation regarding the changing face of distance education.

2.9   REVISITING THE NATURE OF DISTANCE EDUCATION

For many people there seems to be a clear distinction between distance education and contact-based education. Many people seem to think along the lines of the following diagram:
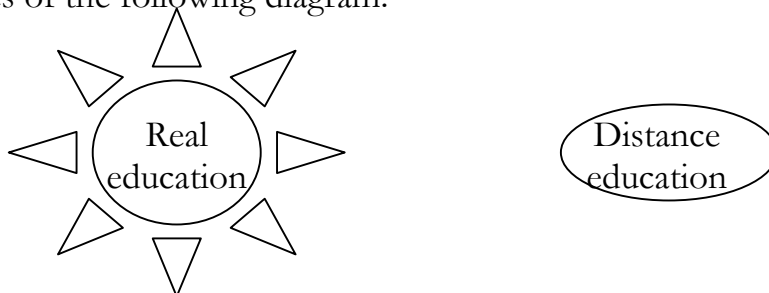
- Real education is what happens when a teacher teaches in a classroom.
- Distance education is what you do if you cannot gain access to the real thing. For too many people, the term "distance education" still conjures up a vision of an individual learner struggling by candlelight late into the night to make sense of a pile of badly reproduced and obscure study material.
- Real education and distance education have nothing in common.

Misgivings about DE, and the notion of a dichotomy, are clearly problematic given the fact that traditional forms of provision are unable to meet the increasingly diverse needs of potential learners.

Consider the following: Promat Collges, an SA non-governmental organisation (NGO), offers an REQV13 level INSET programme which involves learners in over 120 hours of face-to-face interaction with a tutor and with other teacher-learners. In contrast, in the 25-week third year of an undergraduate degree, a learner might spend an average of four hours a week attending lectures and/or one-to-one tutorials, which amounts to about 100 hours of direct face-to-face interaction during the course of the year. The former is classified as a part-time/distance education model, the latter as a traditional contact-based university offering.

Internationally, as well as within South Africa, traditional contact-based providers are increasingly seeking means to offer their services to greater numbers of more diverse learners in a growing variety of ways and to achieve economies of scale. On the other hand, traditional correspondence-type providers are increasingly concerned with finding ways to offer more and better learner support, including direct face-to-face interaction, to improve retention and success rates.

The boundaries between distance and non-distance forms of provision are consequently blurring. Under such conditions, it seems increasingly necessary to think of education as a continuum of provision, rather like the following:

Multiple venues
Multiple pathways
Emphasis on learner
independence

Single venue
Single pathway
Emphasis on T-L
interaction
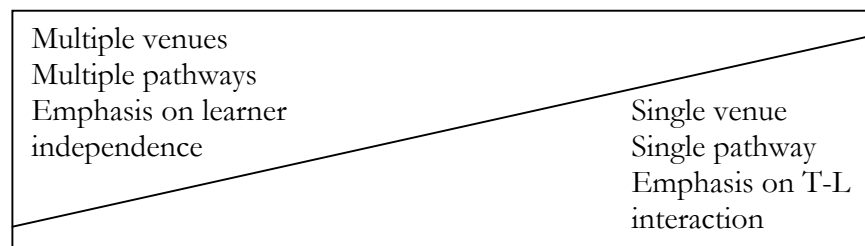
At one extreme of the continuum we have something along the lines of the old London City and Guilds approach in which a syllabus, perhaps with a number of electives, was provided and the learner would organise his or her own study and simply indicate when he or she felt ready to write an examination. Even at this extreme, however, it is hard to imagine the average learner not seeking some support from others, such as local librarians, past students or people with related subject expertise, which is why the dividing line in the diagram does not bisect the corner.

At the opposite extreme, we have the fairly traditional school classroom. Even here, however, it is hard to imagine a realistic scenario in which **all** the learning takes place in the classroom. There will surely still be times when learners will be reading, thinking, using or talking about the learning outside of the classroom.

In reality, most educational provision probably falls somewhere along the continuum rather than in a neat and discrete category of DE or not DE. In any learning situation, there will likely be occasions when the learner is consolidating the learning in a separate time and venue from the direct face-to-face contact session. All educators therefore have an interest in methods that can maximise learning in this space. As an issue of concern for **all** education providers, distance education can be considered:

> A set of teaching and learning strategies (or educational methods) that can be used to overcome spatial and temporal separation between educators and learners. These strategies or methods can be integrated into any educational programme and – potentially – used in any combination with any teaching and learning strategies in the provision of education (including those which demand that learners and educators be together at the same time and/or place). (SAIDE, 2000: 52)

This, of course, presents us with something of a dilemma in trying to define the nature of a "dedicated" distance education institution. Useful here is GDEnet's more condensed definition of distance education: "Teaching and learning in which learning **normally** occurs in a different place from teaching". (GDEnet, 2001. Our emphasis.)

It seems obvious that if a fundamental premise is that the majority, but not necessarily all, of the learning will happen in an asynchronous/non-contiguous way, then we need to think even more carefully about the DE strategies available to us to maximise learning opportunities.

The rapid development of increasingly versatile ICTs further suggests that the notion of "distance" as a problem in relation to issues of synchronicity/contiguity could eventually fall away altogether. In fact, in a listserve submission forwarded by Dr. Tom Brown, Brad Jensen (2001) argues as follows:

> DE is often defined in the following way: "Distance education is learning which takes place while the educator and learner are separated by time, distance, or both". (Leslie, 1995).

Jensen argues that this is no longer an appropriate perception. He challenges us to do a "thought experiment" with him:

> The teacher sits at the front of the computer lab, the students are at their pc kiosks scattered around the room, taking instruction. No distance, no separation, no time difference – using the same course that is taught at a distance, and the same technology.
>
> Did it suddenly become a non-distance ed class?
>
> Some will argue yes.
>
> Distance education is a learning experience that takes place through an indirect communication channel. (Jensen, 2001)
>
> This would include satellite TV, internet, over a modem, and correspondence (snailmail or email).
>
> In the vernacular, if the teacher can't spit on you, it's DE.
>
> My definition also includes what you guys seem to be calling Computer Based Training. (Some will like that inclusion, some will hate it.)

As Weedon (1997) so eloquently argues, however, we should not rush into simply considering the "hows" of overcoming any perceived "distance". Our understanding of the nature and purposes of education will influence the kinds of decisions we make.

We should, perhaps, write "distance education" as "distance EDUCATION" to emphasise that our primary concern is with sound educational practice; the element of distance is no excuse for bad educational decision-making. This point is illustrated in the following table suggested by Weedon's 1997 article and other recent publications (Bertram et al., 2000; COL, 2001). The dots in the table indicate the tentative nature of these perceptions.

Table 1: The influence of educational theory on DE design and practice

Underpinning educational theory	Kinds of choices made by providers…	…as manifested in DE design and delivery
Behaviourist/ utilitarian	Emphasis on transmission of "objective" knowledge Single pathway Emphasis on summative assessment and norm-referencing …	Printed and ICT lectures Activities of low cognitive demand General tutorial letters Right/wrong feedback on assessment …
Constructivist– drawing on the work of Piaget	Emphasis on construction of knowledge by individuals– concern with materials that provide scaffolding and involve learners in the process Multiple pathways for diverse learners Emphasis in assessment marking on feedback to the **individual** and concern with his/her thought processes Emphasis on formative assessment …	Self-instructional materials of a multi-media nature Personalised feedback on assignments Interactive, open-ended use of ICTs One-to-one tutorials/ teletutorials/email etc. …
Socially constructivist– drawing on the work of Vygotsky	Emphasis on construction of knowledge in collaboration with others Pair and group activities and assessment tasks Exposure to multiple viewpoints Core plus electives Emphasis in feedback on both individual and **group** responses Emphasis on interaction and open-ended discussion Negotiated assessment …	Modularisation of self-instructional multi-media materials with multiple links to other resources Personal and group feedback on assessment Interactive, open-ended use of ICTs Group tutorials audio-video conferencing/ email/chat rooms, etc. …

Our concept of distance education is therefore a dynamic one concerned with keeping abreast of changing environmental conditions. COL (2001) identifies four main stages of "technical" evolution that are currently recognisable:

- First generation: text-based correspondence courses, with text similar to that used in the classroom;
- Second generation: mainly print-based, characterised by self-instructional design;
- Third generation: self-instructional print integrated with media (audio and video); and
- Fourth generation: interactive ICT to support course delivery and learning.

As indicated in the preceding table, however, in evaluating the various programmes we are concerned not only with **what** methods and technologies are employed to enhance the learning process for a particular audience, but equally with **how** they are used in practice.

Moore (1993; 1996) observes that there is a degree of distance in all forms of education provision:

> The transaction that we call distance education occurs between teachers and learners in an environment having the special characteristic of separation of teachers from learners…With separation there is a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner. It is this psychological and communications space that is the transactional distance.
>
> Psychological and communications spaces between any one learner and that person's instructor are never exactly the same. In other words, transactional distance is a continuous rather than a discrete variable, a relative rather than an absolute term. It has been pointed out … that in any educational programme, there is some transactional distance. (Moore, 1993; 1996)

Moore goes on to point out that the transactional distance between educators and learners is determined by the interrelated function of three sets of variables in learning and teaching processes:

- **Instructional dialogue**—This refers to the ease with which there is ***interaction*** between the learner and educator. For example, there is often less dialogue between learners and educators in a first year face-to-face lecture than between a distance learner and an educator offering written feedback on assignments, etc.

Dialogue between distance learners and their educators may be slower but more thoughtful than in an immediate face-to-face context, although with greater use of audio- and video-conferencing technology this may be less and less the case. The essential concern is whether or not opportunities for such dialogue are built into a learning programme and whether or not they are mediated in the best possible way in the circumstances.

- **Programme structure**—This refers to the extent to which a programme can accommodate or be responsive to each individual's needs, and suggests the need for multi-disciplinary teams to design learning experiences in such a way that diverse needs are catered to and opportunities for learner-learner and learner-educator dialogue are maximised.

- **Learner autonomy**—This refers to the extent to which it is the learner rather than the educator who determines the goals, the learning experiences and the evaluation decisions of the learning programme. It raises questions about the extent to which a programme is delivered in such a way that it helps learners to reach a point where they no longer need a third person to mediate their learning. At this stage, learners can cope with a high degree of geographical and time distance between themselves and their peers and tutors.

Thus, for Moore the degree of distance between learners and educators is a product of the underlying educational philosophy of a programme and how this philosophy is manifested in the learning and teaching strategies employed.

The notion of transactional distance therefore also places what is usually perceived to be "distance education" and what is usually perceived to be "traditional face-to-face education" on a continuum of educational practices rather than in two different spheres of activity. As noted previously there is an increased blurring of the boundaries as more traditional face-to-face institutions make use of resource-based learning and distance education strategies, and more traditionally correspondence institutions build direct human contact into the delivery of their programmes.

Another significant trend, observable at **both** ends of the continuum, is a growing desire to make greater use of different technologies — including the more recently developed information and communications technologies — to create learning environments that integrate an ever-wider range of media to support learners.

It is already difficult to make a clear distinction between face-to-face and distance learning institutions, especially at higher levels of education, and mixed mode or flexible learning practices are increasingly becoming the norm.

In conclusion, it can be argued that while it is possible to place traditional forms of classroom-based education provision and first generation, low cost correspondence type programmes at either end of a continuum of provision, the reality is that more and more providers are offering their programmes somewhere in the middle. There is no clear distinction between the latest manifestations of traditional provision and good distance education practice, and therefore there should be no distinction in funding.

REFERENCES

Bertram, C., Fotheringham, R. and Harley, K. 2000 Curriculum Studies. Pietermaritzburg, University of Natal.

Commonwealth of Learning (COL). 2000. An Introduction to Open and Distance Learning <www.col.org/ODLIntro/introODL.htm>.

Global Distance Education Network (GDEnet). 2001. Glossary of Distance Education Terms <www.saide.org.za/worldbank/glossary.html>.

Glennie, J. 2001. The NPHE Funding Formula. A paper presented at the 4th National NADEOSA Conference, Johannnesburg, 2001 <www.saide.org.za/ NADEOSA/conference>.

Hodgson, B. 1993. Key Terms in Open and Distance Learning. London: Kogan Page Limited.

Jensen, B. 2001. Online posting to the Distance Education Online Symposium Listserve <DEOS-L@LISTS.PSU.EDU>.

Mays, T. 2001. Walking with Dinosaurs—DE: Evolution or Extinction and the NPHE. A paper presented at the 4th National NADEOSA Conference, Johannnesburg, 2001 <www.saide.org.za/NADEOSA/conference>.

Moore, M. G. 1993. Theory of transactional distance. In Keegan, D., Ed., Theoretical Principles of Distance Education. London: Routledge.

Moore, M. G. and Kearsley, G. 1996. Distance Education: A Systems View. Wadsworth, USA.

National Department of Education—South Africa. 2001. The National Plan for Higher Education. Pretoria: Government Printer.

National Department of Education—South Africa. 1995. White Paper on Education and Training, Notice 196 of 1995 <www.policy.org.za/govdocs/ whitepapers/educ2.html>.

Rumajogee, R. 2001. A Consultation Paper on The National Strategy for Distance Education and Open Learning. Mauritius: Tertiary Education Commission.

Rumble, G. 1989. 'Open learning', 'distance learning', and the misuse of language in Open Learning. In <u>Open Learning—The Journal of Open and Distance Learning</u> (June 1989): 7–15.

South African Institute for Distance Education (SAIDE). 2000. Information and Communication Technologies and South African Higher Education. A discussion paper prepared for the Council on Higher Education. Johannesburg: SAIDE.

Weedon, E. 1997. A new framework for conceptualising distance learning. In <u>Open Learning—The Journal of Open and Distance Learning</u> (February 1997): 40–45.

3. WHY THE USE OF DISTANCE EDUCATION AND OPEN LEARNING METHODS?

In this chapter we look at advantages of open and distance learning and how it provides opportunities for learners. The chapter also reflects on how problems such as distance and time, which are barriers to conventional learning, are overcome in open and distance learning, and how these issues challenge educational institutions to deliver high quality distance learning courses.

Kinyanjui (2000) notes that African countries are increasingly under pressure to open up access to learning opportunities and identifies four main phases in this process:

- the drive towards universal access to primary education
- the drive towards universal access to secondary education
- the drive towards universal access to tertiary education; and
- the drive towards universal access to lifelong learning.

The following table, extracted from an UNESCO report (2000: 104 - 107) indicates that whilst SSA countries have made substantial progress in most areas of education provision, many of the goals identified by Kinyanjui above remain elusive:

Table 2: Gross enrolment ratios (UNESCO, 2000: 104 - 107)

	Primary		Secondary		Tertiary				Tertiary 1965		Tertiary 1995	
Country	*1965*	*1995*	*1965*	*1995*	*1965*	*1975*	*1985*	*1995*	*Male*	*Female*	*Male*	*Female*
Angola	41	77	5	12	0		1	1			1	0
Benin	34	72	3	16	0	1	3	3	0	0	4	1
Botswana	65	112	3	64	0	1	2	5	0	0	6	5
Burkina Faso	12	40	1	9		0	1	1			2	1
Burundi	26	51	1	7	0	0	1	1			1	1
Cameroon	94	87	5	26	0	1	2	4	1	0	7	1
Central African Republic	56	59	2	10	0	0	1	1	0	0	2	0
Chad	34	58	1	10	0	0	0	1			1	0
Congo, D. Republic	70	72	5	28	0	1	2	2	0	0	4	1
Congo, Republic	100	114	10	53	1	3	7	8	1	0	13	3
Côte d'Ivoire		69		23			2	5			7	2
Djibouti		39		13				0			0	0

	Primary		Secondary		Tertiary				Tertiary 1965		Tertiary 1995	
Country	*1965*	*1995*	*1965*	*1995*	*1965*	*1975*	*1985*	*1995*	*Male*	*Female*	*Male*	*Female*
Eritrea		57		19				1			2	0
Ethiopia	11	38	2	12	0	0	1	1			1	0
Gabon	100		11		0	2	5	8			11	5
Gambia, the	21	77	6	25	0	0	0	2	0	0	2	1
Ghana	69	76	13	32	1	1	2	1	1	0	2	1
Guinea	32	48	5	12	0	3	2	1			2	0
Guinea-Bissau	26	68	2	11	0	0	0		0	0		
Kenya	54	85	4	24	0	1	1	2	1	0	2	1
Lesotho	94	100	4	29	0	1	2	2	1	0	2	3
Liberia	41	33	5	15	1	2	3	3	1	0	5	2
Madagascar	65	73	8	13	1	1	4	2			2	2
Malawi	44	135	2	16	0	1	1	1	0	0	1	0
Mauritius	100	107	26	62	0	1	1	7	0	0	7	7
Mozam-bique	37	60	3	7	1	2		6	0	0	1	0
Namibia		133		62				8			6	10
Niger	11	29	1	7	0	0	1	1	0	0	1	0
Nigeria	32	88	5	32	0	1	3	4			6	2
Rwanda	53	97	2	14	0	0	0	1	0	0	0	1
Senegal	40	65	7	16	1	2	2	3	2	0	5	2
Seychelles												
Sierra Leone	29	53	5	17	0	1	1	2	1	0	3	1
Somalia	10	9	2	5	0	1	3	2			4	1
S. Africa	90	117	15	84	4	6		17	6	2	18	17
Sudan	29	52	4	19	1	2	2	4	1	0	5	3
Swaziland	74	126	8	66	0	3	4	4	0	0	4	4
Tanzania	32	67	2	5	0	0	0	1	0	0	1	0
Togo	55	119	5	27	0	1	2	3	0	0	6	1
Uganda	67	73	4	12	0	1	1	2	1	0	2	1
Zambia	53	89	7	28	0	2	1	3	0	0	4	2
Zimbabwe	100	116	6	47	0	2	3	6	0	0	9	4
SSA	**45**	**74**	**5**	**25**	**1**	**1**	**2**	**3**	**1**	**0**	**5**	**2**

Note: The percentages in the table indicate the number of actual enrolments divided by the number of potential enrolments in the expected age range. Where figures greater than 100 appear, this indicates that there are people studying at this level who fall outside of the expected age range.

At a meeting of the World Education forum in Dakar, Senegal, 26-28 April 2000, the following broad goals were agreed:

1. Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children
2. Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality

3. Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes

4. Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults

5. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and acheievement in basic education of good quality

6. Improving every aspect of the quality of education, and ensuring their excellence so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Mackintosh (1999) referring to a World Bank report, describes the slow growth in access to tertiary education in particular as a "time-bomb". He comments:

> The African continent is facing one of the most daunting developmental challenges of the globe. Improving access to education is undoubtedly one of the highest priorities of capacity building on the continent … For example, the tertiary education gross enrolment ratio for Sub-Saharan Africa is 3,6%. When compared with other developing regions – for example, the Arab states (14%), Asia (10,4%) and latin America (18,4%) the magnitude of the challenge is amplified (UNESCO, 1998). Based on the demographic profiles of the traditional 18 – 23 year-old cohort of higher education, many African countires will have to double their access to higher education by the year 2010. William Saint, Senior Education Specialist at the World Bank, argues that 'local demands to expand tertiary enrolments in Africa will constitute a political time-bomb'(World Bank, 1999).

In light of the above challenges, there is an increasing demand for distance education in Sub-Saharan Africa. Shabani and Okebukola (2001) suggest that what informs the demand is the perception that distance education can expand the limited number of places available, reach a wider student audience, meet the needs of students who are unable to attend on-campus classes, provide continuing professional development to graduates, be used to meet the demand for life long learning, involve outside experts who would otherwise be unavailable (for example, there is a lack of trained teaching personnel relative to the demand, teachers are geographically concentrated and teachers with expertise are in short supply), and improve access to education for women who have been treated as second class citizens as far as development is concerned.

Saint (2000) also argues that distance education increases access to education, especially to four groups: secondary school leavers unable to obtain a place at a college or university, students who are geographically isolated, women with domestic responsibilities and the economically disadvantaged. For example, Chale (1995) stated that the application or adoption of distance education methods in Tanzania can be justified by the extent to which distance learning programmes have broadened access to education for numerous groups. The following statistics provide evidence of increased access:

- Over 35,000 primary teachers have obtained their professional qualifications or certificates through distance learning (The Ministry of Education and Culture, 1990; Chale, 1992).
- In 1992, the Institute of Adult Education claimed to have reached over 80,000 students through the National Correspondence Institution (Chale, 1995).
- The Co-operative College Directorate of Field Education, formerly known as The Co-operative Education Centre, recorded that 50,000 students had enrolled for book keeping and management courses, and more than 1,000 study groups had completed study group courses by 1992 (Dodds, 1996).

In 1993, The Tertiary Education Commission in Ghana conducted a survey on "Demands for Distance Education Programmes" among housewives, unemployed women and the employed population. This survey, which yielded interesting findings on the areas of interest, the levels of courses demanded and the motivation for ODL, was instrumental in identifying areas of focus for course development for upgrading the qualifications of employees of secondary schools. A-level courses were also offered to those who did not have the basic entry qualifications for university studies.

DE can increase learners' points of access to education. Mwagiru (2001) points out that learners tend to access distance teaching in four sites, namely, the home, the workplace, dedicated study centres and, like their counterparts in the conventional sytem, traditional classrooms (for example, the Malawi College of Distance Education makes use of day school classrooms to offer support to MCDE learners after normal school hours).

Dhanarajan (1999) contends that because investment in education as a portion of the Gross National Product (GNP) of African countries is probably the lowest in the world, many SSA countries need to establish distance education to compensate for the past deprivation and to meet the demands of the present and future.

Dhanarajan then goes on to indicate that in real numbers, the participation in basic education by people of the appropriate age group is declining.

Out of 31 countries that suffer deprivation in educational provision (where a third of all children are out of school), 24 of these countries are located in Sub-Saharan Africa (SSA). Education is just one of the endemic challenges that SSA countries must address to create enabling conditions for human development. However, Bagwandeen et al. (1999) argue that education is the livelihood of any community and as such is critical to social, economic, cultural, technological and individual development.

Mackintosh (1999) also argues that one of the developmental challenges of the African continent is to improve access to education. However, social conditions in many African nations militate against this mammoth task. These conditions include:

- High levels of national debt;
- Severely declining quality of educational provision; and
- Rapidly growing populations.

Many people recognise the role that education can play to accelerate development in SSA by closing the gap between rich and poor countries and also by removing the urban-rural divide and gender barriers within SSA countries. Unfortunately, however, most SSA countries lack the resources to meet the educational needs of their populations. Hence, the growing interest in alternative forms of education provision.

Macdonald (2001) argues that education serves both broad and narrow purposes. He says that access to education is a guarantee to a less divided world. However, this does not automatically mean that if substantial inroads are made on the issues of access that disparities will be closed.

In the absence of a direct causal link he suggests that where policies are developed, concerns for equity and equality of access should be preserved. Development and implementation of appropriate education policies recognising equality of access and equity will enable the education system to realise its broader objective of reducing disparities.

The use of distance education and open learning methodologies will address a number of capacity-building issues. These include:

The extension of literacy and numeracy skills among millions of adults through the use of radio, television and telematics, helping rural women to develop entrepreneurial skills, assisting agricultural extension workers to improve their capacity to educate farm workers, training of legislators in legislative drafting, increasing the speed of in service training of un- or under-trained teachers, and delivering continuous professional development programmes for health workers, managers and administrators. (Macdonald, 2001: 6)

While it cannot be claimed that distance education is a panacea to all problems of education, it is widely recognized as a potentially successful educational model:

DE has certainly become a major form of teaching and learning around the world. It has earned for itself the reputation of being a truly innovative education phenomenon in both developed and developing countries. (Bagwandeen et al, 1999: 1)

For the situation in SSA to improve, educational resources need to be used. However, countries in SSA are amongst the poorest in the world, and therefore have very limited resources. It is against this background that Dhanarajan (1999) proposes a paradigm shift in the way conventional education providers provide services. He argues that instead of schools, colleges and universities requiring students to move to access education programmes, these institutions should introduce practices that move to find the learners.

An open learning philosophy supported by distance education strategies will help provide educational opportunities for the poor, marginalised, underprivileged, unreached, rural and isolated populations (Dhanarajan, 2001). According to Jegede (2001), for example, in countries such as Zimbabwe and Tanzania, DE has increased the numbers of trained teachers in the classrooms to an extent that would have been impossible using conventional teacher training colleges. Supprting the move towards DE provision, statistics from Kenya and Nigeria suggest that part-time students learning at a distance achieve similar results to part-time, on-campus students.

In Mauritius, demand for continuing education for groups of learners such as housewives, employed women, out of school youths and functionally illiterate persons is increasing. The survival of a healthy and multicultural democratic society depends on whether the education system can respond to this pressure quickly and adequately. Multiple-media award and non-award programmes with both long term educational impact and relevant social significance will provide learners with the opportunity to acquire a good knowledge of Mauritian history, environment, arts, culture and languages (Rumajogee, 2001).

Kinyanjui (1998) also supports the argument that distance education is a viable option for educational provision. He emphasises that governments and distance education associations should work together to identify common issues and challenges facing SSA. This will help them to develop appropriate strategies and policies for distance education and open learning at national, regional and international levels.

It is critical that policy-makers not marginalise this form of education, but instead integrate policy on distance education into broader national education policy. (The Commonwealth of Learning – COL – have recently developed and piloted a CD-Rom/Web-based "on-line" course for policy makers to assist withis process.) Ideally, the development and implementation of distance education policy will create an enabling environment for economic and social benefits to be attained, lead to optimum utilisation of resources, encourage development of technological capabilities and allow procurement decisions to be taken rationally.

However, too often distance education strategies have been introduced hastily or arbitrarily in a top-down manner. In addition, there are so many challenges that need to be tackled in SSA countries to make the soil fertile for quality provision of distance education that the second-rate reputation of such provision in SSA where it does exist is sometimes justified.

People tend erroneously to assume that the mere introduction of DE will bring about the desired changes. DE and its associated technology should be perceived as a solution for a specific problem rather than a universal remedy for all educational problems that plague SSA countries (Kinyanjui, 1998). The context and the needs of the student population should inform the implementation of DE systems.

The constraints that SSA countries face in providing distance education are well documented. Agunga (1997) points out that ethnic strife, political unrest, unreliable rains and low food production militate against development in SSA. The attention of African leaders is focussed on stopping wars or ethnic conflicts in Rwanda, Sierra Leone and Liberia. In the villages, people are without water, electricity and telecommunications networks. Many people lack access to basic traditional media, such as newspapers, radio and television. In counties that have radios, televisions and newspapers, these media seem to be underutilised for education purposes.

Macdonald (2001) notes that among the over one billion people who lack literacy, there are 140 million children who have no access to primary education.

In the poorest countries, learners find themselves in overcrowded and ill-equipped schools with untrained or poorly trained teachers, an environment that is not conducive to learning. A good proportion of these children will not complete their primary school education. Most of these un- or underprovided for learners are living in Commonwealth member states located in SSA. Faced with these circumstances, education policy-makers and leaders are reconsidering the design and delivery of education and incorporating distance education into mainstream education and training efforts.

The Association for the Development of Education in Africa (ADEA) identifies a number of other limitations to the development of DE programmes. Among them are a low level of political support for distance education by political authorities in Africa; the failure of the public service to recognise distance learning in its assessment of employee qualifications; the lack of professionally trained distance learning personnel; the lack of follow-up and support programmes; and the limited budgets and poor domestic infrastructure. People engaged in delivering distance education programmes must first understand the conditions (social, economic, political and technological) prevalent in much of the developing world, including SSA (Carty, 1999).

Kinyanjui (1998) argues that the operational effectiveness of DE has been below expectation in SSA., in part because of a lack of policy co-ordination with other efforts, such as, the provision of adequate resources, the development of supporting infrastructures and the education and training of DE users. At the organisational level, DE and its associated technologies have often been introduced without a clear understanding of organisational cultures and contexts, including the political, economic, physical, social, technological and trade environments. In this case, he says, decision makers in all areas should work together to gain a clear and informed understanding of the policy processes and the contextual factors at the organisational level.

A great part of the responsibility to fast track social changes using DE and other technologies rests with the national governments of SSA to establish a general framework for a national policy on distance education.

Governments should explicitly recognise distance learning as an effective education approach, grant equivalency to degrees, diplomas and certificates obtained through distance learning, and draft supportive funding policies for distance education institutions. In South Africa in 2001, the proposal is currently to fund DE provision at 50 percent of the subsidy granted to more traditional face-to-face institutions. In contrast, in Australia and the UK, funding is standard regardless of mode, while in Canada, DE providers sometimes receive higher funding.

Whatever the policy framework, there is general recognition that at the institutional level there should be excellence in design, development and delivery of distance education courses, systematic staff training, reward systems, effective learner support systems and sound use of technologies (Kinyanjui, 1998).

In short, the challenges or problems that SSA will have to address before DE and its associated technologies can be fully utilised are the lack of a trained cadre of professionals to support the implementation of DE, the absence of national distance education policies or political will or support in many African countries, the lack of access to telecommunications or poor domestic infrastructure, and the limited budgets (ADEA, 1999; Mazibuko and Darkwa, 2000).

Case Study 1 by R. A. Rumajogee (2001) examines current policy initiatives in Mauritius aimed at addressing some of the challenges outlined previously.

Case Study 1
Policy initiatives in ODL in Mauritius

In 1947, the Audiovisual Centre (AVC) was set up at and by the Mauritius Ministry of Education to bring media support to primary, secondary and adult education. The AVC produced radio programmes for open broadcast and for closed circuit utilization.

Educational television was born in 1966, one year after the creation of the National Television Service. It catered to School Certificate and Higher School Certificate students using curriculum-based programmes produced by the AVC.

In a 1971 act of parliament, the government of Mauritius created the Mauritius College of the Air (MCA) to promote and enhance primary and secondary education through radio, television and correspondence courses.

The MCA and the AVC merged in 1985 to 1986. The new MCA focused on media support to primary and secondary education to the detriment of DE through correspondence courses. Its targeted population was school children; out of school youths/the general public benefited mostly from the sensitization campaign on health issues, environment, and agricultural practices

In 1992, the government released *The Master Plan for Education 2000 and Beyond,* an official policy document on education that defines the objectives of DE as follows:

- To improve access to education and skills for new groups such as the employed, housewives and school dropouts;
- To increase access to tertiary education in a variety of subjects; and
- To upgrade teacher qualifications.

The plan proposes an organizational structure based on a "consortia" model with a focal point responsible for providing the process expertise (design, development, production of materials) and the administrative support required for the delivery of courses. This model rests on collaboration among institutions of the sector for providing all academic inputs, namely, the course contents, tutoring and lecturing. A DE Unit/Division is created in each of the tertiary education institutions. Coordination at the national level is ensured by the Distance Education Committee, which is chaired by the head of the Tertiary Education Commission.

The Master Plan also sets some of the priorities of DE: teacher education, higher secondary education (A-Levels), adult and continuing education, and vocational and professional courses.

Policy initiatives with regard to quality

Overseas providers operating without any in-built quality assurance mechanisms are offering DE courses to more than 5,000 students—as many as are enrolled at the University of Mauritius. Under the National Accreditation and Equivalence Council (NAEC) Act 1996, they will have to register with the NAEC.

The Code of Practice to be implemented by the NAEC and the Guidelines for Prospective Students of Distance Education Programmes Offered by Local and Overseas Institutions, will ensure that Mauritian students are provided with the same academic and administrative support services that are available to students in the institution's home country.

Income Tax Act 1995

Under the item "Expenditure on Education and Training", every person is allowed a deduction from his or her net income for any fees or expenses (up to Rs 25,000) paid to a recognized institution for education or training, whether by distance learning or otherwise. (For ease of reference, you may wish to know that a degree level course by DE costs about Rs 5,000 annually.)

Finance Act 2001

The interest on bank loans on an amount of up to Rs 200,000 for financing of tertiary education of dependent children is deductible. Employers who invest in staff training through distance education or by any other means are also given a tax rebate.

In 2001, the Ministry of Civil Service Affairs and Administrative Reforms developed a new scheme to financially support all civil servants wishing to upgrade their skills and competence through the distance education mode.

Case Study 2 (taken from COL 2001), summarises contemporary initiatives in the implementation of DE in Nigeria.

Case Study 2
Policy initiatives in Nigeria

The policy environment within which distance education operates in Nigeria is currently in a state of flux. When the concept of this (COL) consultancy project was established, distance education was a relatively low priority in Nigeria. However, this changed after a national workshop on distance education was held in September 2000 at the ECOWAS Secretariat. This workshop saw the development of a plan for a decade of distance education, with the following objectives:

1. Enactment of a National Policy on distance Education (as a component of the National Policy on Education) to provide the policy framework for the operation of the distance education delivery system in Nigeria.

2. Establishment of a solid institutional framework for distance education in Nigeria following carefully conducted needs-assessment studies.
3. Estabishment of distance education as a core component of the Universal Basic Education (UBE) programme to jump-start the UBE delivery process.
4. Support of UBE (including the non-formal and nomadic education components) to achieve (a) 100% primary and junior secondary Net Enrolment Ration; and (b) 100% adult literacy rate.
5. Reopneing of the National Open University to address access and equity issues in higher education.
6. Provision of higher education to a minimum of one million qualified candidates through the distance and open learning modes involving public and private sector participation, in areas of high manpower needs.
7. Establishment of a National Open School (secondary) to address access and equity issues in secondary education.
8. Provision of secondary education to five million out-of-school youth and adults through the National Open School.
9. Capacity building (training) of 20,000 distance education operators including course writers, support service providers, producers, managers, broadcasters, instructional designers and technicians.
10. Establishment of a virile ICT-driven distance education delivery system.

REFERENCES

Agunga, R. 1997. <u>The Politics of Distance Education in the Development of Africa</u>, A keynote address at the 12th African Educational Research Symposium on Politics and Education, Athens, Ohio, 21–22 February 1997.

Association for the Development of Education in Africa (ADEA). 1999. Tertiary Distance Learning in Sub-Saharan Africa. In <u>ADEA Newsletter</u>, Vol. 11, No. 1 (January—March): 1–4.

Bagwandeen, D. R. et al. 1999. Assuring Quality through Study Materials in Distance Education in South Africa. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Carty, W. 1999. <u>New Markets for Meeting Old Needs: U S Distance Education and Developing Countries</u>. London: EDUCASE.

Chale, E. 1992. Application and cost effectiveness of distance education in teacher preparation: a case study of Tanzania. In Murphy, P. and Zhiri, A., Eds., <u>Distance Education in Anglophone Africa</u>. Washington, DC: World Bank.

Chale, T. 1995. The Status of Distance Education in Tanzania. A paper presented at the Sub-Regional Workshop on the Establishment of the Multi-Channel Learning Base for East and Southern Africa, Nyanga, Zimbabwe, 6–10 March 1995.

COL International (2001) Building Capacity to Deliver Distance Education in Nigeria's Federal University System – Report prepared for the World Bank. Vancouver: COL. 13-14

Darkwa, O. and Mazibuko, F. 2000. Creating Virtual Learning Communities in Africa: Challenges and Prospects. In <u>First Monday</u>, Vol. 5, No. 5 <www.firstmonday.org/issues/issues5-5/darkwa/>.

Dhanarajan, G. 1996. Setting Up Open Universities. A paper delivered at the British Council seminar Quality Assurance in Open Learning in Higher Education, Bedford, United Kingdom.

Dhanarajan, G. 1999. The Quest for Implementing Quality in Distance Education: Practice Not Platitude. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Dhanarajan, G. 2001. Literacy as an International Challenge: Jomtien, Dakar and Beyond. A background paper prepared for the 47th Commonwealth Parliamentary Conference, Darwin, Melbourne and Canberra, Australia, 3–14 September, 2001.

Dodds, T. 1996. The Use of Distance Learning in Non-Formal Education. Vancouver and Cambridge: Commonwealth of Learning/International Extension College.

Jegede, O. 2001. Primary Teacher Education: The use of distance education methodologies for primary teacher education in Nigeria. Vancouver: Commonwealth of Learning

Kinyanjui, P. 1998. Distance and Open learning in Africa: What Works or Does Not Work. A paper presented at the EDI/World Bank workshop on Teacher Education Through Distance Learning, Addis Ababa, Ethiopia.

Kinyanjui, P. E. (2000) Future Trends in Open and Distance Education. In *Huria – Journal of the Open University of Tanzania, Volume III, No. 1, September, 2000.* 1 – 10

Macdonald, H. I. 2001. Access to Education: A Guarantee of a Less Divided World? The Sixth Memorial Lecture, New Delhi, India.

Mackintosh, W. (1999) "The Future Ain't What It Used to Be" – Transforming Distance Education for the Emerging Knowledge Society in *OLISA Review 1999.* Johannesburg: OLISA. 141 - 156

Rumajogee, R. 2001. Evolution of ODL in Mauritius. A paper presented to a meeting of the SADC Technical Committee on Open and Distance Learning, Maputo, 1–3 October 2001.

Saint, W. 2000. Tertiary Distance Education and Technology in Sub-Saharan Africa. Vol. 5, No. 1 of Education and Technology Technical Notes.

Shabani, J. and Okebukola, P., Eds. 2001. Guide to the Development of Materials for Distance Education. Ibadan, Nigeria: Olu-Akin Printing Press.

UNESCO (2000) The Dakar Framework for Action – Education for All: meeting out Collective Commitments. Reoprt from the Wolrd Education Forum held in Dakar, Senegal, 26 – 28 April, 2000.

4.   MANAGEMENT AND ADMINISTRATION

Distance education is a means of bringing education to the doorsteps of people who would otherwise have no access to formal education. It can thus remove barriers to formal education and enable people to access learning while they are still working. But for DE to be effective, efficient management and administration systems need to be put in place. This chapter looks at four modes of distance education provision and the key elements of DE management and adminstration. Case studies examine several organisational models of DE programmes in SSA institutions.

According to Dhanarajan (1996), effective management and sensible and efficient administration systems are vital to the well-functioning of an "open" institution. It is particularly important to make sure that students of distance education are not isolated though they may be at a distance.

An effective system of two-way communication between the learner and the institution is therefore an important element of good management and administration. DE institutions must build functional and responsive systems to provide students with counselling, advice on courses, general information and programme details, as well as information on tuition and assessment. Current students, part-time staff, regional administrators, government officials, financial sponsors and business training initiatives all require regular information on the opportunities available and the plans and direction of the institution.

Within the distance education environment, there are four basic modes or models of educational provision: single mode institutions, dual mode institutions, mixed mode institutions and consortia.

- **Single mode institutions** are founded for the sole purpose of offering distance education. The management of these institutions devote all planning, funds, staff and other resources to designing and delivering courses for distance learners. Delivery might include some face-to-face interaction. Teaching materials are print-based and often supplemented by various media (audio, video, and computer technologies). Examples of single mode institutions include UNISA, Technikon Southern Africa, Malawi College of Distance Education and NAMCOL.

- **Dual mode institutions** provide both conventional face-to-face education and distance education. Some institutions were founded to provide both, but many started providing only face-to-face education and later incorporated distance education into their programmes. In this latter environment, distance education programmes tend to be administered by a special management unit. Examples of dual mode institutions include the Universities of Fort Hare and the Western Cape in SA (among many others), the University of Nairobi, the University of Zambia and the University of Botswana.

- **Mixed mode institutions** are those where distance-teaching programmes are designed, delivered, and administered by the same people who provide conventional programmes. A mixed mode institution is the result of the convergence of face-to-face and distance modes, and increasingly characterises organisations that were once single mode or dual mode. Mixed mode institutions offer learners a wide choice of models of study, and maximise flexibility of place and pace. A programme can be delivered using both face-to-face and distance teaching (Shabani and Okebukola, 2001). Examples of mixed mode institutions include the Universities of the Witwatersrand and Pretoria in RSA, the University of Mauritius and the Zimbabwe Integrated National Teacher Education Course (ZINTEC). In Mozambique, both Eduardo Mondlane and the Pedagogical University are moving in this direction.

- **Consortia** involve groups of autonomous institutions that agree to combine efforts to offer distance education. In such arrangements, resources are normally organised under a single management unit. In the Eastern Cape of South Africa, several institutions have formed a consortium with the provincial government to offer training to health officials.

These models of distance education and open learning depend upon effective management and administration. Umoru-Onuka and Otu (2001) see management and administration as the means to harness both human and material resources to achieve the organisational goal. The management and administration domain includes organising, directing, co-ordinating and utilising resources. DE managers should know exactly what they manage, and how to evaluate each component of a DE programme to determine and track its working pattern, whether it deviates and what action to take.

A DE institution, as with any other educational initiative, also depends upon the competence and commitment of its staff. Staff appraisal systems are therefore an important aspect of effective management. Staff appraisal means knowing the extent of each staff member's contribution to the programme they are involved in and how it can be improved. The evaluation of the programme should be followed by the planning of the sequence of improvements to be carried out. Planners must consider the nature and quantity of resources needed, as well as the kind of person power (skills, knowledge and experience) necessary for the successful execution of the programme.

Because management of distance education has cost implications, managers should be familiar with budgeting for DE provision as an integral part of planning. To facilitate the execution of programmes, managers will need to work out projections for the future or make appropriate budget provision. Appraisal, developmental evaluation and monitoring of progress are important to programme success (Umoru-Onuka and Outu, 2001).

In short, effective management and administration requires procedures for defining and reviewing the institutional mission; for allocating human and financial resources among the competing student demands and markets; for selecting, appointing, training and monitoring teachers; for recruiting, registering and supervising students; for selecting and controlling the use of technologies; for controlling materials production systems; and for managing budgets and finances (GDEnet, 2001).

4.1   TRENDS

Very little literature exists regarding the management systems that countries and institutions have put in place to facilitate the implementation of DE. However, the following recent models and guidelines offer some insights into both actual and suggested management arrangements.

The draft Mozambican model presented in Case Study 3 below illustrates two important lessons of experience from international practice:

- The need for government to express its commitment to support ODL through the establishment of an enabling policy framework; and
- The need to maximise the use of limited resources through a variety of collaborative relationships.

Case Study 3
Draft framework for managing DE in Mozambique

Ministry
policy framework; national system of finance; marketing of DE concept

↓

Institute of DE
research/feedback; training; quality assurance; evaluation and accreditation;
information and communication

↓

DE Providers
faculty-based provision;
some central co-ordination

↓

Shared Resource and Support Centres
dedicated; dual mode; other (for example, public-private partnerships)

The University of Fort Hare (UFH) model of decentralised management of learner support, presented in Case Study 4, has evolved over the period of the implementation of the project and is still evolving. It illustrates for other providers some of the overall management structures and lines of communication needed for successful programme implementation.

Case Study 5 presents a framework for the development of human resource capacity for effective DE provision prepared by the Distance Education Association of Southern Africa (DEASA). All three case studies highlight the fundamental importance of a clear policy framework, and clearly defined roles, responsibilities and lines of communication for DE managers, to the quality provision of distance education.

Case Study 4
The organisational structure of the
University of Fort Hare DE B.Ed programme in 2000

Dean

Central Office

Interim Manager

Also
Academic Co-ordinator

Lead Academic Co-ordinator:

Academic Co-ordinators:
Maths, Science and Technology
Literacy
Core Education

Interim Administrator and Financial Manager

Regional Co-ordinators
(3)

Asst. Financial Manager
Stores and Distribution Manager
Database Manager
Administration Systems and
Logistics Manager
Volunteer IT Specialist

Graphics and
Newsletter Staff

Centre Co-ordinators
(8)

ESSOs*
(±11)

Librarian

Abakhwezeli●
(±75)

Teacher-Learner
Representative Council

Teacher-Learners

*ESSO: Educator and School Support Officer

●*Abakhwezeli* (contact support facilitator): those "who keep the fire burning"

Case Study 5

DEASA Framework for staff development

Note: Some of the above roles and functions can be combined into one position in small programmes or at the start of new programmes

Training and development of staff in distance education
Main target groups

Course Design and Development

- curriculum developers
- course designers
- subject matter specialists
- writers
- editors
- instructional designers
- assessment specialists
- media/technology specialists

- course development administrator/ coordinator
- administrative support staff, e.g. receptionists, data capturers, clerks
- resource librarian

Trainers

Course Production and Distribution

- course materials preparation
- course materials despatch coordinator
- information coordinator/ programme promotion

- senior administrator
- administrative support staff, e.g. receptionists, data capturers, clerks

Trainers

Research and Evaluation

- researchers
- staff involved in research, e.g. course development administrator, course team leader and members

- research and evaluation coordinator
- administrative support staff, e.g. receptionists, data capturers, clerks

Trainers

Course Presentation and Learner Support

- tutors
- tutor coordinators / course coordinators
- facilitators of CLCs
  ≻ centre coordinators
  ≻ career guidance/counselling staff

- enrolment coordinator
- student services administrator
- administrative support staff, e.g. receptionists, data capturers, clerks

Trainers

Central circle:
Open Learning and Distance Education Values and Principles

Surrounding: Senior managers · Planners · Accountants · Rectors · Principals · Directors · Coordinators · Logistics · Quality promotion · Policy makers

REFERENCES

DEASA Framework for staff development (2001). Diagram prepared for discussion.

Dhanarajan, G. 1996. Global Trends In Distance Learning: A Broad Overview. A paper delivered to the National Seminar on Globalisation and New Challenges to Open Learning Systems, Kota Open University, India.

Global Distance Education Network (GDEnet). 2001 <www.saide.org.za.worldbank/Management/management.html>.

South African Institute for Distance Education (SAIDE). 2000. Case Study of the University of Fort Hare B.Ed. Johannesburg: SAIDE.

South African Institute for Distance Education (SAIDE)/Mozambique Ministry of Higher Education. Workshop on DE Systems, Maputo, 01–03 October 2001.

Shabani, J. and Okebukola, P., Eds. 2001. Guide to the Development of Materials for Distance Education. Ibadan, Nigeria: Olu-Akin Printing Press.

Umoru, O. and Otu, A. 2001. Distance education: Its organisation and management. In Ibadan Journal of Education, Vol. 1, No. 1: 18–25.

5. CURRICULUM DESIGN

The organisation of distance education also involves planning and organising the curriculum and its course contents. This chapter looks at the ways in which issues of curriculum design are approached in SSA.

As distance education learners increase in number, distance education has been shifting from the periphery to the core. The argument for distance education and open learning as a viable option has often centred on issues of access to educational opportunities, openness and flexibility, especially for the individuals and groups who were denied access before. Dhanarajan (2000) and Bertram (2000) argue that distance education presents a good option because through this mode providers open access to education for such groups as students in remote rural areas and in-service teachers who want to study while working.

However, DE providers in SSA must overcome the challenge of cultural bias. Darkwa and Mazibuko (2000) argue that the distance education process is a Western social, cultural and educational construct that has been exported into Africa quite quickly. To date, most distance learning models have been developed and tested outside Africa (Barker and Dickson, 1996). In view of the dangers of rigid imposition of western models of DE, many have called for the "Africanisation" of distance education. It is in this context that arguments were put forward for the development of all aspects of distance education to be congruent with the diverse needs and experiences of the learners.

Curriculum design is no exception. Cummins and Sayers (1996) argue that the design of a distance learning curriculum needs to be sensitive and relevant to cross-national cultural experiences. The needs, the experiences and the context of the people the curriculum is intended to serve must also be taken into account. Dodds and Edirishingha (2000) alert us to the diverse nature of the audience for distance education, which includes people of all ages, from young children to ageing adults. Curriculum designers must bear in mind that the curriculum needs to be flexible enough to accommodate the needs and experiences of a range of people, including urban and rural dwellers; the employed, self-employed and unemployed; learners who have the language of instruction as a first or as an other language, and other sub-groups.

For example, we have identified five distance learning programmes in non-formal education based in Kenya, Uganda, Zambia, Tanzania and Ghana (Siaciwena, 2000). The curricula of these initiatives vary in design, structure and flexibility, factors which are influenced by the local context and the goals and target audiences of specific programmes. In many instances, programmes that have been adapted to suit local needs are offered in local languages. What is common to all five of the programmes is that the curriculum is designed to help increase the standard of living of the rural poor by providing them with opportunities to acquire literacy and numeracy skills and to improve health and agricultural practices.

> Therefore, the curricula in all the programmes appear to be directly related to the socio-economic activities and needs of the communities they serve. In all the case studies, the curricula deal with subject matter of immediate practical life-related topics. (Siaciwena, 2000: 135)

Along the same line, Glennie (1996) argues for a learner-centred approach to distance education that responds to learners' diverse needs. Putting learners first, she argues, means that the needs, traditions and interests of DE institutions and their staff should not dictate learning programmes in distance education.

Curriculum design is a process that involves a wide variety of issues:

> Curriculum is made up of both content and methods; it includes all the planned experiences to which learners may be exposed in order to achieve learning goals (Rogers, 1996: 67).

Curriculum design encompasses issues such as course content, teaching and learning methods, assessment strategies, aims and objectives or intended outcomes of the course and how these objectives tie in with national imperatives, as well as who is to be involved in the curriculum design process.

In SSA, curriculum designers need to be cognisant of environmental constraints such as lack of infrastructure, poor access to ICTs, the existence of multilingual and multi-cultural communities, and the absence in many communities of a culture of reading and of learning independently. Case Study 6 below describes the steps taken by AMREF to construct DE health worker training courses in Uganda, Case Study 7 introduces the community outreach and "curriculum content" organised by a Ghanian community radio station, while Case Study 8 presents a course design model developed as part of a consultancy for Botswana College of Distance and Open Learning (BOCODOL) (Randell, 2002).

Case Study 6
Curriculum design in Uganda

The African Medical Research Education Foundation (AMREF) was instrumental in setting up a Distance Education Unit in Uganda following its experience in Kenya. The Unit was set up in the Health Manpower Development Centre and Distance Education Unit (HMDC). According to Omwangangye (1998), the aims of the Distance Education Unit are:

- To provide continuing education to health workers through self-directed learning materials;
- To offer correspondence courses and radio programmes that do not disrupt health workers' work schedules;
- To supplement other methods of continuing education; and
- To build human resource capacity at all levels of the health sector.

The rationale for establishing the Distance Education Unit was to provide continuing education or in-service training as an integral part of professional development for health workers who work in government and NGO hospitals, dispensaries, health centres and sub-dispensaries. These health workers include:

- District medical officers, doctors and their teams of nurses, medical assistants, chemists, midwives, clinical officers and nursing aides;
- District health visitors;
- Health inspectors;
- District assistant drug inspectors; and
- District officers in charge of control of tuberculosis and leprosy.

The programme is tailored for a wide range of workers in the field of health, and the curriculum is suitable for their work situation. There is congruence between what health workers do in their workplace and what they study. Programmes offered by the Distance Education Unit also meet societal health needs. The courses offered include child health, community health, immunisation, environment health, management of rural health facilities, mental health, management of essential drugs, family planning and healthcare delivery, and communicable diseases. The curriculum is developed in workshops by health workers who are based in areas identified through district needs assessments.
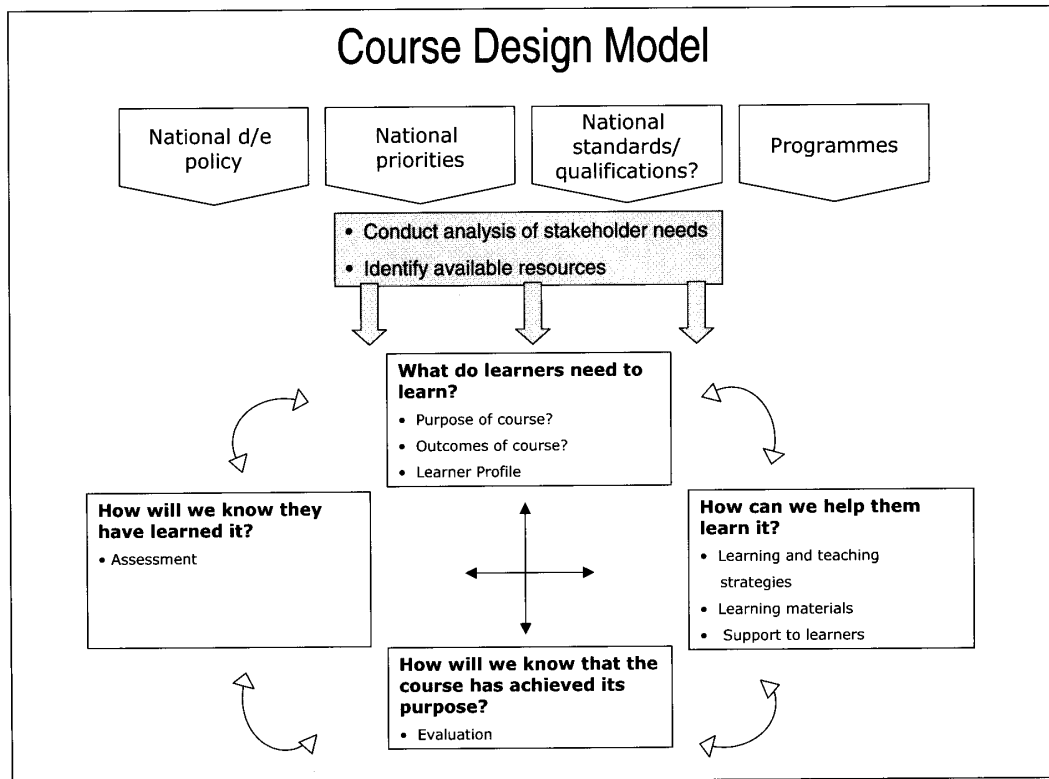
Case Study 7
Curriculum Design in Ghana

The National Functional Literacy programme in Ghana is based on broad curriculum areas. According to Siabi-Mensah (2000), the programme content states that for a learner to be certified functionally literate she or he has to study and master 28 functional themes in a Primer in one of 15 Ghanaian languages. The primer is based on three broad areas, namely, life skills, occupational skills and civic awareness. The following themes focus on national development and can be studied in all 15 Ghanaian languages:

- Family Planning
- Teenage Pregnancy
- Nutrition
- Community Empowerment
- Safe Drinking Water
- Community Development
- Safe Motherhood and Child Care
- Immunisation
- AIDS
- Environmental Hygiene
- Income-generating Activities
- Traditional and Modern Farming
- Farm Extension Services
- Borrowing Money for Work
- Food Preservation
- Animal Husbandry
- Soap Making
- Edible Oil Extraction
- Drug Abuse
- Tree Growing
- Child Labour
- Saving Energy

The community-based radio station, Radio Ada, serves the Dangme-speaking population in the Dangme East District of Ghana. Radio Ada organises face-to face meetings with people to discuss issues relevant to their livelihood.

To reinforce such programmes, it also offers community-based programmes that include "curricular content" such as issues of health, sanitation, culture, functional literacy and the environment.

Case Study 8
Course Design in Botswana

Course Design Model

```
National d/e     National      National          Programmes
policy           priorities    standards/
                               qualifications?
```

- Conduct analysis of stakeholder needs
- Identify available resources

What do learners need to learn?
- Purpose of course?
- Outcomes of course?
- Learner Profile

How will we know they have learned it?
- Assessment

How can we help them learn it?
- Learning and teaching strategies
- Learning materials
- Support to learners

How will we know that the course has achieved its purpose?
- Evaluation

5. 1   TRENDS

While evidence exists of countries in SSA seeking to design programmes to meet national needs, little has been documented regarding the systems and processes that have been put in place to assure the quality of the curriculum design process. There has been some resistance to the implementation of Western or developed country DE models and curricula, but there has not been a concerted and consistent effort to develop regional models and criteria. Instead, individuals and individual institutions seem to work largely in isolation from one another with regard to their curriculum design processes.

The difficulty that the researchers of this report have had in accessing relevant literature on this subject is a testament to the fledgling nature of indigenous collaborative curriculum design processes. In fact, the researchers have come across cases of staff in the same institution working on the development of the same kind of materials for the same target population!

The emerging National Qualifications Framework (NQF) in South Africa represents an interesting attempt to learn from international experience whilst developing a system that meets local needs and provides a policy framework applicable to all education and training providers.

REFERENCES

Barker, B. O. and Dickson, M. W. 1996. Distance Learning Technologies in K-12 Schools: Past, Present and Future Practice. In <u>TechTrends</u>, Vol. 41, No. 3 (November-December): 19–22.

Bertram, C. 2000. A Mixed Mode Distance Education Model for Teacher Education: Rationale, student experiences and quality. A paper presented at the 2nd National NADEOSA Conference, 21–22 August 2000.

Cummins, J. and Sayers, D. 1996. Multicultural Education and Technology: Promise and Pitfalls. In <u>Multicultural Education</u>, Vol. 3, No. 3 (Spring): 4–10.

Darkwa, O. and Mazibuko, F. 2000. Creating Virtual Learning Communities in Africa: Challenges and Prospects <<u>firstmonday.org/issues/issues5-5/darkwa/</u>>.

Dhanarajan, G. 2000. Education in Knowledge Societies. A plenary keynote speech delivered at the Eleventh General Conference of the International Association of Universities, Durban, South Africa.

Dodds, T. and Edirishingha, P. Organisational and delivery structures. In Yates, C and Bradley, J., Eds., <u>Basic Education at a Distance: World Review of Distance Education and Open Learning,</u> Vol. 2. London and New York: Routledge Falmer.

Glennie, J. 1996. Towards learner centred distance education in the changing South African context. In Mills, R. and Tait, A., <u>Supporting the Learner in Open and Distance Learning</u>. Johannesburg: Pitman Publishing.

National Centre for Technology and Distance Education (NCETDE). 1998. <u>Quality Criteria for Distance Education</u>. Johannesburg: Department of Education.

Omwangangye, A. P. 1998. Annual Report of the Distance Education Unit.

Rogers, A. 1996. <u>Teaching Adults.</u> Buckingham and Philadelphia: Open University Press.

Siabi-Mensah, K. 2000. Ghana: the use of radio in the National Literacy and Functional Skills Project in the Volta and Northern Regions. In Siaciwena, R., Ed., <u>Case Studies of Non-Formal Education by Distance and Open Learning.</u> Vancouver and Cambridge: Commonwealth of Learning/International Extension College.

Randell, C. (2002) Notes from an instructional design consultancy to improve the effectiveness of the learning materials at BOCODOL in <u>OLDE: open learning through distance education, Vulume 8, Number 1, March 2002.</u> Johannesburg: SAIDE. 10 – 13

Siaciwena, R., Ed. 2000. <u>Case Studies of Non-Formal Education by Distance and Open Learning</u>. Vancouver and Cambridge: Commonwealth of Learning/International Extension College.

Siaciwena, R. and O'Rourke, J. 2000. Basic education curriculum: Contexts and contests. In Yates, C. and Bradley J., Eds., <u>Basic Education at a Distance: World Review of Distance Education and Open Learning</u>, Vol. 2. London and New York: Routledge Falmer.

6.   COURSE PRODUCTION

Course production is the next step after curriculum design. This chapter discusses how courses are produced and developed in a distance and open learning setting, particularly in Sub-Saharan African countries. It is important to mention before delving deeper into the pros and cons of different course development processes that approaches vary from one institution to another. In many institutions, instructional design and material development involve teams of experts such as writers, reviewers, editors, electronic media specialists and graphic artists, and these teams differ in their composition and size. At the University of Nairobi, Kenya, for example, course development involves writers, reviewers and editors, while at Makerere University in Uganda the process involves lecturers who are writers, reviewers and visual designers or illustrators. There are also a number of institutions, such as the University of Zambia, where course production is the reponsiblity of mainly one person—the course writer (Shabani and Okebukola, 2001). Other institutions use a combination of these methods. According to Chale (1999), course design and development at the Open University of Tanzania, is "actuated through both individual and team approaches through the planning, writing, reviewing, [and] testing". (Chale, 1999: 68)

Lusunzi (1999) argues that increasingly students do not have to leave their countries to receive instruction. This means that the instructional designers, the tutors, the author(s) and the students are often separated by distance. Under these circumstances, it becomes imperative to create a sustainable dialogue between the instructional materials and the students on the one hand, and between the student and the tutor on the other. Feedback and assessment strategies need to be built into the course repertoire.

Kabonoki (1999) identifies ways of building quality into distance learning media. He argues that quality is not divorced from the realities and characteristics of distance learners. He goes on to say that as distance education and open learning gain popularity, competition will develop as more and more organisations offer this service. Education providers will need to come up with effective strategies to survive in this competitive environment. By developing quality learning materials, providers can maintain quality learning experiences. Learning materials that are not customised to the needs of the learners cannot be recognised as being of high quality.

The development of quality learning materials will obviously have cost implications.

Koumi (1995) argues that to assure the quality of distance learning materials, it is necessary to recruit highly qualified staff for materials development. The professional experience of course developers is an important input in course development and a major determinant of the quality of course materials. One of the main tasks of a course developer is to ensure that the curriculum is sufficiently and systematically presented using print or non-print course materials. They develop outlines on which units are based. Therefore, staff recruitment processes should lay down procedures and requirements for the recruitment of people who are competent, experienced and professionally qualified.

However, Shabani and Okebukola (2001) recognise that it is not always easy to recruit people with prior experience and professional qualifications in SSA. Despite the rapid development of distance education in the last three decades, there has not been a corresponding increase in training programmes for staff dealing with distance education methodologies. Adekanmbi emphasises the same point:

> While African distance education has witnessed a level of growth over the years, its early practices in human resource development reveal a general lack of a systematic education and training strategy for its practitioners. This may have been due to the manner of entry of the field of instruction itself, considered in some literature as circuitous. Another reason may have been its part-time nature of provision, which logically gives way to part-time treatment of its foundation building process. There are indications that even in the countries of its roots, this innovation may have not fully overcome the problems of providing a comprehensive academic development process for its practitioners. (Adekanmbi, 1999: 20)

One of the major problems experienced in staff recruitment is the shortage of people qualified in distance education in general and in instructional design in particular. Most DE employees are recruited from conventional institutions. Although competent in their subject areas, these people often lack experience in designing and developing distance education materials.

Moreover, production of media learning materials requires inputs from people such as subject experts, media experts, technical operators and maintenance personnel. Good quality production facilities such as studios must also be available.

From a quality point of view, media learning materials should be designed to meet the needs commonly expressed by students, such as for clarification of course content and reduction of isolation. The question of who should be on the team responsible for development is another important consideration.

The course development and production process can make a significant contribution to the quality of course material. Whatever the course development approach and regardless of the combinations of course materials, the production of quality materials will involve some or all the following tasks:

- Preparation of blue prints for developing and organising materials;
- Writing study units in collaboration with other course team members;
- Supplying ideas for visual design;
- Revising drafts;
- Working with reviewers, editors and illustrators in preparing materials;
- Testing and evaluating materials;
- Reviewing and revising galley proofs from printers; and
- Preparing feedback questionnaires, pre-tests and post-tests, and developing computer-based courses (Dhanarajan, 1990: 51).

Case Study 9
Course production in Uganda

According to Dzimbo (2001), production and of study materials and delivery in Uganda is the responsibility of the Institute of Adult and Continuing Education (IACE). The Department of Distance Education within IACE is divided into three sections: Tutoring, Material Development and Support Services.

The Material Development Section is responsible for the development of study materials. It arranges writing workshops where writers are trained to write distance education study materials, including unit objectives, lecture objectives, lecture content and lecture summaries. A course unit consists of 15 to 20 lectures corresponding to the course content description.

The finished manuscript is given to a reviewer on a diskette and then returned to the writer with comments. The writer incorporates the reviewer's comments and the revised manuscript is passed to an editor for typesetting and formatting. The editor is also responsible for sending the manuscript to the printer. The Material Development Section is also in charge of delivering study units to the learner. Dzimbo (2001) states that limited resources hamper the material production process at Makerere University and as a result students cannot be offered study material for their own keeping. Instead, study materials are lent out to all incoming learners to ensure some materials are always available.

The Material Development Section operates a Book Bank with a librarian who catalogues and prepares lending cards for books. The section also organises handouts for courses where written materials have not been developed. Tutors are usually responsible for the development of such handouts, but they do not write them in the distance education mode. Sometimes, however, tutors prepare extracts from books for students to read.

According to Juma and Okebukola (2001), Makerere University production procedures provide a good example of the general processes in course production and development. Bhuye (2000) provides a clear picture of course production at Makerere Univeristy:

- The production process starts with writers submitting their completed manuscripts to the tutor in charge of materials development. Sometimes the writers key-in their manuscripts for a fee and prepare briefs for illustrations. In most cases departmental typists wordprocess the manuscript. The writers have an obligation to proofread the first draft.
- The typist then enters the writer's corrections and the manuscript is sent to the reviewer who makes comments and recommendations. This feedback is forwarded to the writer who incorporates any corrections before sending the manuscript to the editor.
- The editor checks the language and illustrations and makes recommendations. The typist enters the corrections and this third draft is sent to the writer to crosscheck and proofread.
- At the next stage, the manuscript is typeset and the illustrations are pasted in. The Department of Education then arranges for a copy editing session in which experts in the field critique the written unit. After copy editing, the corrections are entered on the fourth draft and the final proofreading is done.
- A few copies are photocopied, loose bound and piloted among students. Corrections are incorporated and the final printing takes place. The study unit is then distributed to students.

6. 1   TRENDS

Once again, there is little available documentation regarding the processes people go through to develop their materials. While there does seem to be a growing recognition of the value of a teamwork approach, anecdotal evidence suggests that this is an ideal rather than a norm in many SSA institutions.

Cost and tight deadlines are often cited as factors militating against a teamwork approach to the development of both print-based and multi-media packages.

Many SSA institutions face a critical shortfall in capacity for course design and production, especially for multi-media packages, which require a wide range of expertise. In addition, the majority of SSA institutions lack the necessary production facilities for the development of either high quality print materials or multi-media packages. As discussed earlier, there is little evidence of a collaborative approach to the use of such facilities, which means that if an institution wished to move into a fourth generation mode of DE provision, it would probably have to do so independently. For most institutions the cost of setting up the necessary infrastructure is prohibitive. This challenge is further exacerbated by the dearth of appropriately skilled technical support staff.

REFERENCES

Adekanmbi, G. 1999. <u>A Comment on the Education and Training of Distance Education Practitioners in Africa.</u> Centre for Continuing Education, University of Botswana.

Bhuye, J. 2000. The Materials Production—A Case study of Makerere University. In Lockwood, F., Compiler, <u>Alternative Methods of Materials Production: A Collection of Examples.</u> Adelaide, Australia.

Chale, E. 1999. The Open University of Tanzania: Case study. In <u>Commonwealth of Learning: Quality Assurance in Open and Distance Learning</u>. Vancouver: Commonwealth of Learning.

Dhanarajan, G. 1990. The adoption and adaptation of externally-produced course materials: training implications. In Commonwealth of Learning, <u>Report of Roundtable on Training Distance Educators</u>. Vancouver: Commonwealth of Learning.

Dzimbo, K. P. 2001. Case study of a distance teaching and open learning university. In Shabani, J. and Okebukola, P., Eds., <u>Guide to the Development of Materials for Distance Education</u>. Ibadan, Nigeria: Olu-Akin Printing Press.

Kabonoki, K. 1999. Building Quality into Media Distance Learning Materials. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Koumi, J. 1995. Building good quality in rather than inspecting bad quality out. In Lockwood, F., <u>Open and Distance Learning Today</u>. Routledge: London.

Lusunzi, I. S. 1999. <u>Building Instructional Activities in Distance Education Self-instructional Materials</u>. A paper presented at the 1st NADEOSA Conference, 11–13 August 1999.

National Centre for Technology and Distance Education (NCETDE). 1998. <u>Quality Criteria for Distance Education</u>. Johannesburg: Department of Education.

Shabani, J. and Okebukola, P., Eds. 2001. <u>Guide to the Development of Materials for Distance Education</u>. Ibadan, Nigeria: Olu-Akin Printing Press.

7.   QUALITY ASSURANCE

Quality assurance is a centrally important and wide-ranging aspect of distance education. Quality assurance is a measure that provides a constant check on the efficiency and effectiveness of distance education and open learning practice, including how the enabling processes are developed and reviewed, from planning to implementation. According to Butcher (1998), the establishment of internal quality assurance mechanisms is internationally regarded as one of the most effective ways of ensuring the continual improvement of educational provision.

Butcher argues that organisations involved in distance education in SSA should introduce Total Quality Management (TQM). The concept of TQM has two dimensions: quality assurance and quality control. The former is intended to anticipate problems that might occur and the latter is a retrospective process, checking the work after it is done to see if it was up to standard. Bagwandeen, Bojuwoye, Lebeta, Letsie and Matobako (1999) argue that distance education is an effective strategy for addressing the issue of access. Therefore, the quality of distance education is of paramount importance.

This chapter explores quality assurance and control from the point of view of Sub-Saharan Africa. Because quality assurance issues or concerns pervade all areas of distance education, this chapter should not be seen in isolation from the other issues under discussion. Rather, quality assurance should be construed as a critical mechanism to be built into every practice of distance education, including curriculum design, course delivery, learner support, tutor training, and the use information and communication technologies.

Lusunzi (1999) argues that the current period is characterised by the "commodification" of education. The value attached to education is determined by the demand, and the need to meet this demand makes necessary the adoption of a quality assurance ethos in the provision of education and training.

Dhanarajan (1999) presents a positive view of the current direction of distance education. He suggests that institutions that provide distance education in the Commonwealth are heading in the right direction. He justifies his optimism with the following reasons:

- The acceptance of distance education as an important pillar of educational provision by many nations;
- The extent and the intensity of the debate within distance education circles around issues relating to quality assurance;
- The number of external reports that view distance education as a positive alternative to classroom-based instruction;
- The confidence with which distance education providers are entering the educational global market, which is seen as a reflection of the high level of confidence they have in their systems; and
- The enthusiasm with which the historically renowned institutions are embracing the use of distance education.

However, these factors do not ipso facto suggest that good practice is widespread. The practice of distance education has a long way to go, especially in Sub-Saharan Africa where there are so many problems, constraints and challenges that need to be effectively tackled to create paths conducive to the provision of distance education of high calibre.

The concern for quality in distance education is not something new. In 1991, the Commonwealth of Learning (COL) provided the Ministers of Education in the Commonwealth with guidelines for institutions or organisations wishing to embark on provision of distance education and open learning. These include:

- A comprehensive communication infrastructure;
- A core of dedicated distance education expertise in the institution in areas such as instructional design, material development and assessment;
- An effective student management and record system;
- A supportive learning environment for isolated learners; and
- Sensitive marketing strategies.

But what is quality? It must be strongly emphasised that quality is a difficult and elusive term to define within the context of educational provision. In this document, we understand quality to be concerned with the extent to which all the resources employed for the purposes of distance education provision actually enable learners to acquire the desired knowledge, skills and attitudes at the end of their learning programmes. As such, quality distance education is understood as a dynamic concept that is responsive to the ever-changing education landscape and population. It follows then that quality assurance must be a continuous process and not a once-off event.

The educational quality of a distance learning programme can be measured through the quality of such inputs as the curriculum, textbooks, teaching/learning materials, facilities, lecturer/student ratios, library facilities and the qualifications of the lecturers. The quality of distance learning programmes can also be measured in terms of outputs such as completion rates, graduation rates, persistence rates, examination levels and performance in examinations, post-graduation work performance, and rates of admission into post-graduate programmes (Okumbe, 2001). Therefore:

> Quality assurance is conceptualised as the deliberate and conscious effort designed by the distance learning managers to ascertain that quality is maintained from input to output. (Okumbe, 2001: 246)

There are concerns relating to the need to develop and apply distance education learning methodologies that are as effective at enabling learners to acquire skills as the conventional programmes are believed to be (an assumption that is often open to question). Open learning and distance learning programmes that do not respond to students' needs and fail to teach them effectively can create feelings of failure and frustration in learners, which contribute to high drop out and low completion rates. In such circumstances, open and distance learning may become discredited, seen as the second-best option or the quick fix that its critics always said it would be. It is imperative for open and distance learning institutions to develop a tradition of quality assurance practices (Chambers, 1995).

Many institutions committed to distance education and open learning have put in place programmes to ensure their educational provision is of high quality. Institutional quality assurance policies that guide the development and implementation of quality assurance mechanisms have been formulated in many organizations in SSA countries. Moreover, Strydom (1997) observed that various government policies for quality assurance systems exist, although in different forms and with different names. The South African Qualification Authority (SAQA) provides an example of a national policy framework for quality assurance. The following are examples of quality assurance policies at SSA institutions:

- At the Potchefstroom University for Christian Higher Education in South Africa, the official policy is that all distance learning materials should be developed in accordance with the given objectives of a particular course unit and that there should be optimum use of all relevant and applicable technologies.

- At Makerere University in Uganda, course materials developed by tutors have to be reviewed by senior members of staff and must be edited, as a matter of policy.

- At other institutions, such as the University of Mauritius and the Universities of Swaziland and Zambia, there are broad policies that specify, among other aspects of quality assurance, the qualifications or standards required for course design and development staff.

- At most institutions there are specific policies regarding the curriculum from which course materials should be developed. At the Potchefstroom University in South Africa, for example, all the course units must be developed according to the curriculum policy of the university senate. At the University of Swaziland the academic standards of the university are built into the content that is taught and the level at which it is taught. At the Universities of Nairobi and Zambia, as in many other distance learning institutions, the curricula undergo rigorous review by various academic committees. New curricula must be reviewed and approved by departmental or professional committees, faculty curriculum review committees and the senate to ensure that they are relevant to the needs of students and the country, as well as to the mission of the institutions. After each committee review the necessary changes are made (Shabani and Okebukola, 2001).

Case Study 10
Quality assurance in Kenya

The faculty of external studies at the University of Nairobi, Kenya, offers a wide range of programmes within the model of distance education. Quality is measured from two perspectives, namely, inputs and outputs. According to Okumbe (2001), the quality of distance learning programmes from the inputs perspective is maintained by:

- Ensuring that the curriculum or the content for distance learners has been thoroughly discussed, improved and accepted by the various academic organs, including the senate, which is the highest academic structure at the University;

- Finding out that the lecturers who have been recruited to teach either on a full-time or part-time basis have reputable academic credentials and professional track records;

- Determining students' academic and professional admission, or entry, criteria that are equal or comparable to internationally accepted university standards;

- Ensuring that teaching and learning materials have been properly peer reviewed and edited to enhance quality; and
- Building guidance and counselling programmes into the teaching and learning activities to ensure that students stay and complete their programmes.

Quality assurance from the output perspective is ascertained by:

- Strengthening and enhancing external moderation strategies of examinations to maintain international university standards;
- Ensuring proper external moderation for examination scripts and grades;
- Soliciting the views and feedback from the employers of the distance learning graduates; and
- Strengthening the guidance and counselling programmes to enhance completion/graduation rates.

The extent to which quality is achieved is measured through performance or quality indicators. The performance indicators in the distance learning programmes at the University of Nairobi include:

- The high completion rates reported from both the External Degree (B.Ed) and the Post-graduate Diploma in Education Programmes;
- The appreciable rate of admission of the distance learning graduates into higher degree programmes both at the University of Nairobi and elsewhere;
- The impressive popularity of the distance learning study materials in universities both locally and outside the country;
- The high employment rates of graduates locally; and
- The rate at which experts in distance learning programmes have been used as resource persons in universities outside the country.

7.1 TRENDS

As illustrated in Case Study 10, there is a normal practice in DE quality assurance processes to replicate the same kind of academic verification processes found in more traditional contact-based institutions. As noted in Chapter 6, SSA institutions find it difficult to recruit skilled and experienced DE specialists. There is therefore a danger that materials and processes will be quality assured from a traditional contact-based perspective rather than from informed concern with the particular needs of open and distance learning.

Another risk is that quality assurance might be seen as a once-off event rather than a continuous process. On the next page we present an alternative model for quality assuring distance education provision.
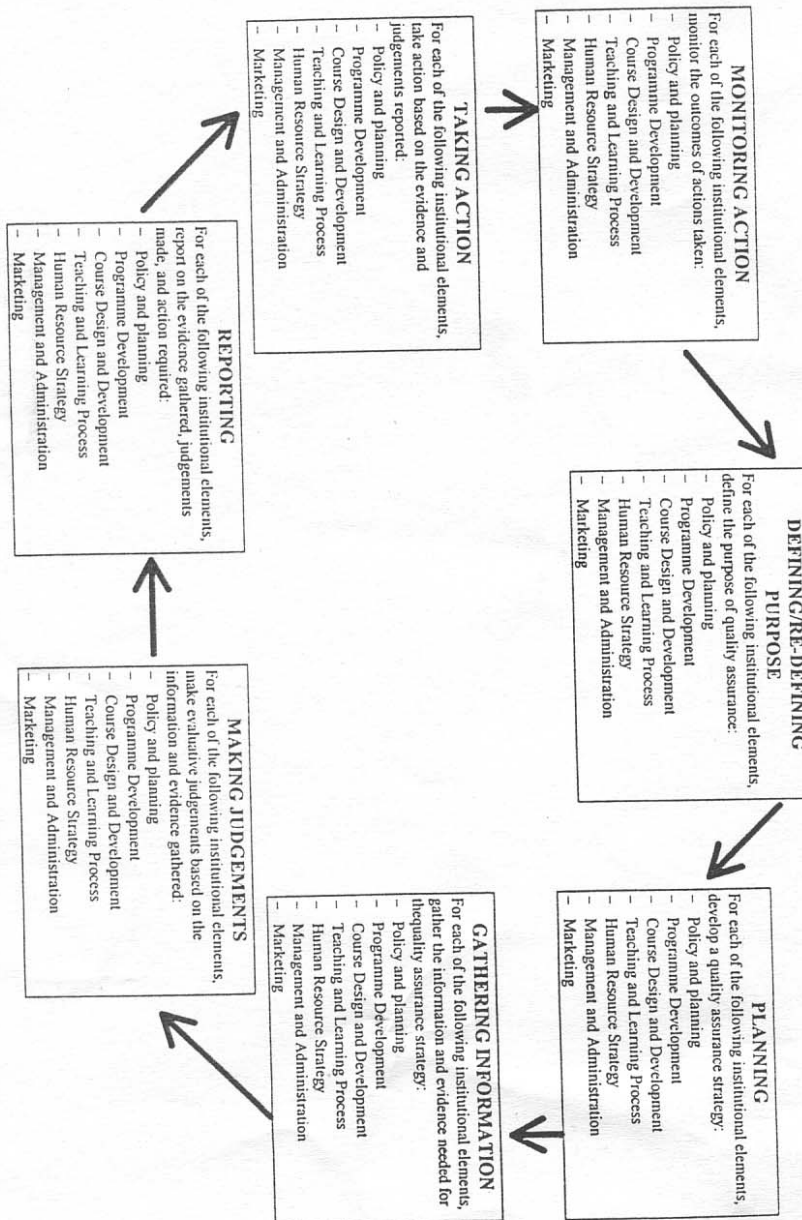

Case Study 11: *A cycle of quality assurance*

MONITORING ACTION
For each of the following institutional elements, monitor the outcomes of actions taken:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

TAKING ACTION
For each of the following institutional elements, take action based on the evidence and judgements reported:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

REPORTING
For each of the following institutional elements, report on the evidence gathered, judgements made, and action required:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

DEFINING/RE-DEFINING PURPOSE
For each of the following institutional elements, define the purpose of quality assurance:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

PLANNING
For each of the following institutional elements, develop a quality assurance strategy:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

GATHERING INFORMATION
For each of the following institutional elements, gather the information and evidence needed for the quality assurance strategy:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

MAKING JUDGEMENTS
For each of the following institutional elements, make evaluative judgements based on the information and evidence gathered:
- Policy and planning
- Programme Development
- Course Design and Development
- Teaching and Learning Process
- Human Resource Strategy
- Management and Administration
- Marketing

Figure 1 : A Cycle of Quality Assurance

(Swift & Morojele, 1996:12)

REFERENCES

Bagwandeen, D. R. et al. 1999. Assuring Quality through Study Materials in Distance Education in South Africa. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Butcher, N. 1998. <u>The Possibilities and Pitfalls of Harnessing ICT to Accelerate Social Development: A South African Perspective.</u> Johannesburg: South African Institute for Distance Education (SAIDE) <<u>www.saide.org.za/butcher/unrisd.htm</u>>.

Chambers, E. 1995. Course evaluation and academic quality. In Lockwood, F., Ed., <u>Open and Distance Learning Today</u>. London: Routledge.

Dhanarajan, G. 1999. The Quest for Implementing Quality in Distance Education: Practice Not Platitude. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Kabonoki, K. 1999. Building Quality into Media Distance Learning Materials. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Lusunzi, I. S. 1999. Building Instructional Activities in Distance Education Self-instructional Materials. A paper presented at the 1st NADEOSA Conference, 11-13 August 1999.

Okumbe, J. A. 2001. Management of higher distance education in Africa: The case study of the University of Nairobi. In Shabani, J. and Okebukola, P., Eds., <u>Guide to the Development of Materials for Distance Education</u>. Ibadan, Nigeria: Olu-Akin Printing Press.

Shabani, J. and Okebukola, P., Eds. 2001. <u>Guide to the Development of Materials for Distance Education</u>. Ibadan, Nigeria: Olu-Akin Printing Press.

Strydom, A. H. 1997. An analysis of quality assurance policy perspectives in South African Higher Education with specific reference to self-evaluation. In Strydom, A. H., Lategan, L. O. K. and Muller, A., Eds., <u>Enhancing Institutional Self-Evaluation and Quality in South African Higher Education: National and International Perspectives</u>. Bloemfontein: University of the Orange Free State.

Swift, D. and Morojele, M. 1996. Quality in Distance Education. In Strydom, A. H., Lategan, L. O. K. and Muller, A., <u>Quality Assurance in South African Higher Education: National and International Perspectives</u>. Bloemfontein: University of the Orange Free State.

8.   LEARNER SUPPORT

Learner support remains the backbone of distance education delivery. This chapter discusses learner support systems in SSA. It reflects on the wide range of support strategies employed to help distance learners complete their courses.

Despite general recognition of the importance of learner support, there is no widely accepted definition of the concept. There is a tendency to use the term broadly, so that it may mean different things to different people depending on their circumstances; learner support will often be defined in relation to specific contexts and experiences. According to the University of South Africa's (UNISA) draft report on Integrated Learner Support, learner support encompasses

> The entire range of methods and strategies employed in the presentation and delivery of courses aimed at assisting and enabling learners to comprehend fully, assimilate and master the skills and knowledge needed to achieve success in their studies. (SAIDE, 1999: 14)

Akinade (1998) puts forward a similar understanding of learner support, which he defines as

> Systems or procedures that are purposefully created and effectively utilised by a distance education institution to support and or facilitate teaching and learning. (Akinade,1998: 2)

These broad definitions of learner support may be difficult to operationalise and put into practical use. Despite the definitional problems, however, the common understanding is that learner support is about providing learners with the assistance (provision of integrated and multifaceted support services) they need to cope with and meet the demands of distance learning and to achieve their desired educational outcomes. The following list (based on Siaciwena, 1996; Nonyongo and Ngengebule, 1998; Mills and Tait, 1996; Lockwood, 1995; Cheng and Lam, 1993; and Sewart, 1993) demonstrates the wide range of activities that may constitute learner support services:

Services related to teaching and learning/needs

- Teaching and learning contracts
- Network of learner support centres
- Compulsory residential schools

- Practical sessions for professional training (for groups such as nurses and teachers) and access to facilities (for example, workshops for artisans and laboratories for natural scientists)
- Academic advising, tutoring and counselling in person and by letters, telephone and email
- Tutor marking and feedback, and quick turnaround on assignments
- Orientation and ongoing training of tutors to ensure provision of quality support
- Supply of high quality learning material
- Pre-examination counselling
- Pre-course registration counselling
- Pre-course study skills training
- Administration of examinations
- Provision of audio and or video tapes
- Telematics
- Supply of newspapers (internal and mass media)

Services related to access and information processes/needs

- Information on fees and financial support
- Information on administrative procedures and regulations
- Information on registration and admission
- Access to information technologies
- Record management
- Book services
- Library services
- Provision of personal time tables
- Career guidance

Services related to social and personal needs

- Pre-course registration counselling
- Internet and email support
- Peer support/study groups
- Career guidance
- Disabilities support
- Minorities support

- Adult learners support
- Multicultural education co-ordination
- Social events
- ESOL and languages teaching unit

The list of student support services above is descriptive. It does not anlayse the services or identify whether or not a specific service is offered in a particular institution or country. However, it does indicate the range of strategies associated with learner support within SSA and elsewhere.

The provision of learner services depends largely on the capacity and resources at the disposal of a particular institution. Learner support takes place from two points of view, namely, academic and administrative. Academic services offered include tutorials, advising and counselling. Administrative support strategies include enrolment admission and registration, record keeping, information provision and delivery of study materials.

8.1 LEARNER SUPPORT AS A CRITICAL COMPONENT OF DISTANCE EDUCATION

One of the major demands of the ever-changing landscape of distance education is provision of effective learner support. This is a critical component that facilitates learning and helps distance learners to achieve success. Many organisations and practitioners involved in distance education agree that DE poses many problems for learners. These challenges are aptly captured in the following statement:

> Learning at a distance is similar in many ways to learning in a classroom environment, but there are some significant differences. Teachers of distant learners must accomplish the same goals as those working in conventional environments, but separation from the learners means some of the teacher's challenges take on special forms. For example, the learner is frequently insecure in the absence of the teacher and apprehensive regarding his/her progress in the absence of close feedback and perhaps absence of peer learners. The student becomes more insecure if the direction of the course is not well structured, and if she/he is not very clear where he or she is in relation to its completion. The phenomenon of drop out is much more common in distance than conventional education, i.e, it is easier for a student to exercise the option of withdrawing from the relatively impersonal relationship of a distance course than it is from a conventional curriculum. (<www.saide.org.za/worldbank/Management/management.html>)

Akinade (1998) also argues that distance learners encounter a wide range of difficulties with which they need support to overcome.

While students in a distance education environment enjoy a high degree of freedom as compared with those in the traditional mode of education, they are expected to exercise more responsibility with regard to their learning. Problems and challenges that students encounter include:

- Meeting deadlines for submission of their academic work;
- Doing group work cooperatively;
- Aquiring good study habits;
- Using library facilities to access information technology;
- Preparing for and taking examinations;
- Adjusting to different course lecturers;
- Locating specialist rooms with ease;
- Relating to the campus environment; and
- Coping with distance learning strategies apart from the printed material packages they are familiar with. These strategies may include a combination of interactive audio or video tape materials, television-aided learning, overhead projectors, and computer-assisted instruction using the internet or computer referencing.

Table 3 below compares the experiences and challenges faced by distance education learners with those encountered by students in a face-to-face setting.

Table 3: Challenges faced by distance learners and contact learners

Distance Learner	Face to Face Learner (Traditional)
Physically removed from the teacher	Has face-to-face contact with teacher
Isolated from other learners	Is in contact with other learners throughout
Feedback is delayed	Gets immediate feedback
Chooses his or her own timetable	Works according to a set schedule
Sets his or her own working pace	Learning pace is set by the teacher
Chooses his own sequence of subjects	Follows the sequence of the institution
Motivated students can achieve their goals in less than the stipulated time	Must progress at the rate of the whole class
Independent learning fosters self-discipline, maturity and a sense of responsibility for one's own learning	Classroom students want and expect direction, are more dependent, sometimes exercise less initiative
Likely to have competing demands during study time, such as home responsibilities	Just a full time student
Has limited access to resources such as. school libraries	Has access to resources
Often disadvantaged by breakdown in communication	Less disadvantaged because of proximity
Distance education is often considered a	Considered real education

Distance Learner	Face to Face Learner (Traditional)
second rate education	
The learner is at her or his place, does not have to leave home and therefore has other household chores to attend to. Home situation is not often conducive for studying	The learner has to leave home for an educational institution where there is presumably no disturbance (Educational Institutions are conducive to studying)
Material distribution delays	Material readily available at institutions
Poor radio reception	Is not affected by radio programmes
Feedback comes after a long time, it takes a long time to change materials	Material made to suit learner's needs and can be changed soon after feedback
Inefficient postal system affects learners	Learners are not affected by postal system as they do not need any learning materials to be posted to them

(Molefi, 1998:5)

Learning within a distance education setting happens under very difficult circumstances for many SSA learners. Although learners can be exposed to educational opportunities, without learner support it is unlikely that they will be able to access success — in other words, to complete their courses. A first generation correspondence model is therefore increasingly seen as inadequate.

Provision of quality materials or programmes is another necessary but insufficient condition for students to succeed. Again, what is of paramount significance is the quality and scope of the support that distance education institutions provide. According to a study conducted by the South African Institute for Distance Education (SAIDE):

> Various policies converge on the centrality of learner support and it is broadly agreed that it is necessary to provide learner support in distance learning. It has consistently been argued that ensuring learners have access to educational opportunities will not promote equality of educational opportunity unless learner support is also offered. (SAIDE, 1999: 16)

Unless learner support is offered, access to educational opportunities will not in itself promote equality of educational opportunities.

> In the context of collaborative distance education which is characterized by heavy reliance on overseas course materials and locally provided support services, although printed learning materials are perceived as self-contained and appropriate for independent learning and despite prior acquisition of learning skills, students consider tutoring and counselling as **irreplaceable** … Learner-centred services contribute cognitively and meta-cognitively to compensate for the insufficiencies of standardized imported distance education materials and help to promote autonomous learning by increasing learners' social, pedagogical and psychological control over their learning process. (Rumajogee, 2001: 255, 259; Our emphasis)

It is against this background that many organisations and institutions involved in the provision of distance education have conceptualised and implemented a wide range of intervention strategies to deal with problems that may inhibit learners' intellectual growth and development, and more importantly, their ability to reach their educational goals.

Haasbroek (1995) agrees that education institutions that have been successful throughout the world have integrated learner support as one of their distance education provision strategies. Tait (1995) also argues that distance education institutions have demonstrated an increased awareness in the importance of providing learner support. According to a study conducted by Roberts and Associates in 1998, African tertiary institutions offer a wide range of interpersonal learner support services.

Table 4 indicates that high percentages of anglophone (83 percent), francophone (61 percent) and lusophone (50 percent) institutions report providing student support and tutoring.

Table 4: Availability of student support/tutoring in African tertiary institutions

Student support/ tutoring	Anglophone (N=66) %	Francophone (N=67) %	Lusophone (N=10) %
a. Available	83	61	50
b. Not available	2	3	0
c. No information provided	15	36	50
Number of institutions/ programmes	**66**	**67**	**10**

Data from the Roberts and Associates study shown in Table 5 indicate that direct contact with teachers is one type of support that is frequently offered. Lusophone institutions typically provide individual telephone contact (40 percent) or group audio- or videoconferences (40 percent). Anglophone and francophone institutions typically offer face-to-face group or individual sessions (24 percent and 22 percent respectively), with anglophone institutions also offering weekend or longer residential components (14 percent).

Fifteen percent of francophone institutions report significant use of internet communication, compared with only two percent of anglophone institutions. None of the lusophone insitutions used the internet. As there are significant non-completion rates on this item (as high as 53 percent in anglophone countries), the results must be interpreted with caution.

Table 5: Type of direct teacher contact with students in African tertiary institutions

Type of Contact	Anglophone (N=66) %	Francophone (N=67) %	Lusophone (N=10) %
a. One or more face-to-face group or individual sessions	24	22	30
b. Individual telephone contact	0	0	30
d. Group audioconference or videoconference	0	2	40
d. Internet communication	2	15	0
e. Weekend or longer residential component	14	0	0
f. On-site visit/work practicum	6	8	0
g. Staff/tutor at Resource Centre	2	8	0
h. No information provided	53	45	30
Number of Institutions/ Programmes	**66**	**67**	**10**

Viljoen (1997) and Africa (1997) note that one of the most significant factors of learner support is the availability of study centres. Wilson (1993) indicates that African learners are field-dependent and study centres are fundamental to their success. Table 6 shows the reported availability of regional study centres in SSA, but since 70 percent or more of the institutions suveyed did not respond to this item, the results should be considered indicative but not highly reliable.

Table 6: Availability of regional study centres in African tertiary institutions

Study Centres	Anglophone %	Francophone %	Lusophone %
a. Available	23%	18%	30%
b. Not available	77%	82%	70%
Number of Institutions/ Programmes	**66**	**67**	**10**

In SSA, and internationally, learner support is seen as an integral part of a well-functioning distance education system (Mays, 2000). The case studies that follow illustrate different models of learner support in SSA.

Case Study 12
Learner Support in South Africa

There is commitment at the policy level in South Africa around the issue of learner support. However, very little has been documented about the extent to which learner support has been implemented (Mays, 2000). In South Africa the likelihood is very high that a large number of learners will fail if they do not receive learner support from their respective institutions and other interested parties. Despite the change in the political and legal landscape, large numbers of learners are still disadvantaged and underprepared to successfully complete their courses through distance education.

Glennie (in Tait and Mills, 1996) summarises the reasons for the high failure rate and attrition of distance education students in South Africa:

> Many learners undertaking distance education programmes at secondary and tertiary level do so on the basis of very negative experiences of education. Their schools have operated sporadically, their educators have often been alienated, unmotivated, and authoritarian, and rote learning will have been the norm. The prospective learners are likely to lack many essential learning skills, and in general, are underprepared. (Glennie, 1996: 32)

This statement illustrates the critical role that learner support will play in South Africa. Acknowledging that learner support creates optimum conditions for success and enhances the quality of educational provision, distance education providers have begun to provide support services.

In the Eastern Cape Province (considered to be the poorest of all the provinces in South Africa) the University of Fort Hare (UFH) manages to provide quality support to its teacher-learners in the Bachelor of Primary Education (B.Prim.Ed.) programme offered by the university's Distance Education Project (DEP). The DEP is situated at the All Saints campus of the UFH in Bisho. The B.Prim.Ed. Programme consists of eight semesters. Each semester comprises two courses, presented in "bite-size" chunks using separately printed booklets. Each booklet has approximately 40 pages and is called an *Umthamo* (Mays, 2001).

The programme consists of two courses each comprised of four strands.

Core Education Studies:

- Learning About Learning (LAL)
- Helping Learners Learn (HLL)
- Schools as Learning Communities (SLC)
- Learning in the World (LIW)

Learning areas include:

- Literacy
- Numeracy and Mathematics
- Natural Sciences
- Technology

Each *Umthamo* represents 40 hours of notional learning time. Of the 40 hours, 3 hours are spent in face-to-face discussion on three Saturday mornings and the other 37 are spent in individual self-study and classroom applications built around a key activity that requires at least 10 hours to complete. A typical Saturday morning contact session involves discussion of various issues regarding three *imithamo*: linked either to introducing, maintaining or concluding.

Abakhwezeli offer support during the Saturday morning contact sessions. According to Mays, *abakhwezeli* are not supposed to use contact sessions to teach the content of the programme.

> Rather, they play the role of facilitating discussions on issues arising, as well as progress
> on and implications of the issues explored in the printed material. The abakhwezeli have
> a key role to play in motivating teacher-learners in their studies that is, keeping the fire
> burning. (Mays, 2001: 17)

The majority of *abakhwezeli* are teachers or principals from the local area. Some were college lecturers and some were designated as Educator and School Support Officers (ESSOs). These ESSOs were seconded by The Department of Education from the closed colleges of education. They are expected to spend 50 percent of their time on Department of Education fieldwork, 10 percent in the office and 40 percent on Fort Hare's DEP work.

Learner support is also offered through Regional Co-ordinators. The functions of the three Regional Co-ordinators in the Eastern Cape area include:

- Providing academic support to *abakhwezeli* and teacher-learners;
- Providing administrative support such as recruitment and induction, record keeping, reporting on progress at monthly central meetings, developing plans of action, and negotiating for catch-up sessions for any group lagging behind; and
- Providing logistical support such as ensuring that materials are delivered to the right place at the right time for the right cohorts, and making sure that centres have *abakhwezeli* to support the teacher-learners.

These Regional Co-ordinators are the first line of communication for Centre Co-ordinators, who provide the link between Regional Co-ordinators, *abakhwezeli* and teacher learners. Based in different areas across the province, Centre Co-ordinators do work similar to Regional Co-ordinators but on a smaller scale. Their role includes:

- Ensuring that proper *imithamo* and *abakhwezeli* are in place at the right time;
- Compiling a report of activities on a monthly basis for the Regional Co-ordinator;
- Checking that *abakhwezeli* mark learners' activities fairly, accurately and on time; and
- Checking of non-hand-in key activities as well as *abakhwezeli* journals on an ad hoc basis.

Mays sums up the UFH's teacher-learner support strategy in these words:

> By making use of the existing facilities, mobilising the support of the community members who give very generously of their time and expertise, and entering into a partnership agreement with the Provincial Department of Education, the University of Fort Hare manages to offer a considerable and varied degree of contact-based support to its teacher-learners, without needing to raise fees to unaffordable levels. (Mays, 2001: 13)

Case Study 13
Learner support in Namibia

The Centre for External Studies (CES) at the University of Namibia (UNAM) endeavours to meet the needs of distance education students through the following mechanisms:

- Students attend classes twice a year in Windhoek and in the north where face-to-face teaching is offered.
- Audio tapes are provided in language courses.
- Lecturers are trained to mark assignments done by students and towrite tutorial letters.
- There are nine centres established by the university across the country. The heads of these centres assist students through the following activities:
    - Enroling students at the start of the year;
    - Distributing study materials to students;
    - Recruiting tutors and organising weekend sessions for face-to-face tutoring;
    - Organising group discussions for distance learners;
    - Maintaining the small libraries in the centres;
    - Arranging telephone contacts between students and lecturers who are based in Windhoek;
    - Dealing with student matters;
    - Assisting with the organisation of vacation schools, especially the one in the north; and
    - Sending out letters to students in their region.

Case Study 14
Learner support in Zambia

When Zambia gained its independence from Britain in 1964, few of its citizens were educated. Therefore education became the major priority. To meet the challenge, the Ministry of Education's Department of Continuing Education established the National Correspondence College. The College, whose primary purpose was to increase access to education, offered distance and correspondence courses. The College still offers correspondence courses by distance, and learner support is regarded as an important aspect of their system. The College provides learner support through the Student Advisory Office, which handles *inter alia* students' administrative queries, and through tutors who mark students' work and give students detailed feedback.

The college also uses "learner friendly" teaching materials that are in themselves supportive (<www.saide.org.za/worldbank/countries/zambia/zamncc.htm>). The materials are written in language that is deliberately made as accessible as possible for independent study and contain exercises to encourage self-assessment. At the end of each learning unit there are assignments that learners must complete and send to the College for marking.

Case Study 15
Learner support in Mauritius

Provision of education through distance education methods is a new phenomenon in Mauritius. Tutors recruited into the distance education system are usually from the traditional system of education, which implies that although they may have sound educational qualifications, they have a limited knowledge about distance education practices.

In 1994, the Mauritius College of the Air (MCA) established the Division of Distance Education. The main mandate of this division was to provide adult and continuing education based on distance/open learning principles. Since then, the division has been offering a number of learning programmes to ensure that distance learners progress satisfactorily through their courses. The learner support services include:
- Induction
- Face-to-face meetings with tutors (at intervals of five to six weeks)

- Postal correspondence through tutor marked assignments
- Phone tutorials
- Counselling
- Mock examinations
- Audio-conferencing
- Peer group meetings.

Case Study 16
Learner support in Ghana

The Ministry of Education's Non-Formal Education Division in Ghana has set in motion a National Functional Literacy Programme. In line with this programme the Literacy and Functional Skills Project (LFSP) was launched to provide non-formal education to illiterate adults. Learners are required to attend classes. The project supports these learners using radio programmes that complement the face-to-face teaching. The radio programmes are broadcast simultaneously with the classes so that learners and their facilitator can listen and discuss the contents of the programmes together.

Case Study 17
Learner support in Uganda

According to Dzimbo (2001), learner support systems at Makerere University are not yet fully developed. His research indicates that distance education learners at this university are supported primarily through face-to-face sessions and print-based materials.

Students are lent study materials that include materials developed by Nairobi University and Makerere University staff, textbooks and book extracts. These resources are instrumental in assisting students to complete assignments and prepare for examinations.

The university also organises face-to-face orientation sessions to introduce students to the tutors and course requirements. Assignments and reading lists are made available to learners. A second face-to-face session prepares the students for examinations. Students also sit for tests, which ensure continuous assessment.

Face-to-face sessions are critical because they create a platform that allows interaction between students, and between students and tutors/lecturers, for mutual benefit. At a face-to-face session a tutor can review the previous assignments, counsel and direct students on the best way to achieve good results, as well as identify and assist students who are not coping with the work.

During these sessions the students get a chance to organise themselves into groups and form student bodies. Each academic year has a student leader and each course unit has a subject leader. The main function of the leaders is to communicate student problems to the administration and vice versa. As the distance education students (external students) write the same papers on the same day as full-time students (internal students), face-to-face sessions help place learners in the former category on the same footing as students in the latter.

Makerere University has a network of libraries on campus that includes the Main Library, Medical School Library, School of Education Library, IACE Library and Makerere Institute of Social Research (MISR) Library. The MISR Library has cards that allow learners to borrow at least two books at a time. Distance students can use the Main Library when on campus.
The Department of Distance Education at Makerere University runs a Book Bank that includes study materials from Nairobi University, books from the Open University of London, materials produced by Makerere University lecturers (tutors) and books bought from the open market. These materials are lent out to the students for a maximum of two months.

Photo copying facilities are available for students. The department photocopies handouts developed by lecturers and passes them on to students through the Book bank. Lecturers also identify book extracts and make photocopies for students. The Book Bank staff, Material Development Section staff and lecturers help students identify relevant photocopied materials.

Group counselling is provided at the beginning and the end of every face-to-face session. There is however, plenty of individual counselling on academic and social matters offered through heads of department at IACE School of Education. No systematic counselling through a professional counsellor takes place, however, difficult cases are referred to the university counsellor in the university hospital.

Seven upcountry IACE centres serve the learners.

Study groups converge on these centres for group discussions and invite the tutors to discuss difficult areas of their work. Tutors obtain feedback on the progress of learners upcountry and assist the department in planning material distribution and preparing face-to-face sessions. However, the centres have not worked as expected because they are not strategically located in areas where there are clusters of students. Schools, resource centres or teacher-training colleges would provide more strategic institutions.

There are also evening study groups organised by Bachelor of Commerce students. Students solicit the services of tutors who assist them with their academic problems.

8.2   TRENDS

There is growing recognition of the need to build learner support into DE programmes, especially for learners entering higher education from schooling systems which have not prepared them for independent study. By and large, support is offered either through face-to-face contact sessions or, in a more limited way, using telecommunications, audio and video strategies.

The literature on learner support systems tends to be descriptive in nature and does not give insight into how providers address the impact and value of learner support initiatives. There seems to be a complete absence of comparative research and very little in the way of longitudinal studies on the impact of learner support strategies.

REFERENCES

Africa, H. P. 1997. A Case Study of Distance Education at Vista University from 1982 to 1997. A paper presented at the ADEA Working Group on Higher Education (WGHE) meeting, Saint Louis, Senegal, 20–22 October 1997.

Akinade, E. A. 1998. Counselling Services During Distance Education Tutorials. A paper presented to distance education tutors during a workshop organised by the Centre for Continuing Education, Gaborone, Botswana, 23–24 July 1998.

Cheng, C., Lam, M. and Back, D. 1993. Exporting distance learning: The question of student support. In Nunan, T. Ed., <u>Distance Education Futures.</u> Adelaide: Australian and South Pacific External Studies Association.

Dzimbo, K. P. 2001. Case study of a distance teaching and open learning university. In Shabani, J and Okebukola, P., Eds., <u>Guide to the Development of Materials for Distance Education</u>. Ibadan, Nigeria: Olu-Akin Printing Press.

Glennie, J. 1996. Towards learner centred distance education in the changing South African context. In Mills, R. and Tait, A., <u>Supporting the Learner in Open and Distance Learning</u>. Johannesburg: Pitman Publishing.

Haasbroek, J. B. 1995. <u>Tutoring and Counselling in Distance Education.</u> Pretoria Institute of Educational Research, University of South Africa.

Lockwood, F. 1995. <u>Open and Distance Learning Today</u>. Routledge: London.

Mackintosh, W. G. 1999. "The future ain't what it used to be": Transforming Distance Education In Africa for the Emerging Knowledge Society. A paper presented at the 1st National NADEOSA Conference, 11-13 August 1999.

Mays, T. 2000. Learner support: A South African Programme Perspective. A paper presented at the 2nd National NADEOSA Conference, 21–22 August 2000.

Mays, T. 2001. <u>Innovative ways to support teacher-learner in Open learning through Distance Education</u>, Vol. 7, No.1: 16–17.

Mills, R. 1996. The role of study centres in open and distance education: A glimpse of the future. In Mills, R. and Tait, A., <u>Supporting the Learner in Open and Distance Learning.</u> London: Pitman Publishing.

Molefi, F. 1998. Support Services for Distance Education Students at the Department of Non-Formal Education. A paper presented at the Distance Education Workshop for Setswana Part-Time Writers. Gaborone (Botswana Contribution): DNFE.

National Centre for Technology and Distance Education (NCETDE). 1998. <u>Quality Criteria for Distance Education</u>. Johannesburg: Department of Education.

Nonyongo, E. P. and Ngengebule, A. T., Eds. 1998. <u>Learner Support Services: Case Studies of DEASA Member Institutions</u>. Pretoria: UNISA.

Roberts and Associates. 1998. <u>Tertiary Distance Learning in Sub-Saharan Africa; Overview and Directory to Programs.</u> World Bank, Washington, DC: ADEA Working Group on High Education.

Rumajogee, R. 2001. <u>Distance Education: A logic of diffusion or a logic of service? (A Mauritian Experience</u>). Ph.D. thesis, University of Paris 8, Department of Education Studies.

South African Institute for Distance Education (SAIDE). <<u>www.saide.org.za/worldbank/countries/zambia/zamncc.htm</u>>; <<u>www.saide.org.za/worldbank/Management/management.html</u>>.

South African Institute for Distance Education (SAIDE). 1999. <u>Learner Support in Distance Learning: A South African Programme Perspective,</u> Johannesburg: SAIDE.

Sewart, D. 1993. Student support systems. In Scriven, B., Lundin, R. and Ryan, Y., Eds., <u>Open Learning</u>, Vol. 8, No. 3: 3–12.

Siaciwena, R. 1996. The management of student support services in a dual-mode university. In <u>Open Praxis</u>, Vol. 2. International Council for Distance Education (ICDE): 14.

Tait, A. 1995. Student support in open and distance learning. In Lockwood, F., <u>Open and Distance Learning Today</u>. Routledge: London.

Viljoen, A.J. 1997. The Telematic Learning Systems of the Potchefstroom University, South Africa. A paper presented at the ADEA Working Group on Higher Education (WGHE) meeting, Saint Louis, Senegal, 20–22 October 1997.

Wilson, C. D. 1993. Study Centres: Key to success of field dependent learners in Africa. In B. Scriven et al. Eds., <u>Distance education for the twenty-first Century</u>. Selected papers from the 16th World Conference of the International Council for Distance Education, Thailand.

9.   THE USE OF INFORMATION TECHNOLOGY IN DISTANCE EDUCATION IN SUB-SAHARAN AFRICA

In this chapter we reflect on some examples of distance education and open learning practices in SSA that integrate the use of information and communication technology (ICT). The chapter first explores the theoretical underpinnings around the use of technology in distance learning. It then addresses the challenges SSA countries face in implementing ICT strategies. Information and communication technology in this context includes printed media, audio, video and audio-visual methods, computers, multimedia or interactive television, cable, microwave and satellite linkages, and fibre optics (Agunga, 1997).

It is widely believed that the use of ICTs would have a positive impact on distance learning:

> The invention of the television and video recording is said to have had the most profound influence on distance education. However, some people in the distance education field may say that personal computers and the internet reinvented the face of education and how students may learn at a distance. Today, virtual classrooms are expanding in numbers due to common technologies like television and radio, as well as technologies like desktop, laptop and network computers. It is safe to say that we are already within the "next generation" of distance learning. With the speed that technology is advancing and the abundance of personal computers and web technologies, people have already began to embrace distance learning in the digital world. By providing instruction via the World Wide Web, even business travellers or students in isolated areas can enjoy interactive virtual classrooms no matter where they are or what time zone they may be in! The digital world will help in providing distance learning opportunities for anyone, at any time, anywhere in the world. (Ivala, 1999: 2)

Ivala argues for the need to integrate technology in distance education to widen its scope, to strengthen the capacity of distance education providers to meet the needs of the masses, or to facilitate what is often called "mass customisation" of distance education and open learning. Ivala explains the benefits of integration in this way:

> Although the internet related technologies no doubt are of benefit to distance education, integrating them with other media (print, video conferencing, radio, television, etc) would form a new learning domain which would enable distance education educators and students to engage in learning interactions more effectively, and develop new and different forms of educational interactions. Because of this mix of media, and multi-media which appeal to a variety of learning styles, students will learn more effectively than they would from one medium alone. (Ivala, 1999: 9)

According to Butcher (2001) the use of technology in education has been stimulated by the problems that face education systems globally. These problems include:

- Educational institutions having to broaden their learner base to include people who have been excluded because of various factors;
- Cuts in public expenditure in the field of education and training; and
- A crisis of confidence in the traditional or conventional approaches to education, in which education is considered simply a transfer of information.

It is against this background that there has been a proliferation of activity focused on using information and communication technology to enhance the efficiency and the effectiveness of education systems.

Reflecting on the state of distance education technology, particularly in Africa, Mackintosh (1999) argues that in the context of the information technology revolution, distance education is simply not possible without technology. The time-space divide in distance education needs to be mediated or bridged by technology. Arguing for internet use and connectivity, the secretary-general of International Telecommunication Union (ITU), Dr. Pekka Tarjanne, emphasizes the potential of ICTs:

> The internet has a great deal to offer the people of the African continent, with its ability to break the bouts of isolation and bring remote communities in touch with the rest of the world. Its vast store of information, along with distance learning and tele-medicine systems now being developed, has a real potential to transform the lives of many African inhabitants. (Shapshak, 1998: 7)

The President of the Commonwealth of Learning, Dr. Gajaraj Dhanarajan, has called for the greater exploitation of other ICTs as well as internet-based strategies. He has this to offer about E-learning:

> One would be foolish to question the importance of the internet and www for education in this new decade. At worst, it has the ability to connect communities of learners and teachers as well as other knowledge seekers and providers and at its best it could very well be the tool that education has been waiting for these past thousands of years. Its promise is only limited by the imagination and capacity of the people who can apply and benefit from it. However, access to that promise should not be limited to only a few who are wealthy, live in information rich societies, and have skills, knowledge and support to use the tools but should also be provided to the many who lack all of these but who need education and training just as much as the 'haves' to escape from the traps of deprivation. To benefit the many, we must get some things right about on-line education. (Macdonald, 2001: 6)

Internationally, there is a growing information technology revolution and the countries in Sub-Saharan Africa are not impervious to this development.

In the majority of African countries, the concept of distance learning and educational technology is still emerging. Furthermore the use of technology is not a problem-free exercise.

To argue that countries in SSA would simply benefit from technology without analysing what technology brings to the continent and how it can be utilised for development would be a fatally simplistic view of technology and its role. The explosive growth of information technologies may serve to entrench disparity rather than eradicate it. Ivala (1999) argues that estimates of rapid growth of internet technology in Sub-Saharan Africa, for example, conceal the fact that most internet growth in this continent takes place in South Africa.

SSA countries started their distance learning activities using self-study media such as print, audio and video cassettes, and then evolved to radio and television. They are only now experimenting, often as part of initiatives from outside the continent, with new information and communication technologies such as internet, videoconferencing and other forms of multimedia. Table 6 illustrates that technologies such as print are still an important learning tool (Roberts and Associates, 1998).

Table 7: Percentage of African tertiary institutions/programmes using various types of media

Type of Media	Anglophone (N=66) %	Francophone (N=67) %	Lusophone (N=10) %
a. Print	96	88	90
b. Telephone	8	2	0
c. Fax	0	0	0
d. Audio cassettes	17	15	20
e. Video cassettes	13	31	0
f. Radio	2	12	70
g. Audioconferencing	3	3	40
h. Videoconferencing	0	0	0
i. Satellite	2	18	0
j. Internet/CD-Rom	5	34	0
k. No information provided	6	5	10
Number of Institutions/ Programmes	**66**	**67**	**10**

Fully 96 percent of anglophone institutions, 90 percent of lusophone institutions and 88 percent of francophone use print as a learning tool. The internet and CD-ROMs are much more widely used in francophone institutions (34 percent) than in either anglophone (5 percent) or lusophone institutions (0 percent). Francophone institutions also regularly use video cassettes (31 percent). Lusophone institutions also use radio (70 percent) and audioconferencing (40 percent) extensively. Anglophone institutions use audio (17 percent) and video cassettes (13 percent). As Perraton and Potashnik (1997) point out:

> More advanced telecommunications technologies are still not a prevalent feature of programs in the developing world … We are only beginning to learn how to use some of these technologies effectively and much remains to be learned. (Perraton and Potashnik, 1997: 13)

Internet use in Africa should be approached with caution and sometimes with scepticism. Moreover, Dhanarajan (1999) cautions that we should not rely only on technology to make distance education of high quality; it will necessarily be insufficient. Commitment, professionalism, skills and knowledge from distance education practitioners constitute important factors as well.

Before SSA states can cross the "digital divide", they must traverse the divide between the more and the less technologically advanced countries. SSA states fall into the latter category. One of the manifestations of this divide is the wide gap between the telecommunication infrastructure of developed and developing countries. Africa has the lowest number of telephone lines per capita in the world, and the infrastructure that exists is in poor condition. The teledensity (the number of telephone lines per 100 people) in Sub-Saharan Africa was estimated at 0.5 in 1999; in the United States that figure stood at 65 (Ivala, 1999). Telephones and other communication infrastructures outside major cities are particularly inadequate. Some 70 percent of Africa's population lives in the rural areas served by only 228,000 lines (Mwagiru, 2001).

In an address to the wealthy G7 countries in 1998, the President of South Africa, Thabo Mbeki, indicated that there were more telephone lines in Manhattan, New York than in the whole of Sub-Saharan Africa (Ivala, 1999). The infrastructure patterns that are manifest in most Sub-Saharan African countries make it difficult for the continent to join other countries in the world on their journey on the "information superhighway".

Saint (2000) observes that in many SSA countries internet connectivity is expanding rapidly but unevenly.

Forty-nine of 54 African countries have access to the internet in their capital cities, but this is almost exclusively for use by upper-middle class urban populations. Particularly active internet markets are found in South Africa, Senegal, Mozambique, Kenya, Uganda, Zimbabwe and Cote d'Ivoire. In early 1999, a survey of internet capability at 15 Sub-Saharan African universities outside of South Africa (regarded as among the countries in SSA as progressive in the use of ICTs) concluded that only four possess full internet capability while three have email capacity through individual connections in some departments.

In this world of the globalised economic system, technology is a central driver of economic growth.This places Africa, given its technological constraints, in a comparatively disadvantaged position. Because globalisation is rooted in the expansion of global communication systems (Mackintosh, 1999), if Africa is lagging behind in technology, the gap between the developing and the developed countries could be insurmountable. The lack of ICTs in many African countries limits the provision of distance education and open learning.

In many institutions that have begun to offer distance education, staff knowledge and experience rests in traditional methods of education delivery. Therefore there is a lack of qualified professionals to support the technological demands. Many poor countries have limited telecommunication networks, while the internet entirely depends on a minimum level of telecommunication infrastructure for its operation (Ivala 1999).

The absence of clearly defined national distance education policies on how to integrate the use of technology in education systems is stark in many Sub-Saharan African countries. Reflecting on educational technological policy in Southern Africa, Butcher (2001) argues as follows:

> The general perception, however, is that there are few policies covering the use of information communication technology in education. Where they exist, they tend to remain vague and make little reference to implementation. (Butcher, 2001:6)

In spite of these problems and challenges, educational technology remains a viable option in distance education:

> The promise of Information Technology (ICT) on the continent is enormous. ICT is expected to serve as a catalyst of development for Africa communities, allowing them to profit and contribute to an increasingly globalized society. (Darkwa and Mazibuko, 1999: 2).

The African Information Initiative is convinced that technology will play a critical role in the social development of African countries in the sense that it will stimulate growth and raise the standard of living by helping to meet the challenges of health care, job creation and food security (Africa Information Society Initiative, <www.bellanet.org/partners/aisi/>). But the way in which technology is utilised should serve as a catalyst for transformation, and countries need to take into account that technology can also be a mechanism to maintain the status quo. Bearing this in mind, SSA will have to find creative solutions to leapfrog previous eras of technology. The fear that technology will accelerate the marginalisation of Africa is a genuine concern but there is no turning back:

> These dangers should not be underestimated, but lamenting them will not stop the rushing train of information technology. (Africa Information Centre, 1996 (<www.Africapolicy.org/bp/inet.html>)

Use of technology in Africa is a *sine qua non* for access to education and mass customisation of distance education, and could drive the continent to make a meaningful contribution to globalisation (Mackintosh, 1999). Mwagiru (2001) argues that Instructional Technology (IT) can play a significant role in expanding and enhancing distance teaching and learning. He emphasises that there are educational benefits that could accrue from the use of IT:

> If IT is appropriately adopted and applied in the teaching and learning environment, it can facilitate countries in Africa to reform and transform their educational systems and to make educational opportunities available and accessible at every level. (Mwagiru, 2001: 2)

Case Study 18
African Virtual University Project (AVU)

The World Bank initiated the African Virtual University Project in 1996. The most ambitious distance education initiative in Africa, it is intended to pilot internet-based and satellite-linked distance education programmes in the field of Science and Engineering. The objectives of the AVU are:

- To use modern technology (especially satellite TV technology) in diverse countries to demonstrate that it can be used effectively as a teaching medium;
- To prove that a project can be successfully implemented in various African countries, each with its own government, educational system, independent universities (jealously guarding academic freedom), telecommunications authorities (jealously guarding their airspace), language and culture;

- To prove that a project can generate the economy of scale to sustain itself after the inevitable discontinuation of donor funding;
- To upgrade the capacity of African countries in teaching mathematics and science, subjects that are very much needed to kick-start their economies.
- To prove that diverse communities can easily adapt to modern technology, that is, that such communities can leapfrog the paper age; and
- To prove that diverse university curricula and timetables can be subjected to the dictates of common sense and usefulness.

The pilot phase of the project began in July 1997 and lasted for a year. It involved six undergraduate courses of televised instruction broadcast from the United States, Ireland and Canada to appropriate sites at Africa universities. At the same time, French language courses were developed in Belgium, France and Switzerland.

Formal contracts with US and European universities to provide the teaching and background material (called "literature") were concluded. The project involved twelve higher education institutions from six anglophone countries (Ethiopia, Ghana, Kenya, Tanzania, Uganda, and Zimbabwe). These institutions include:

- Addis Ababa University, Ethiopia
- Kenyatta University, Nairobi, Kenya
- Uganda Martyrs University, Nkosi, Uganda
- Makerere University, Kampala, Uganda
- Uganda Polytechnic, Kyambogo, Kampala, Uganda
- University of Zimbabwe, Harare, Zimbabwe
- National University of Science and Technology, Bulawayo, Zimbabwe
- Open University of Tanzania, Dar-Es-Salaam, Tanzania
- University of Dar-Es-Salaam, Dar-Es-Salaam, Tanzania
- University of Science and Technology, Kumasi, Ghana
- University of Cape of Coast, Cape of Coast, Ghana
- University of Ghana, Accra, Ghana.

Eleven institutions from six Francophone countries (Benin, Burkina Faso, Cote d'Ivoire, Niger, Senegal and Togo) and two institutions from two Lusophone countries took part in the project during the equipment installation phase.

The institutions from Francophone countries include:

- Universite d'Abidjan, Cote d'Ivoire
- Ecole superieure polytechnique de Yamoussokro, Cote d'Ivoire
- Etablissements Loko, Cote d'Ivoire (the biggest private educational institution in the country)
- Universite de Lome, Togo
- Universite de Cotonou, Benin
- Universite d'Ouagadougou, Burkina Faso
- Centre universitaire de Bobo Diou Lasso, Burkina Faso
- Universite de Niamey, Niger
- Universite de Nouakcott, Mauritania.

The instutions from Lusophone countries include:

- Universite Eduardo Mondlane, Mozambique
- Cape Verde Higher Education Institute, Cape Verde.

The pilot was a satellite-based effort to:

> Harness the power of information technologies to deliver university education in the disciplines of science and engineering, non/continuing education programs, and remedial instruction to students in Sub-Saharan Africa. (Darkwa and Mazibuko, 2000: 4)

Provision of education in this virtual institution has been based on satellite transmission and interactive email. AVU is a distance educational model that uses modern information technologies and thereby complements traditional modes that lack interactive instructional networks, such as print, radio, cassettes and television. Its interactive telecommunications network enhances North-South co-operation and South-South co-operation in in the delivery of content and technology (Juma, 2001). Because this project is still being tested, only ten countries have been participating. The intention is to extend the project during the second and third phases to other African countries to the benefit of every African citizen.

Case Study 19
The use of technology in Botswana

Botswana has an impressive technological infrastructure and a national policy to integrate the use of Information and Communication Technologies (ICT) in education. One of the providers is Botswana College of Distance and Open Learning (BOCODOL). Four departments in the Ministry of Education—the Department of Non-Formal Education; Teacher Training and Development; Curriculum Development and Evaluation; and Vocational Education—also play an active role in the application of ICTs in distance education.

All schools in Botswana have between one and three computers. The computers are used for teaching and learning activities and for administrative duties. All junior secondary schools have computer laboratories with networked facilities and dial-up connections to the internet.

Although Botswana does not have its own television broadcasting system, one of its radio channels has an Educational Broadcasting Division. This channel broadcasts 15-minute radio programmes on several school subjects. The Educational Broadcasting Division recently initiated a Distance Education Programme leading to a Primary Teachers' diploma with 600 young adults who have left school enroling (Jegede, 2001). It also utilises ICTs in distance courses leading to a certificate in Adult Education.

Although these are small scale projects, Jegede (ibid.) concluded that Botswana is a good example of an African country that has been successful in employing ICTs in distance and teacher education.

Case Study 20
The use of technology in South Africa

In South Africa the use of technology is strongly supported by the government through its policy and other initiatives. According to Naidoo and Schutte:

> South Africa has the benefit of a government that realises the advantages of the information and telecommunication age. The government actively plans, encourages, and supports the development of the necessary infrastructure, including upgrading city and rural networks to fibre optical systems and all exchanges to digital exchanges, and installing microwave communication and satellite technology. Millions of new phones are installed, or are in the process of being installed into homes, especially those of the previously disadvantaged part of the society. (Naidoo and Shutte, 1999: 101)

The government is clear about education policy and information technology. The Department of Education commissioned the TELI report (*Technology-Enhanced Learning in South Africa: A Discussion Document,* National Department of Education, 1996), and established an active National Centre for Educational Technology and Distance Education in Pretoria. This Centre is responsible for co-ordinating and implementing plans for the use of technology in various institutions in the country.

The University of South Africa (UNISA)

The University of South Africa is the oldest distance education institution in the world. It has a main campus in Pretoria, as well as subsidiary campuses in Durban, Cape Town, Nelspruit and Pietersburg. UNISA has about 125,000 students mainly from within the borders of South Africa. The students are from different backgrounds in terms of race and geographical location (both rural and urban, with a lack of infrastructure in the former). The institution also enrols a sizeable number of foreign students and the number is expected to grow in response to the increasing need for distance education. UNISA is following in the footsteps of other institutions by providing study centres all over the country, and these centres will require tutors and support staff. Against this background, Naidoo and Schutte (1999) point out that "telematic enhancement will play an increasingly important role, since it is very expensive to provide buildings and tutors". (Naidoo and Schutte, 1999: 103).

Although the university has a modern computing system as well as telecommunication and other infrastructure at its campus in Pretoria, it needs place a greater emhpasis on using this technology to enhance learning. There has, however, been a major paradigm shift in understanding and accepting the use of technology at the UNISA, which is aptly captured by the words of the former vice chancellor and principal of the university:

> Our teaching must not be confined to our magnificent campus, let us speak, walk around our campus-South Africa and other countries and teach our students directly and not at a distance, by means of well designed, self-instructing course materials, with the aid of modern technologies. (Wiechers, 1996: 2)

The university opted to move towards building a "virtual university"'with its bold steps to test the use of technology. It is making progress in the following areas:

- A Web-based virtual university, called Students on Line (SOL)—SOL gives the university an opportunity to use modern communication and education technologies to improve its administration, education and training services for the convenience of staff and students. Through this particular initiative students are enabled to access the massive university database on their own at any time from anywhere without assistance from any support staff. The students can register for courses, download course materials, pay their fees, post assignments and browse the library catalogue system. SOL is cost-effective in time and money.

- Tele- and videoconferencing—UNISA argues that it is one of the world leaders in fully interactive tele- and videoconferencing, which it operates at four sites (one at each campus). This initiative, which was added into its distance teaching operation, is proving to be popular. It maybe expanded to other areas where UNISA is operating.

- Audio-visual aids—In an effort to help blind students, UNISA provides audio versions of the study material. According to Schutte and Naidoo (1999), the university produces 500,000 audio cassettes each year for various courses to enhance the printed study material. The video cassettes are produced in fully operational modern studios. Although the number of blind students very small, it is growing.

UNISA is also making rapid progress in other relevant areas of technology education, including Web-based information services in the library.

Case Study 21
The use of radio in Ghana

The government of Ghana has long been positive about the potential of radio to make a major breakthrough in its literacy programme. Therefore, a radio component has been the backbone of its efforts to support classroom teaching and learning, and to provide detailed information about literacy.

In 1986, the Ministry of Education in Ghana created the Non-Formal Education Division (NFED), giving it the mandate to co-ordinate and direct all non-formal education activities. The division began a pilot functional literacy programme 1988 at Apam/Winneba in the Central region and Tono/Vea in the present Upper East Region, with funding from the Overseas Development Administration (now the department for International Development) and other donors.

In response to strong demands for literacy in Ghana, the head of state compelled the NFED to broaden the scale of the pilot project into a National Functional Literacy Prgramme (NFLP) in 1990.

The NFLP has the following goals and objectives:

- To equip learners with knowledge, attitudes and skills that will enable them to raise the quality of life in the community;
- To enable learners to improve their occupational skills through functional literacy;
- To broaden the reading interests of learners and establish an attitude of reading; and
- To enable participants to meet their personal or social needs.

Dodds (1996) indicates that NFLP distance learning methods were vital in publicising the functional literacy programme itself and in encouraging the people to attend literacy classes and have positive attitudes.

The Literacy and Functional Skills Project (LFSP), launched in 1992 and supported by the World Bank and other donors, emerged from the NFLP.

The main aim of the LFSP was to improve the quality of life in Ghana, especially for the rural poor and women, and to reduce the level of illiteracy among the country's then 5.6 million illiterate adults. The project included a radio component,where radio was used the non-formal education sector to support classroom teaching and learning. According to Siabi-Mensah (2000), the use of radio in the non-formal education sector is limited. The few programmes in which radio has been utilised include:

- The Rural Radio Forum Programme of the Ghana Broadcasting Corporation (GBC);
- The Upper Region Agricultural Radio (URA-Radio); and
- The radio component of the LFSP.

The Literacy and Functional Skills Project was run as a pilot project from 1989 to 1991. The project used GBC's FM stations and staff to broadcast its programmes to the public in seven languages. Winneba/Apam and Tono/Vea were chosen for the pilot because of the availability of the necessary infrastructure, particularly the transmission stations at Apam and Bolgatanga.

By 1995 the project seemed to have made little impact on the public (Siabi-Mensah, 2000).

As a result, in December 1996 the NFED embarked on aproject called the Use of Radio to Support Functional Literacy. The purpose of this project was not only to support teaching and learning in the classroom but also to find the mechanisms that could remedy the pitfalls of the previous project. The project was also mandated to find out what structures have to be in place for radio to play an effective role in literacy work. According to the deputy director of the NFED, Mr. K. Ansre (Laflin et al., 1998), the radio programmes were expected to provide:

- Information that will help change the lifestyle of learners;
- Complementary support for themes taught in the primer;
- A forum for learners to discuss issues with each other;
- A medium through which learners can practise their literacy skills; and
- News and information for learners and the general public.

Another example of an open learning initiative that uses radio for practical learning and social and political development is Radio Ada, a new and innovative education project in Ghana. Although the radio station is officially owned by Ghana Community Broadcasting Services, there is a strong sense of community ownership.

Radio Ada was established in 1998 and is situated at Ada, the capital of the Dangme East District in the Greater Accra region. According to Siaciwena and O'Rourke (2000), Radio Ada is a development-oriented community-based radio station designed to foster a climate conducive for the participation of Dangme people, including the disadvantaged people such as women, in planning and evaluating development activities. The goal of the Radio Ada is to "encourage, promote and contribute to informed dialogue and reflective action among the one million Dangme-speaking people within this region of Ghana" (Siaciwena and O'Rourke, 2000: 80).

Of the 17-hour broadcast day, 4 hours are devoted to development-oriented programmes that give attention to the non-formal education activities available for the main socio-economic groups in the area. There are radio programmes for women and for occupational groups such as fishmongers, drivers and traders.

9.1 TRENDS

Although various countries are experimenting with the use of third and fourth generation technologies, these experiments are limited to a few institutions and projects with limited scope. The use of ICTs in SSA is severely hampered by a lack of expertise, a lack of infrastructure and a largely technologically illiterate user-group.

There does not appear to be an established culture of inter-institutional collaboration with regard to the establishment, maintenance and utilisation of ICT potential. However, a burgeoning cellular phone industry, the expanding terrestrial telephone system and exciting initiatives such as the recent commitment by the South African Government to making internet and email access available in post offices country-wide, indicate that given the necessary support, SSA is committed to closing the digital divide.

REFERENCES

Africa Policy Information Center. 1996. Africa on the Internet: Starting Points for Policy Information. Online background paper. <www.africapolicy.org/bp/inet.html>

Africa Information Initiative. <www.bellanet.org/partners/aisi/>

Agunga, R. 1997. The Politics of Distance Education in the Development of Africa. A keynote address at the 12th African Educational Research Symposium on Politics and Education, Athens, Ohio, 21–22 February 1997.

Butcher, N. 2001. Reflecting on Educational Technology in Southern Africa. In Open Learning Through Distance Education, Vol. 7, No. 2 (July 2001): 6–7.

Butcher, N. 1998. The Possibilities and Pitfalls of Harnessing ICT to Accelerate Social Development: A South African Perspective. Johannesburg: South African Institute for Distance Education, and at <http://www.saide.org.za/butcher/unrisd.htm>.

Darkwa, O. and Mazibuko, F. 2000. Creating Virtual Learning Communities in Africa: Challenges and Prospects. In First Monday, Vol. 5, No. 5 <firstmonday.org/issues/issues5_5/darkwa/>.

Dhanarajan, G. 1999. The Quest for Implementing Quality in Distance Education: Practice Not Platitude. A paper presented at the 1st national NADEOSA Conference, 11–13 August 1999.

Dodds, T. 1999. Non-Formal and Adult Basic Education through Open and Distance Learning in Africa: Developments in the Nineties Towards Education For All. Unpublished study carried out by the International Extension College for the Commonwealth of Learning.

Farrell, G. M. 1999. The Development of Virtual Education: A Global Perspective. Vancouver: The Commonwealth of Learning.

Ivala. E. 1999. The Internet and Distance Education. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Jegede, O. 2001. The Use of Distance Education Methodologies for Primary Teacher Education in Nigeria. In Primary Teacher Education: The use of distance education methodologies for primary teacher education in Nigeria. Vancouver: Commonwealth of Learning.

Juma, M. N. 2001. The management of distance higher institutions in Africa: The case study of the African Virtual University, Kenyatta University. In Shabani, J. and Okebukola, P., Eds., Guide to the Development of Materials for Distance Education. Ibadan, Nigeria: Olu-Akin Printing Press.

Laflin, M. et al. 1998. Evaluation of Literacy and Functional Skills Radio Programme. Accra: Non-Formal Education Division (NFED).

Macdonald, H. I. 2001. Access to Education: A Guarantee of a Less Divided World? The Sixth Memorial Lecture, New Delhi, India.

Mackintosh, W. G. 1999. Transforming Distance Education in Africa for the Emerging Knowledge Society. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

Mensah, E. 1996. The role of print and auto-based media in the Functional Literacy programme in Ghana. In Mensah, E., Yates, R. and Dodds, T., Mass Functional Literacy campaigns in Ghana, in Course 7 Non-Formal and Adult Basic Education at a Distance: A reader: MA in Distance Education for External Students. Cambridge: International Extension College/University of London.

Mwagiru. 2001. Enhancing Teaching and Learning from Distance: The IT Challenge. A paper presented at the NADEOSA conference Beyond the Hype: Maintaining Sustainable Distance Education, University of the Witwatersrand, West Campus, Johannesburg, 28-29 August 2001.

National Department of Education—South Africa. 1996. Technology-Enhanced Learning in South Africa: A Discussion Document. Pretoria: Government Printer

Naidoo, V. and Schutte, C. 1999. Virtual education on the African continent. In Farrell, G.M., Ed., The Development of Virtual Education: A global perspective. Vancouver: Commonwealth of Learning.

Perraton, H. and Potashnik, M. 1997. Teacher education at a distance. In World Bank Human Development Department, Education Group, Education and Technology Team, Education and Technology Series, Vol. 2. Washington, DC: World Bank.

Roberts and Associates. 1998. Tertiary Distance Learning in Sub-Saharan Africa: Overview and Directory to Programs. ADEA Working Group on Higher Education. Washington, DC: World Bank.

Siabi-Mensah, K. 2000. Ghana: The use of radio in the National Literacy and Functional Skills project in the Volta and Northern Regions. In Siaciwena, R., Ed., Case studies of Non-Formal Education by Distance and Open Learning. Vancouver and Cambridge: Commonwealth of Learning/International Extension College.

Siaciwena, R. and O'Rourke, J. 2000. Basic education curriculum: Contexts and contests. In Yates, C. and Bradley J., Eds., Basic Education at a Distance: World review of distance education and open learning, Vol. 2. London and New York: Routledge Falmer.

Shapshak, D. 1998. Writing Up the Continent: Developing Africa's Information. Original source unknown.

Saint, W. 2000. Tertiary Distance Education and Technology in Sub-Saharan Africa. Vol. 5, No. 1 of Education and Technology Technical Notes.

United Nations Educational, Scientific and Cultural Organisation (UNESCO). 1998. World Statistical Outlook on Higher Education: 1980-1995. Working Document for the UNESCO World Conference on Higher Education. Paris: UNESCO.

Wiechers, M. 1996. Fifty Years of Excellence in Distance Education. In Progressio , Vol. 18, No. 1.

10. CONTINENTAL, REGIONAL AND NATIONAL ASSOCIATIONS IN SSA

This chapter describes the organisations (continental, regional and national) that provide distance education and open learning programmes across SSA. The focus is on their objectives or goals and their main initiatives.

10.1 ASSOCIATION FOR THE DEVELOPMENT OF EDUCATION IN AFRIC (ADEA)

ADEA is responsible for promoting the development of effective education policies, including distance education and open learning policies, for Africa. Established by World Bank in 1998 under the name "Donors to African Education" (DAE), the association's original objective was to encourage collaboration and co-ordination between development agencies in support of education in Africa. Currently, ADEA is a network of African Ministries of Education, development agencies, education specialists and researchers, and non-governmental organisations active in education. ADEA now focuses on developing partnerships between ministers of education and funding agencies to promote effective education policies based on African leadership and ownership. It is neither a funding agency nor a traditional investment project.

ADEA's mission is:

- To promote dialogue and partnerships;
- To develop consensus on policy issues facing education in Africa;
- To reinforce African ministries' capacities to develop, manage, and implement education policies;
- To promote the sharing of experiences and successful strategies; and
- To promote nationally driven education policies, projects and programmes.

10.2 REGIONAL ASSOCIATIONS IN SSA

A number of regional and national distance education associations have been created within Sub-Saharan Africa. Regional distance education associations that maintain a regional presence in SSA include the Distance Education Association of Southern Africa (DEASA), the West African Distance Education Association (WADEA) and the East African Distance Education Association (EADEA).

The establishment of such associations is seen as a very important development that has greatly benefited distance education systems in Africa. For example, these professional bodies played a critical role in bringing together distance education practitioners and learners for a common vision or goal (Kinyanjui, 1998).

10.2.1 The Distance Education Association of Southern Africa (DEASA)

The Distance Education Association of Southern Africa (DEASA), formerly known as the Distance Learning Association (DLA), has been in existence for more than 20 years. It is an association of 20 member institutions or organisations from Botswana, Lesotho, Swaziland, South Africa, Namibia and Tanzania. These institutions are involved in distance education or non-formal education at various levels, ranging from adult basic to tertiary level education.

The constitution of the DEASA describes the association's objectives as follows:

- To provide a platform for discussing issues affecting and/or related to the field of distance education;
- To encourage exchange of expertise among member institutions as efficiently and widely as possible;
- To exchange information and material on distance education and to promote co-operation among member institutions;
- To promote educational activities and opportunities for those who are not part of the conventional education system;
- To seek assistance from national governments and international organisations in the furtherance of distance education; and
- To present and advocate for the interests of distance education to government funders and policy-makers.

These aims and objectives have been translated into practice through a programme of work that is carried out by member institutions collectively and through an Executive Committee chaired by member states on a rotational basis. Each member institution is given a space to contribute towards the development and implementation of DEASA activities. DEASA's activities revolve around three broad areas of work:

- Training and professional development of staff through workshops organised regionally and nationally on several aspects of distance education, including material development, learner support and the use of technology;
- Attending biannual regional meetings to share ideas and monitor DEASA activities; and
- Producing a newsletter, which provides a channel for communication within and beyond the region.

The target audience for the newsletter is the staff of DEASA member institutions. The target groups for the training workshops include distance education course writers and materials development staff, learner support service staff, and managers and directors of DEASA institutions. DEASA recently decided to open membership to all Southern African Development Community (SADC) countries.

10.2.2 THE AFRICAN MEDICAL RESEARCH FOUNDATION

AMREF is an independent, international non-profit organisation (NGO), headquartered in Nairobi, Kenya. It maintains country offices in Kenya, Tanzania, Uganda and South Africa, and field offices in Rwanda and Somalia. According to Mwangi (2000), the activities of AMREF are structured into programme areas that reflect the main priorities of the organisation. There are five programme areas:

- Sexual and Reproductive Health
- Child and Adolescent Health and Development
- Environment Health
- Health Policies and Systems Reform
- Clinical Services and Emergency Response

AMREF has a Distance Education Project (formerly known as Distance Teaching Unit) focussing on health sector workers who have little or no access to any other form of continuing education. The goal of AMREF Distance Education Project is to

> Improve the health of people in the rural areas of Eastern Africa, through establishing and extending sustainable distance education services throughout the region. (Mwangi, 2000: 49)

AMFEF organisation sees non-formal, continuing education within a paradigm of distance education and open learning as an essential part of human resource development. The specific objectives of the project include:

- Initiating, developing and offering correspondence courses to update the knowledge and skills of health workers on the job;
- Providing continuing medical and health education to all cadres of health workers through a variety of media;
- Establishing distance education support systems; and
- Demonstrating the acceptability and cost effectiveness of distance education as a method of continuing medical education (AMREF, 1983).

10.3   NATIONAL ASSOCIATIONS IN SSA

Distance Education Association of Tanzania (DEATA)
The Registrar
The Open University of Tanzania
PO Box 23409
Dar es Salaam
Tanzania
T: (+255 51) 668 992/668 445/667 455
F: (+255 51) 668 758

Ghana Distance Education Association (GHADEA)
The Principal
University College of Winneba
PO Box 25
Winneba
T: (+233) 432-22361
F: (+2330 432-22268/432-22397
Ucew@ug.gn.apc.org

National Association of Distance Education Organisations of South Africa (NADEOSA)
The President
PO Box 31822
Braamfontein
2017
T: (+27 1) 403-2813

F: (+27 11) 403-2814
info@saide.org.za
<www.saide.org.za/nadeosa>

Nigerian Open and Distance Education Network (NODEN)

Zambian Association for Distance Education (ZADE)
The President
Directorate of Distance Education
University of Zambia
PO Box 32379
Lusaka
T: (+260) 290 719
F: (+260) 253-952
Rsiaciwena@dde.unza.zm

Zimbabwe National Association for Distance and Open Learning (ZINADOL)
Chief Education Officer
Distance Education
Ministry of Education, Sports and Culture
PO Box CY 121
Causeway
Harare
T: (+263) 734 050/734 071
F: (+263 4) 707 580/794 505

REFERENCES

African Medical Research Foundation (AMREF). 1983. Continuing Education for Health Workers: Planning district programmes. Nairobi: AMREF.

Kinyanjui, P. 1998. Distance and Open learning in Africa: What Works or Does Not Work. A paper presented at the EDI/World Bank workshop on Teacher Education Through Distance Learning, Addis Ababa, Ethiopia.

Mwangi, A.P. 2000. The African Medical Research Foundation Distance Education Project. In Siaciwena, R., Ed., Case Studies of Non-Formal Education by Distance and Open Learning. Vancouver and Cambridge: Commonwealth of Learning/International Extension College.

11. INITIATIVES SUPPORTING DEOL IN SSA

To promote the use of distance education in SSA, several critical issues need to be addressed. These include:

- The need to open access to education for a greater number of more diverse learners;
- The expected continuation of limited resources for education;
- The gradual growth of technology infrastructure; and
- The increasing acceptance of ODL principles as a viable alternative to traditional provision.

Many initiatives now operating within SSA address these issues and support the expansion of ODL.

Although the absence of dynamic and forward-looking policies on distance education in SSA states cannot be over-emphasised, the existence of the national and regional associations discussed in Chapter 10 and the wide range of national and international initiatives outlined below, suggests that distance education and open learning developments are likely to increase in the near future. The activities of these organisations and initiatives are having a tremendous impact on the shape of distance education in SSA.

Technological constraints remain a major challenge to effective DE provision in SSA. State control over telecommunication operations in SSA has stifled private sector investment in this crucial area of economic development and is the primary cause of the disastrous state of telecommunications in SSA countries. However, new technology such as low earth orbit satellites could help SSA overcome this deficit by reducing the cost of telecommunication development (Ivala, 1999). Current and future technology advancement will encourage the provision of distance education to SSA learners.

Despite the challenges confronting the advancement of DE in Africa, there is a growing interest in the concept. According to Kinyanjui (1996), several international organisations have in recent years established initiatives to help develop distance education systems and facilitate co-operation in their activities.

These organisations include the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), the Commonwealth of Learning (COL), Consortium International Francophone de Formation à Distance (CIFFAD), and the International Council for Distance Education (ICDE).

UNESCO has taken a leading role among the United Nations' agencies in efforts to promote distance education in SSA. In 1990, UNESCO organised a seminar on distance education in Arusha, Tanzania. The seminar was attended by representatives from distance education institutions, funding agencies (including the World Bank and the African Development Bank), and other international organisations. The common view that emerged from this seminar is that distance education has a critical role to play in providing greater access to education and thus addressing the problems of equity. As a result of the seminar, UNESCO suggested the setting up of a Regional Programme for the Development of Distance Education in Africa (RPDDEA), which will provide a framework and tools for co-operation.

COL has initiated or supported the development of distance education in all of the seventeen Commonwealth countries in SSA (including South Africa). It has a mandate to create and widen access to learning and improve the quality of education through distance education methodologies. Since its inception in 1997, COL has focussed on the following areas:

- Instructional materials
- Telecommunications and technology
- Information services
- Training
- Continuing professional development.

UNESCO and COL have entered into a formal agreement to work closely with each other on matters of common interest. The two organisations co-sponsored the consultancy work that saw the development of the implementation plan for the Open University of Tanzania.

CIFFAD has been promoting distance education in French–speaking countries such as the Seychelles and Mauritius. ICDE and UNESCO have entered into a joint initiative called "Multi-Channel Learning Base" to serve 13 countries in Eastern and Southern Africa.

Based in Harare, Zimbabwe, this project is designed to strengthen the capacity of SSA countries to develop effective distance teaching systems. However, the initiative appears to be struggling to raise the necessary funding (Naidoo, 2001).

Furthermore, Agunga (1997) states that there is a wide range of international projects that have established bases in South Africa. There are various reasons for this, but one is clearly the reality that South Africa's relatively advanced basic infrastructure, at least in major urban areas, provides a useful platform for developmental initiatives. A few of the more prominent international projects that have operations in South Africa are outlined below. In each case, the information provided below is based on the project descriptions from the project literature.

11.1   THE AFRICAN INFORMATION SOCIETY INTITATIVE (AISI)

The Economic Commission for Africa (ECA) Conference of Ministers adopted *The African Information Society Initiative (AISI): an Action Framework to Build Africa's Information and Communication Infrastructure* in May 1996. AISI is also the principal activity within the United Nations System-Wide Special Initiative on Africa programme on Harnessing Information Technology for Development (HITD/SIA).

AISI had its roots in April 1995 with the African Regional Symposium on Telematics for Development organised by ECA, the International Telecommunication Union (ITU), UNESCO, and the International Development Research Centre (IDRC). Under the name Africa Networking Initiative (ANI), these organisations and others subsequently collaborated on a series of activitiesto engage African stakeholders in an evaluation of the AISA strategy for action. The AISI has set itself the goal of realising a sustainable information society in Africa by 2010. AISA indicates that to achieve this vision, Africa member states must:

- Ensure the continuous flow of information within the society by supporting initiatives to improve and create new information and communication services in different sectors of the society, including education, health, employment, culture, environment, trade, finance, tourism, transport and commerce;

- Create a continent-wide information and telecommunication network that allows low-cost and reliable communication with other users in Africa and across the globe;
- Achieve maximum benefits from available information by encouraging the development of systems that allow wide dissemination to individuals, business communities, non-governmental organisations and the public sector;
- Foster a new generation of men and women in Africa that uses information and communication technologies to leverage the development of their nations;
- Link Africa with the rest of the world by improving the flow of new technologies in both directions and exporting intellectual products and services to the rest of the world.

Thus, AISI attempts to provide a common international policy framework for action in participating African countries. SSA countries need to harness these information and communication technology endeavours to enhance distance learning programmes.

There are other encouraging signs in the adoption of ICT in SSA. Mukasa has provided an update. He noted that the Windhoek-based Media Institute for Southern Africa (MISA) was involved in providing information support for the regional media; the World Bank was initiating an internet project that will network several African universities; the Regional African Satellite Project (RASCOM), developed under the auspices of the International Telecommunication Union and the Organisation of African Unity (AU), was on the brink of launching Africa's first communications satellite, which would open tremendous possibilities in the continent's information flow; and the Pan African Documentation and Information System (PADIS), based in the Economic Commission for Africa of the United Nations headquartered in Addis Ababa, Ethiopia, was making major inroads in collecting and documenting information and knowledge about Africa. If all goes according to plan, PADIS may well turn out to be the largest database in Africa.

11.2   THE ACACIA INITIATIVE

The Acacia Initiative is an international effort led by the International Development Research Centre (IDRC) to empower Sub-Saharan African communities with the ability to apply information and communication technologies to their own social and economic development.

The initiative is expected to involve significant funding during its five years and to grow to maturity over the first quarter of the 21st century.

IDRC is a Canadian public corporation created in 1970 to strengthen research and information capacities in the developing world, and to assist developing countries in addressing their own problems more effectively. Over its 31-year history, IDRC has made significant investments in research, capacity building, and information and communication throughout the developing world. In fact, the IDRC was among the pioneers in the adaptation and use of ICTs in Africa. Acacia will build on IDRC's existing and emerging networks, programmes and partnerships. One key partnership is with the AISI. Acacia will work mainly with rural and disadvantaged communities, and particularly their women and youth groups. (<www.idrc.ca./acacia/5e.htm>)

11.3   WORLD LINKS FOR DEVELOPMENT (WORLD)

Another initiative by the World Bank is the World Links for Development (WorLD). WorLD aims to establish online educational communities for secondary school students and teachers around the world to expand distance learning opportunities, improve educational outcomes, enhance cultural understandings across nations, and build broad support for economic and social development.

WorLD intends to fulfil this vision by linking students and teachers in at least 1,500 secondary schools in 40 developing countries by the year 2000. WorLD linkages will facilitate the exchange of science projects, writing exercises, historical perspectives, artwork and dreams between students in developing countries and their peers around the world. The project will employ the following strategies:

- Promoting connectivity for schools in developing countries;
- Supplying educational content for collaborative learning and linking schools around the world;
- Training in a wide range of educational applications of information technology;
- Encouraging telecommunications policies that lower operating costs;
- Supporting the monitoring and evaluation of the educational impact of its programme; and

- Leveraging additional resources through other agencies and corporate sponsors.

WorLD initiated activity in South Africa in March 1997. It has been working closely with existing projects on the ground and co-ordinating its activities with the government, the Soweto Technology Project and the National SchoolNet South Africa. WorLD will provide initial teacher training and connectivity for ten schools in the network and work closely with the IDRC on various aspects of the programmes. For more information on WorLD, visit the websites listed in the references following this chapter.

11.4   AFRICAN DISTANCE LEARNING ASSOCIATION (ADLA)

An interesting development is the formation in 2001 of the African Distance Learning Association (ADLA). ADLA promotes the idea of an African Virtual University that will exploit existing education technology and the skill of African expatriates to assist African scientific and social institutions via traditional collaborations, volunteer teaching, information exchange, student exchange and the like. More information about ADLA, including its mission statement, can be found at <www.physics.ncat.edu/~michael/adla/>.

REFERENCES

African Distance Learning Association (ADLA). <<u>www.physics.ncat.edu/</u> <u>~michael/adla/</u>>.

Agunga, R. 1997. The Politics of Distance Education in the Development of Africa. A keynote address at the 12th African Educational Research Symposium on Politics and Education, Athens, Ohio, 21–22 February 1997.

Ivala, E. 1999. The Internet and Distance Education. A paper presented at the 1st National NADEOSA Conference, 11–13 August 1999.

International Development Research Centre (IDRC). The Acacia Initiative. (<<u>www.idrc.ca./acacia/5e.htm</u>>)

Mukasa, S. 1997. Internet Discussion on DECCO Conference Planning. Pretoria: Human Science Research Council.

Naidoo, V. 2001. Personal email. Date

World Links for Development (WorLD).
 <<u>www.worldbank.org/worldlinks/english/mission.htm</u>>;
<<u>www.worldbank.org/worldlinks/english/strateg.htm</u>>;
<<u>www.worldbank.org/worldlinks/english/safrica1.htm</u>>

12.   NATIONAL AND REGIONAL DATABASES

In Southern Africa there is the Southern African Global Distance Education Network Website called the Global Distance Education Net (GDEnet). GDEnet is a knowledge guide to distance education created to give assistance to the clients of the World Bank and other institutions and individuals interested in using distance education for human development. The network consists of the core site located at the World Bank and regional sites in all parts of the world. On the Southern African site (regional) data or resources about aspects of DE are organised by ten countries: Zimbabwe, South Africa, Zambia, Lesotho, Malawi, Swaziland, Namibia, Tanzania, Mauritius and Botswana. Information on DE is organised around four themes: teaching and learning, technology, policy and programmes, and management.

It is assumed that each of the regional and national associations identified above has its own database of contacts and information, but we have not yet been able to access this information.

NADEOSA contacts and information, including conference papers, can be found on its website, which is hosted by the South African Institute of Distance Education (SAIDE). The SAIDE website also contains more general information regarding the state of DE practice in South Africa. These two sources can be accessed from <www.saide.org.za>.

13.   CONCLUSION

This research report develops a common understanding of what distance and open learning mean from a Sub-Saharan Africa perspective. It explores various aspects of Distance Education and identifies the organisations that are engaged in DE activities in SSA, such as ADEA, WEADEA, EADEA, and DEASA. The report also includes a brief introduction to the databases where resources in relation to DE can be found. Finally it examines the factors that are likely to encourage development of DE in SSA.

Researchers for this report found that there is a dearth of literature regarding the management systems that countries and institutions have put in place to facilitate the implementation of DE provision. However, the literature does suggest that there is general recognition of three key factors:

- The need for government commitment to and support for the potential of ODL through the establishment of an enabling policy framework;
- The need to maximise the use of limited resources through a variety of collaborative relationships; and
- The need to decentralise the management of learner support services to maximise their effectiveness and responsiveness.

A clear policy framework, and clearly defined roles, responsibilities and lines of communication for DE managers, is highlighted as being of fundamental importance for quality provision of distance education.

Regarding curriculum issues, whilst evidence exists of countries in SSA seeking to design programmes to meet national needs, there are few available documents outlining the systems and processes that have been put in place to assure the quality of the curriculum design process. There has been some resistance to the implementation of Western or developed country DE models and curricula, but there has not been a concerted and consistent effort to develop regional models and criteria. Instead, individuals and individual institutions seem to work largely in isolation from one another to design their curriculum. The difficulty that the researchers have had in accessing relevant literature on on this subject is a testament to the fledgling nature of indigenous collaborative curriculum design processes. In fact, the researchers have experienced cases of staff within the same institution working on the development of the same kind of materials for the same target population!

The emerging National Qualifications Framework (NQF) in South Africa represents an interesting attempt to learn from international experience whilst developing a system that meets local needs and provides a policy framework applicable to all education and training providers.

On a related issue, little has been documented that is readily available regarding the processes people go through to develop learning materials. Whilst there does seem to be a growing recognition of the value of a teamwork approach, anecdotal evidence suggests that this is an ideal rather than a norm in many SSA institutions. Cost and tight deadlines are often cited as factors militating against a teamwork approach to the development of both print-based and multi-media packages.

Many SSA institutions face a critical shortfall in capacity with regard to course design and production, especially for the development of multi-media packages, which require a wide range of expertise. Most SSA institutions also lack the necessary production facilities for the development of either high quality print materials or multi-media packages.

Again, there is little evidence of a collaborative approach to the use of production facilities, which means that if an institution wished to move into a fourth generation mode of DE provision it would probably have to do so independently. For most institutions the cost of setting up the necessary infrastructure is prohibitive. This challenge is further exacerbated by the dearth of appropriately skilled technical support staff.

With regard to quality assurance, the report finds that there is a tendency in quality assurance processes in DE to replicate the same kind of academic verification processes that are found in more traditional contact-based institutions. Many SSA institutions find it difficult to recruit skilled and experienced DE specialists. There is therefore a danger that materials and processes will be quality assured from a traditional contact-based perspective rather than from informed concern with the particular needs of open and distance learning. Another risk is that quality assurance will be viewed as a once-off event rather than a continuous process.

There is, however, a growing recognition of the need to build learner support into DE programmes, especially for learners entering higher education from schooling systems that have tended not to prepare learners for independent study.

By and large, support is offered in the form of face-to-face contact sessions. Some institutions also use telecommunications, audio and video strategies to provide support.

The literature on learner support is often very descriptive in nature and does not explore the ways in which institutions assess the value of learner support initiatives. There seems to be a complete absence of comparative research and very little in the way of longitudinal studies on the impact of learner support strategies.

Although various countries are experimenting with the use of third and fourth generation technologies, these experiments are limited to a few institutions and projects with limited scope. The use of ICTs in SSA is severely hampered by a lack of expertise, a lack of infrastructure and a largely technologically illiterate user-group.

There does not appear to be an established culture of inter-institutional collaboration with regard to the establishment, maintenance and utilisation of ICT potential. However, a burgeoning cellular phone industry, the expanding terrestrial telephone system and exciting initiatives such as the recent commitment by the South African Government to making internet and email access available in post offices country-wide, indicate that given the necessary support, SSA is committed to closing the digital divide.

Finally, the difficulty that the researchers of this report have had in accessing information demonstrates that a lot of work remains to be done in documenting the theory and practice of ODL in SSA. The concerns raised in the rationale for this research seem to be justified.

Appendix:
Quality criteria for distance education
Developed by the Centre for Technology and Distance Education (CETDE) of the Department of Education in South Africa, 1998

Introduction

This policy statement focuses on the delivery of quality education through distance education methods in South Africa. It is an extension of existing policy research documents. Most directly, it falls within the framework of the First White Paper on Education and Training[1], and the National Educational Policy Act, which ensued, from it. The policy statement has been developed in response to a national and international quest for improving the quality of delivery of education, particularly distance education.

This statement is the culmination of an extensive period of research and consultation begun at a workshop held on 8 July 1996. At this meeting a research group was formed to conduct an investigation into the quality of distance education in South Africa. By December 1996 the research group had compiled a discussion document - *A Distance Education Quality Standards Framework for South Africa*. This document was circulated for discussion and comments, and was presented at a national workshop for stakeholders in April 1997.

LOCATING THIS POLICY STATEMENT IN THE EDUCATION AND TRAINING SYSTEM[2]

The education and training system can be divided into three sub-systems: physical systems, management and administrative systems, and learning systems. Change depends on development occurring in all three of these sub-systems and on the co-ordination and management of the system as a whole.

---

[1] Government of National Unity, 1995: *White Paper on Education and Training*, Notice No. 196 of 1995, Government Gazette No 16312 of 1995, Cape Town, Parliament of the Republic of South Africa.

[2] Directorate: Distance Education, Media and Technological Services, 1997: *The Use of Technologies in Education and Training: A Statement of Policy*, Pretoria, Department of Education.

The Physical System

This is made up of the physical environment and physical access:

• The physical environment is crucial to transformation. Without a sound basic physical environment, learning will always be fighting a losing battle against various levels of discomfort and insecurity. The requirements for a physical environment conducive to learning include clean running water, sewerage facilities, electricity, effective shelter, primary health care, appropriate and adequate workspace, security, and, where appropriate, school feeding.

• Learners and educators need to gain access to the learning environment in order to participate in it, and also need to be able to access the learning resources within that environment. Physical access is dependent on factors such as roads, transport, suitable buildings, and telecommunications links and facilities. In facilitating learners' access to sites of learning, some difficult choices may have to be made, such as choices between building more schools or providing transport to get to existing schools. In addition, managing the times at which learners can access facilities is also a key factor for cost-effectiveness, as well as motivation.

Management and Administration

This consists of two important aspects in the new education and training system: qualifications frameworks and the units of governance. Learning achievements in the form of unit standards and qualifications are being generated and set so as to be registered on the National Qualifications Framework (NQF). The NQF has two crucial functions, namely setting standards and quality assurance. It will take time to become fully operational.

Units of governance are perhaps the most difficult aspect of all within the overall educational and training system. What is required is that integrative units of governance are put in place effectively at different levels. At each level, key considerations will be costing, planning, co-ordination, and reporting and evaluation. Various Acts at National and Provincial level are laying the basis for establishing governance structures within the Departments of Education.

There is also a range of people-development initiatives taking place in different places within government (at national and provincial levels), which need to be drawn together for co-ordinated impact.

Learning systems

One role of the state is to provide, in broad terms, access to learning resources as well as access to the mediation of learning resources in the public domain. Learning resources might include print media; apparatus (from that used in early childhood development through to high-tech machinery used in science and technology as well as vocational training); audio-visual media; multimedia and, now, hypermedia.

It is by now well documented that South Africa's education and training system has been ravaged by many years of apartheid educational policy and international isolation. For the purposes of this policy statement, it is, however, worth re-emphasising some relevant features of the current system. They are as follows:
- inadequate and/or badly maintained physical infrastructure;
- enormous distances in some provinces, compounded by the lack of any transport infrastructure in many areas;
- lack of communication facilities, leading to a lack of information on, and support for, new developments in education approaches, new curricula and resource use (such as technologies);
- lack of access to libraries and other resources;
- lack of access to peer group support - among learners, educators and educational providers;
- lack of a supportive environment for pedagogical and professional development; and
- the absence of a flexible opportunity and reward structure to encourage educational providers to invest time and effort in transforming education and training through strategies designed to enhance teaching and learning processes, including the use of technology.

THE FOCUS OF THIS DOCUMENT

This policy statement focuses on delivering quality education and training in all aspects of distance education and is not limited to any sector or sub-system of education.

It is important that all sub-systems are managed in an integrated fashion so that the transformational goals of access, equity, redress, relevance, and quality will become possible.

Such a set of Criteria for Quality Distance Education in South Africa could play an important role in the continuous task of building and assuring quality in education and training.

WHY CRITERIA FOR QUALITY DISTANCE EDUCATION?

The White Paper on Higher Education (A Programme for the Transformation of Higher Education - Education White Paper 3)[3] states the importance of increased provision of distance education and resource-based learning. This must be based on the principles of open learning in order to meet 'the challenge of greater access and enhanced quality in a context of resource constraints and a diverse student body.' This is an extension of the statement in the 1995 White Paper on Education and Training[4] that 'the Ministry of Education is anxious to encourage the development of an open learning approach, since it resonates with the values and principles the national education and training policy and has applicability in virtually all learning contexts.' Already there is a marked increase in the numbers of new distance education and resource-based learning programmes, not only in the higher education sector, but also across all sectors of educational provision. A further factor is the rapidly growing interest from overseas educational institutions in South Africa as a market.

However, most recent research work done into distance education in South Africa indicates quite clearly that the quality of distance education practices in South Africa are not all of equal level. The general assessment made by an international commission in 1994 on distance education in South Africa[5] was that distance education provision does not always contribute positively to the priorities for education and training as set out in the *Policy Framework.*

---

[3] Ministry of Education, 1997, *White Paper on Higher Education (A Programme for the Transformation of Higher Education - Education White Paper 3)*, Government Gazette vol. 386: Notice 1196 of 1997, p. 26

[4] Department of Education, 1995, *White Paper on Education and Training*, Government Gazette vol. 357: no 16312 of 1995, p. 28

[5] SAIDE, 1995, *Open Learning and Distance Education in South Africa: Report of an International Commission, January - April 1994*, Macmillan, Johannesburg, p. xxii.

More recent research into the quality of teacher education offered at a distance in South Africa confirmed this finding, while the White Paper on Higher Education has also reflected such concerns: 'the Ministry is concerned about the efficiency, appropriateness and effectiveness of much current distance education provision'[6].

Criteria for Quality Distance Education are needed both to assist in the improvement of the quality of existing distance education provision, and to inform new initiatives, both local and overseas, in distance education and resource-based learning in South Africa.

TO WHOM SHOULD THE CRITERIA FOR QUALITY DISTANCE EDUCATION APPLY?

In South Africa, as in the rest of the world, distance education provision extends across all educational sectors, and is not restricted merely to the higher and further education sector. Quality assurance mechanisms that are developed for distance education in South Africa, therefore, need to be appropriate to all educational sectors.

Distance education students are enrolled in large numbers in both public and private institutions in South Africa. Quality assurance needs therefore to cover private as well as state provision.

Finally, distance education provision is not only undertaken by institutions or organizations. It can be undertaken by a programme within an organization, or it can be a collaborative project involving a number of partners (public and private organizations, stakeholders and community structures) or it can be an initiative to bring about systemic change and development. In the Criteria for Quality Distance Education that follow, all these types of providers are implied by the phrase 'educational provider'.

---

[6] Ministry of Education, 1997, *White Paper on Higher Education (A Programme for the Transformation of Higher Education - Education White Paper 3)*, Government Gazette vol. 386: Notice 1196 of 1997, p. 27

SHOULD THE CRITERIA FOR QUALITY DISTANCE EDUCATION APPLY TO DISTANCE EDUCATION PROVISION ONLY?

There are numerous distance education initiatives in formerly traditional 'residential' universities and technikons. The White Paper on Higher Education[7] also encourages contact and distance education institutions to provide effective learning environments on a continuum of educational provision in which contact, distance, mixed-mode and dual mode educational opportunities are in principle available to all learners.

This gives some indication that South Africa is part of the world-wide trend towards the convergence of distance education and conventional education. In the light of this, assuring the quality of distance education should be seen as a mainstream educational activity - it is assuring the quality of education, not just part of education.

The strategic initiatives suggested in this policy document point the way to how this can be achieved.

Most of the criteria outlined in this statement are applicable to all educational provision. It is only in the area of human resource strategy that criteria appear which apply specifically to distance education organizations. These are elements 1, 2 and 3. These elements point to the distinctive feature of distance education providers, which is not the production of course materials, but the necessity for increased specialization of staff.

WHAT IS THE APPROACH TO QUALITY ASSURANCE TAKEN IN THIS STATEMENT?

Criteria for Quality Distance Education are necessary to provide an agreed description of quality education. But it is equally clear that Criteria for Quality Distance Education, on their own, cannot assure the quality of educational provision. *They need to be used in a broader national quality assurance strategy that includes a measure of external quality control as well as the development of internal quality processes.*

---

[7] Ministry of Education, 1997, *White Paper on Higher Education (A Programme for the Transformation of Higher Education - Education White Paper 3)*, Government Gazette vol. 386: Notice 1196 of 1997, p. 27

The Criteria for Quality Distance Education in this document have been written as descriptive not as regulatory. They focus on providing specific guidance for good practice, and not on outlining a set of minimum requirements. This approach has been taken because distance education methods are increasingly being employed in a multitude of educational contexts in South Africa, where the needs and requirements are often very different. It soon becomes clear that, in such an environment, attempting to set universally applicable measurements for these Criteria for Quality Distance Education is a futile exercise. Educational providers should use the criteria as guidelines for the development of performance indicators specific to their context and type of provision.

EXPLANATION OF SOME KEY TERMS

Different modes of educational provision

Part of Keegan's[8] definition of *distance education* is useful to distinguish distance education from conventional contact tuition: distance education is 'the quasi-permanent separation of teacher and learner throughout the length of the learning process'. This does not necessarily mean that there is no contact between teacher and learner. There can be the provision of considerable human support. However, the major teacher is the courseware - the materials mediated through various technologies - rather than the speaking teacher. While separation of teacher and learner is a principal distinguishing feature, it needs to be remembered that there is also the benefit to the student of the removal of restrictions relating to the timing and location of instruction. So distance education both removes barriers to and increases the choices about educational provision for individual learners.

Resource-based learning, as understood in South Africa, could take place in a contact institution. The key to the difference between contact tuition and resource-based learning is the role of the teacher.

---

[8] Keegan, DJ, 1986, *The Foundations Of Distance Education,* London: Croom Helm, p.49

Even though the teacher may be present (unlike in a distance situation), the shift in emphasis in the teaching and learning process is from the teacher as the source of knowledge/information to the teacher as the facilitator of learning from resources. The resources have typically been selected and adapted not only for their content, but also for the ways in which they support independent study.

Mixed mode education is where the same learners often within a single programme receive combinations of contact tuition, resource-based learning and distance education.

A *dual mode* institution is one in which some programmes are offered by distance education and some programmes are offered by contact tuition.

Flexible learning allows for the customization of mass learning by providing for a choice of learning methods and opportunities in addition to freedom of access, pace, place and time. The distinction in today's situation is historically based. More and more face-to-face institutions are realizing that to deliver quality to a growing mass of learners, quality distance education methods must be used in more and more instances.

Programmes, courses and course materials

Key to an understanding of this document and the issues in distance education is the understanding of the difference between a programme and a course, and the difference between the categories of course design and course materials used in the Criteria for Quality Distance Education.

Programme development and course design both relate to curriculum, as defined in its most basic sense: 'a course of study at a school, university, etc.; the subjects making up such a course' (Shorter Oxford Dictionary). They also relate to curriculum in its broader educational sense - concern with content, pedagogy, and assessment as the basic elements of the curriculum.

Programme development concerns itself with the curriculum in macro planning of groups of courses, how they combine to realise a general educational goal or set of outcomes (such as a degree, diploma, or certificate), as well as the procedures governing access and articulation with other programmes (see below for a discussion of these terms).

Course design concerns itself with planning the content, pedagogy and assessment in individual courses. The course is more than the materials. It is the structure of learning that is designed into those materials,[9] and includes the range of learner support mechanisms and assessment strategies that are integrated with course materials in providing the course to the learner. Thus, course design involves looking at all of the elements of a course, and ensuring that they are integrated in the most educationally appropriate and cost-effective ways.

Course design involves selection of media and technology. The Criteria for Quality Distance Education follow the understanding of these terms provided by the Discussion Document entitled *Technology Enhanced Learning Investigation in South Africa*[10]. *Media* are means of communication such as face-to-face contact, written text, graphics, audio communication, or video communication. Various forms of *technology* provide the means of delivery. For example, written text can use either print technology or computer technology as a means of delivery.

Course materials (otherwise called courseware) are the concrete products that are results of programme development and course design activities.

They are learning materials in any medium or combination of media. The way they are presented and used is determined by how they are structured into the overall design of the course.

Learner support

Counselling is a form of learner support. Learners have counselling needs before they enrol for a particular programme, while they are engaged in a programme and when they complete a programme. Before they enrol, learners need guidance about choice of course or programme. Once enrolled, they need information and guidance about payment of fees, registration procedures, requirements of the course, contact sessions and assessment procedures.

Either the administrative staff or a tutor can provide such information and guidance. In addition, learners need advice on matters of learning management - such as choice of courses and learning pathways, how to work with the course materials, how to tackle assignments, how to plan their study; they need *academic*

---

[9] SAIDE, 1995. Well-functioning distance education. Reference Paper no 9.

[10] Department of Education, 1996. *Technology Enhanced Learning Investigation in South Africa: A Discussion Document*, Report of the ministerial committee for development work on the role of Technology that will support and enhance learning, p.154

support to develop the skills of reading, writing and study that are required for successfully completion of the course. Learning management counselling can be written into the course materials or provided on an individual or class basis by a tutor. After the learner completes the programme, he may need career advice or advice about further learning opportunities.

Contact sessions are also part of learner support. These can take the form of study group meetings with peers, of tutorials/workshops/seminars under the guidance of a tutor, or of practical sessions such as school experience or laboratory work.

An individualized form of learner support provided by tutors of distance education learners is *teaching on assignments*. The tutor uses the assignments submitted by the learners to comment on the assignments and provide individual feedback to the learner. The *turnaround time on assignments* - that is, the time taken for the learner to receive feedback on work submitted - is critical for effective teaching on assignments. The responsibility for keeping the turnaround time to a minimum is shared between the tutor/marker and the administrative system.

Tutors, in ways described above, provide learner support. However, mentors can also give learners human support in work-based learning situations.

Mentors are facilitators of learning who are also experienced in the particular work that the learner is being trained for.

Learner assessment and accreditation

In the context of the South African Qualifications Authority Act and the development of the National Qualifications Framework, a number of terms have been used in the Criteria for Quality Distance Education.

In the criteria referring to the design of programmes and courses, the term 'learning outcome' has been used frequently. Learning outcomes 'refer to the specification of what learners are able to do at the end of a learning experience. This includes skills, knowledge and values that inform the demonstration of the achievement of an outcome or a set of outcomes.'[11]

---

[11] Department of Education, 1997, *Curriculum 2005: A Discussion Document*

Where the term 'aim' is used in the criteria, it refers to aims of the teacher or designer of the programme, rather than the accomplishment of the learner.

Assessment in the new paradigm introduced by the National Qualifications Framework is assessment of learning outcomes according to certain *assessment criteria*, which specify the required level of performance for each outcome. *Assessment procedures or processes* include details of how the assessment is to be done - evidence required (for example, oral, written, practical, or portfolio combination of varieties of indicators of achievement of outcomes), schedule of assessment (time scale), and people involved in the assessment.

Assessment exemplars are samples of marked student work with a rationale for comment and grading - they are provided in order to guide markers.

A range of ways of assessing achievement of outcomes makes it possible to credit learners who have not gone through the particular course or learning programme with achievement of those learning outcomes as a result of their demonstrated experience or prior learning. This is called *recognition of prior learning and experience.*

Accreditation, according to SAQA (Government Gazette no 18221, 29 August 1997), means 'the evaluation and formal recognition of the quality management system of a body'. Accreditation of a 'body' to deliver a programme or programmes would involve investigating the provider in terms of criteria such as those outlined in the thirteen sets of criteria in this document - including the level of the programme, the reliability and validity of the assessment procedures, and the effectiveness of external and internal moderation processes.

According to the new paradigm, *credits and notional hours of learning* are closely related. According to the decisions of SAQA on unit standards (August 1996), 'a credit indicates the time an average student would take to achieve [the set of learning outcomes]'. In distance education, course designers are required to measure the duration of the course in terms of time spent by learners, not only on reading, but also on working through the activities in the materials, and completing the assessment.

If their courses fall under the NQF, they may, in addition, have to provide a credit description of their course. Each credit, according to the decision of SAQA, is equal to ten hours of learning time.

Clear definitions of learning outcomes, assessment procedures and accreditation procedures make *articulation* possible between different sectors of education and training as well as within and between programmes at the same and different institutions. The purpose of flexible articulation is that learners are to facilitate lifelong learning and enable learners to choose their own learning pathways.

Quality Assurance, Evaluation and Monitoring

Quality assurance involves establishing and maintaining self-improving processes and systems in an institution or programme. In order to be self-improving, the establishment of systems and processes needs to be followed by action, evaluation and revision, followed by more action, evaluation and revision in a cyclical pattern. The aim of quality assurance is to anticipate problems rather than merely react to them.

A process of institutional self-evaluation should involve everyone in the organization. Very often an institutional self-evaluation process is undertaken as preparation for an institutional *audit* in which the performance of the institution is measured according to the existence and effectiveness of its systems.

As is implied above, e*valuation* is a necessary part of quality assurance. Systems and processes in educational institutions are in themselves of little importance, unless they can be seen to contribute to the educational effectiveness of the lesson, course, and programme. A useful definition of evaluation is that it is 'a process by which we arrive at a judgement of the educational effectiveness of anything, from a lesson to a course or a whole curriculum'.[12] Evaluation can be both formative and summative. Some methods of formative course evaluation are referred to: *critical commenting* is the process whereby comment on work-in-process is elicited from peers with particular expertise; this should be accompanied by *developmental testing* in which comment from learners in the target group is solicited as part of the process of course writing; when there is a completed product, a *pilot* of the course can be run with a fairly large sample of learners, so that there is an opportunity to see the extent to which the course 'works' before it is printed in its final version.

---

[12] Hodgson, Barbara, 1993, *Key Terms and Issues in Open and Distance Learning,* London: Kogan Page, p.47

In addition to evaluation of the kinds described above, ongoing monitoring is a necessary aspect of quality assurance. *Monitoring* is a way of systematically gathering information so that programme staff can easily see how the programme is running, what can be done to improve the functioning of the systems, or prevent things from going wrong. Patterns can be picked up from information provided by such means as attendance registers at contact sessions, assignment records, or records of individual contact between tutor and learner. These patterns can be discussed and solutions found to emerging problems before they become too large.

CRITERIA FOR QUALITY DISTANCE EDUCATION

1.   POLICY AND PLANNING

The educational provider has a clear sense of purpose and direction, which is informed by national priorities as well as by the quality demands of cost-effective educational provision.

ELEMENTS OF THE CRITERION

1. The mission statement of the educational provider sets out clearly and unambiguously the goals and the principles according to which it operates, and areas of legitimate operation.

2. Policy statements and strategic plans arising from the mission statement are appropriate for the national and local context and responsive to changing contexts.

3. If slogans and mottoes are used, they reflect the mission, goals and principles and do not contradict policy.

4. There are policy statements on
   • programme development;
   • course design;
   • course materials development;
   • services to and responsibilities of learners;
   • learner support, including tutors and mentors;
   • assessment;
   • language of teaching and learning, as well as of internal and public communication;
   • human resource strategy;
   • management and administration;
   • finances, fees and payment regulations;
   • quality assurance and review;
   • evaluation and research;
   • marketing;
   • accreditation; and
   • collaboration.

5. There is a published statement of the educational provider's commitment to learners.

6. Implementation plans are realistic and designed to enable targets to be met.

7. Policy statements and methods of implementing them are recorded, readily available, and fully understood by members of staff.

8. There are monitoring procedures to ensure that all policies are implemented, evaluated, and amended as and when necessary.

9. Equal opportunities are ensured for all learners, staff and other clients.

2.   LEARNERS

There is a system for updating detailed information about past, present and potential learners and using the information to inform policy and planning of programme development, course design and materials development, learner support, and other relevant aspects of educational provision.

ELEMENTS OF THE CRITERION

1. The educational provider has information about learners under the following categories:
   - demographic factors - for example, age, gender, geographic location, and occupation;
   - language profiles - including language ability in main language of teaching and learning, language background, and multilingual language ability;
   - motivation for learning - for example, for career purposes or personal interest
   - educational background/learning experience - for example, prior learning and experience, prior qualifications, experience of distance learning, learning skills and styles, and language background;
   - special needs - for example, physical handicaps or learning difficulties;
   - resource factors - for example, place of learning, times available for learning, access to electricity, access to media and technologies, and financial resources for purchase of additional materials;
   - experience and knowledge of technology; and
   - success rates of past and present learners.

2. Research into learners and their needs is a high priority and is used to inform all aspects of policy.

3. Learner information is used to design programmes, courses, materials, learner support, and counselling services that are flexible and learner-centred.

4. Supplementary materials and learner support are provided according to the needs of learners in relation to language and learning experience.

5. Tutors have access to information about their learners and contribute to the collection of such information.

6. Systems exist to maintain the confidentiality of information about learners.

7. Special needs (for example, physical handicap) are considered in the design of course materials, assessment arrangements, and communication with tutors.

8. The educational provider is aware of and caters for learners with learning difficulties.

3. PROGRAMME DEVELOPMENT

Programmes are flexible and designed with national needs as well as the needs of prospective learners and employers in mind; their form and structure encourage access and are responsive to changing environments; learning and assessment methods are appropriate to the aims and purposes of the programmes.

ELEMENTS OF THE CRITERION

1. For each programme, there is a publicly accessible description of aims and learning outcomes, target group, style of learning and teaching, features of the learning environment and resources, pattern of assessment, and, where appropriate, accreditation arrangements and articulation with other programmes offered by the educational provider, in the workplace or other educational providers.

2. The programme is developed in terms of a needs analysis based on an audit of existing courses and programmes, market research, liaison (where appropriate) with industry and professions, national and provincial priorities, and the needs of the learners.

3. Wherever possible, courses are used in more than one programme.

4. Educational providers compete on the basis of quality rather than on the number and variety of the programmes and courses they offer.

5. The outcomes, content, and assessment methods in the programme are appropriate for the level and purpose.

6. The various courses of the programme are integrated.

7. Entry requirements for the programme are as open as possible, and include recognition of prior learning and experience.

8. The trend in programme design is to allow for flexible exit points rather than to insist that students complete a fixed set of courses over a lengthy period of time.

9. Learners are allowed to negotiate a time frame for the completion of the programme.

10. Learners are made aware of credit requirements of the programme and the possibilities for transfer to other programmes in the same or other educational providers.

11. Where appropriate, assessment is linked to accreditation and fulfils the requirements of external quality assurance bodies.

12. Procedures for the approval of programmes are not cumbersome and allow for and encourage innovation and flexibility.

13. There are clearly understood processes for the development and regular evaluation of the programme involving relevant stakeholders.

14. Human resource planning is an integral part of programme development.

4. COURSE DESIGN

The course curriculum is well-researched, with aims and learning outcomes appropriate to the level of study; content, teaching and learning and assessment methods facilitate the achievement of the aims and learning outcomes; there is an identified process of development and evaluation of courses.

Elements Of The Criterion

1. For each course, there is a publicly accessible description of the aims and learning outcomes, credit rating and/or notional hours of learning, target group, style of learning and teaching, features of the learning environment and resources, and pattern of assessment.

2. The course is designed with national needs as well as the needs of prospective learners and employers in mind.

3. The list of courses offered by an educational provider is limited to a number that allows for quality investment in course design and development in the context of budgetary limitations. (Quality is defined by the criteria in this document).

4. The outcomes of the course are in line with the demands of appropriate bodies, nationally and internationally, as well as human resource development needs.

5. The course is developed with the needs, knowledge and experience of the target learners in mind.

6. Content and assessment strategies facilitate the achievement of the learning outcomes.

7. Various forms of learner support are built into the design of the course and develop sufficiently the appropriate skills of the learner.

8. There is a stated language policy for the course which is based on the national language policy, language profiles of learners, career context and curriculum. The policy is implemented in course materials, assessment and learner support.

9. The choice of media and type of technology is integrated into the curriculum design, and is justified in the light of the aims of the course, the required learning outcomes, and learner needs and contexts.

10. Active teaching and learning methods help learners achieve the outcomes, and encourage critical thinking and independent learning.

11. Teaching and learning strategies are varied and cater for different learning needs, styles and contexts.

12. Assessment methods provide for a range of contexts and give comprehensive feedback to the learner.

13. The assessment strategy includes effective moderation procedures.

14. Entry level skills, knowledge and experience are made explicit for each course.

15. The educational provider makes relevant competence requirements of authors, consultants, and others that are brought into the course design and development process.

16. The educational provider gives authors, consultants, and others involved in the course design and development process necessary guidance and training regarding aspects of distance education in order to assure quality in their work.

17. An appropriate infrastructure exists within the educational provider to administer the range of elements of the course efficiently.

18. The quality of the design and presentation of the course, as well as its cost-effectiveness, is evaluated in terms of the numbers of learners successfully completing the course.

5. COURSE MATERIALS

The content, assessment, and teaching and learning approaches in the course materials support the aims and learning outcomes; the materials are accessibly presented; there is an identified process of development and evaluation of course materials.

ELEMENTS OF THE CRITERION

1. If existing course material is used for a particular course, its suitability is evaluated in terms of required learning outcomes and its appropriateness for target learners.

2. If existing course material is used for a particular course, there is proper acknowledgement of the source of all quotations and no breach of local or international copyright laws.

3. The development of course material is based on a project plan which describes, for example, routines, finances and other resources, the delegation of responsibility among those involved, and an adequate time schedule for the work.

4. The course development plan includes provision for evaluation during the developmental process in the form of critical commenting, developmental testing, or piloting.

5. There are mechanisms to allow for the periodic revision of the material in the light of ongoing feedback from learners and tutors and advances in knowledge and research.

6. The course is developed with the needs, knowledge, and experience of the target learners in mind, as well as the required learning outcomes.

7. There are clearly laid out aims and learning outcomes, and an explicit indication of study time (notional study hours per section of the material) which allow learners to adopt sensible study plans.

8. The content of the course is sufficient, accurate, up-to-date, relevant to aims and outcomes, free of discrimination, and reflects awareness of the multilingual and multicultural reality of South African society.

9. Active learning and teaching approaches are used to engage learners intellectually and practically, promote learner responsibility, and cater for individual needs.

10. The various elements of the course materials and different media are integrated, and the integration is clearly sign-posted.

11. The course materials are designed in an accessible way.

12. The overall technical quality of the materials facilitates learner use.

13. The language used in the course materials reflects the stated language policy for the course and is accessible to the learners.

6.   ASSESSMENT

Assessment is an essential feature of the teaching and learning process, is properly managed, and meets the requirements of accreditation bodies and employers.

ELEMENTS OF THE CRITERION

1. Assessment is integral to and integrated into every learning and teaching strategy adopted, and includes formative as well as summative processes.

2. Assessment is a measurement of the achievement of learning outcomes.

3. The assessment strategies in a course are congruent with the aims and outcomes of student learning in the course.

4. A range of parties, besides the educator, is involved in assessment of learners: for example, there might be self-assessment, peer assessment, and assessment by employers.

5. Assessment information (including learning outcomes, assessment criteria as well as assessment procedures and dates) is provided in all courses, modules or topics, and assessment exemplars are made available to assessors and learners.

6. Records are kept so that learners can receive detailed and accurate feedback on their progress/performance.

7. If students have a complaint about the fairness of the assessment, there is a system whereby they can appeal.

8. The processes and results of assessment fulfil the requirements of accreditation bodies.

9. The processes and results of assessment are relevant to the needs of employers, community educational providers, and government departments.

10. Employers such as the private sector, government, non-governmental educational providers and the community have access to statements of learning outcomes for relevant courses/programmes as well as the level of achievement of the learners of these outcomes.

7.   LEARNER SUPPORT

Learners are supported to a considerable extent to become independent learners through the use of various communication systems; the need of learners for physical facilities and study resources and participation in decision-making is also taken into account.

ELEMENTS OF THE CRITERION

1. Learners are supported to become independent learners through the use of various forms of technology for tutoring at a distance, contact tutoring, teaching on assignments, mentoring (where appropriate), counselling (both remote and face-to-face) and the stimulation of peer support structures.

2. Academic support is built into the design of the course materials.

3. Tutors are selected and trained for their role of facilitating learning. The training places particular emphasis on equipping tutors to analyze and assist learners with language and learning difficulties.

4. Sufficient contact sessions are arranged to enable learners to use the course materials effectively for learning.

5. Tutors are accessible to learners for individual tutoring.

6. Tutors are trained to teach on assignments by giving constructive feedback.

7. The turnaround time on assignments is kept to a minimum and specified to the learners so that they can use feedback to inform their learning on an ongoing basis.

8. Adequate administrative and professional support is provided to tutors.

9. Tutor performance is monitored regularly.

10. Feedback is sought from tutors for the review of courses and programmes.

11. Administrative staff are trained to be helpful, clear and consultative in the way they relate to and make arrangements for learners.

12. Learners have access to counselling before and during their course or programme, as well as after its completion.

13. The obligations and responsibilities of the learners and the educational provider are made clear at registration. It is clear what resources and equipment the provider will supply, and what the learner will have to supply himself.

14. Satisfactory and cost-effective arrangements are made to meet learners' needs for physical facilities for study, tutorial, and resource space.

15. There are functioning systems for follow up and support of learners throughout the duration of their study.

16. Learners have access to the facilities (for example, libraries) and equipment that are necessary for their successful learning.

17. Learner structures such as student representative councils and faculty associations are established, recognized and empowered to represent learners on structures of institutional governance.

8. HUMAN RESOURCE STRATEGY

The staff structure as well as the experience, qualifications, responsibilities and job descriptions of staff are appropriate for the education and training services provided; staff induction and development programmes equip staff to perform their roles and tasks effectively.

ELEMENTS OF THE CRITERION

1. Distance education teaching tasks are distributed among separate functional responsibilities; for example, course design, instructional design, electronic media use, editing, tutorial support for learners, monitoring of tutors,

counselling, assessment, and management of the distance education learning system.

2. The number of full-time academic staff in the educational provider is as small as possible, but the number of tutors (mostly employed on a part-time basis) is sufficient to provide for the individual needs of the students.

3. The educational provider employs sufficient administrative and technical staff to handle the specialized tasks of registry, despatch, management of assignments, and administrative support.

4. Staff (academic, tutoring and administrative staff) work in teams to design and manage successful learning.

5. Staff selection and promotion criteria give priority to quality of performance in course development, teaching, and management of learning.

6. Staff is trained, monitored, and retrained for the specialized roles and tasks they perform.

7. Academic workload is measured in terms of the following:
   - course design
   - preparation of course materials
   - piloting of courses
   - devising and participating in assessment strategies
   - supervision of tutors/markers/other staff
   - monitoring the success of the course
   - research and evaluation
   - contact hours with learners.

8. Staff development is regarded as the responsibility not only of the individual, but also of the particular department and educational provider in which the individual works.

9. There are systems for the dissemination of newly acquired skills and information.

10. There is an effective performance management and appraisal system for all staff.

9. MANAGEMENT AND ADMINISTRATION

There is effective, transparent and democratic management of communication and information as well as human and material resources; efficient administrative systems support the activities of the educational provider; the educational provider is financially sound and can make reliable educational provision.

ELEMENTS OF THE CRITERION

1. There are clear lines of accountability within the educational provider, between the educational provider and its governing structures, and between the governing structures and the community.

2. Proper accountability structures and mandates for responsible officers are in place.

3. Staff and students and external stakeholders are represented on governance structures.

4. There are effective systems for communication with current and potential learners, with key outside bodies, with governance structures, and with all staff and tutors involved in courses.

5. Mechanisms are in place to prevent staff from using their position of power within the institution to generate extra revenue for personal benefit or double payment for the same work.

6. Enquiries, applications and complaints are dealt with quickly and clearly within a structured administration system.

7. The enrolment practices include provision of accurate, helpful information to prospective learners, as well as efficient handling of money and registration information.

8. The production and delivery of course materials is fast, accurate, and reliable. Where existing systems prove inefficient, creative alternatives are found.

9. There are clear procedures to receive, record, process, and turn around assignments.

10. The turnaround time on assignments is kept to a minimum.

11. Learners' questions are answered quickly, clearly, and supportively.

12. Learner records (for example, contact details, assessment results) are detailed, up to date, and accessible to tutors, academic and administrative staff.

13. Tutor records (for example, qualifications and experience of tutors) are detailed for each tutor and available to tutor-monitors.

14. The examination system, where it is necessary, is reliable and valid.

15. Records of course results can be analyzed to give completion rates for each group of learners.

16. Facilities, equipment, and materials support the learner and are appropriate to the education and training services provided.

17. Equipment and facilities are well managed and maintained.

18. Staff and learners are trained in the use of the equipment, facilities, and communication and information systems.

19. Proper budgetary processes are in place to ensure that the allocation of resources reflects the goals, values and principles of the educational provider.

20. Financial procedures (for example, handling of fees, orders, accounts, receipt of external funds, and part-time and full-time salaries) are known and adhered to.

21. There are budgeting procedures in place to deal with the allocation of resources and monitoring of expenditure. The budgeting procedures are flexible enough to promote and enable constructive experimentation in design and delivery methods.

22. Proper evaluation systems are in place to compare estimated goals and budgets with actual achievements.

23. Clear decision-making structures exist for seeking and receiving funds and the allocation and control of resources.

24. Financial aid is provided for learners, external funding and donations permitting. Information about financial aid is clear to all learners.

25. There is a system for reviewing the quality procedures used and ensuring that all changes are effectively communicated.

10.   COLLABORATIVE RELATIONSHIPS

In the interests of cost-effective provision of education and training, collaborative relationships are formed and collaborative projects are undertaken wherever possible.

ELEMENTS OF THE CRITERION

1. Wherever possible, collaborative relationships (involving public and private institutions, governmental and non-governmental educational providers, stakeholders and/or community structures) are formed for:

   - sharing developed courses;

   - jointly developing new courses;

   - sharing facilities such as libraries and learning centres;

   - sharing regional centres for learner registration, distribution of study material, and examinations;

   - collaborating in the delivery of programmes; and

   - collaboration in terms of research.

2. The membership of relevant associations and forums is encouraged.

3. In the organization of consortia for course development or delivery, structured contractual relationships are formed to protect the interests of all parties including the learners.

11.   QUALITY ASSURANCE

A continuous review of the quality system ensures that learners' and staff needs as well as the needs of other clients are met.

ELEMENTS OF THE CRITERION

1. The management ensures that, in its day-to-day work, the educational provider's activities meet the Criteria for Quality Distance Education set nationally and provincially as well as the provider's own policy for the different elements (as listed in point 4 under policy and planning above).

2. There is an organizational culture that encourages efforts to improve the quality of the education.

3. There is a clear cycle of planning, development, documentation, reporting, action, and review of policy and procedures within the educational provider.

4. Staff development is seen as fundamental to quality service provision.

5. There are clear routines and systems for quality assurance and staff is familiar with those that relate to their work.

6. Staff, learners, and other clients are involved in the process of quality assurance and quality review.

7. Internal quality assurance processes are articulated with external processes such as those to be introduced by South African Qualifications Authority.

12. INFORMATION AND MARKETING

The needs of the learners and other clients are accurately addressed; the education and training services of the educational provider are effectively promoted in a variety of ways.

ELEMENTS OF THE CRITERION

1. There are sufficient systems and techniques in place for the accurate identification of market needs.

2. The publicity provided for each programme is accurate and sufficiently detailed to enable applicants to make an informed choice. (The following is a suggested list of such information: target group(s), entry requirements, aims and learning outcomes, content, learning material, teaching and learning activities, scope of programme, learner support services, assessment and accreditation procedures, price, payment conditions, right to return course materials, recommended time limits for completion, and terms regarding interruption/postponement).

3. Employers and others who enter into collective agreements regarding education or training have received sufficient and correct information about the content and outcomes, entry requirements, implementation and aims of the programme.

4. The educational provider's advertisements are truthful, objective and informative and meet the clients' needs.

5. Information about programmes reaches as many of those who can be expected to have a need or use for these programmes as possible, given limitations imposed by resources and available information channels.

13. RESULTS

Note: This criterion is intended to summarize the main results shown by a successful education provider. The Criteria for Quality Distance Education for each of the elements of distance education will assist or, in some cases, are vital for the attainment of these results. In the end, however, an educational provider will be judged by the degree of success in the achievement of valid learning and teaching goals, the satisfaction of its clients, the self-improving ethos in the educational provider, cost-effectiveness, and the type of impact on society.

The programme achieves valid teaching and learning goals in cost-effective ways that have a positive impact on society and meet the needs of clients and national priorities.

ELEMENTS OF THE CRITERION

1. The mission and policy of the educational provider are in accordance with the principles and policy in the relevant national education and training acts and the economic and educational needs of the country.

2. The educational provider fulfils its mission.

3. The aims, entry level skills knowledge and experience, learning outcomes and content of the courses, course materials and programmes are valid, relevant and up to date.

4. The programmes, courses and course materials are informed by and meet the needs of the stakeholders and target learners.

5. Counselling and support systems are informed by and meet the needs of the target learners.

6. The administrative systems are informed by and meet the needs of learners and of staff involved in programme/course/support design and delivery.

7. Assessment is reliable and focuses on learning goals and outcomes.

8. Assessment results and/or evaluation and monitoring mechanisms show that sufficient learners achieve the outcomes that are established for individual programmes and courses.

9. The educational provider has quality systems in place to ensure continuous self-improvement.

10. Staff is all involved in a co-ordinated way in continuous improvement of the programmes, courses, course materials, administration, and support services.

11. Sufficient numbers of learners complete the individual programmes and courses successfully to justify the cost in time and personpower for the design of the programmes, courses and learner support system.

12. The educational provider has financial results that afford the learners a reasonable prospect of completing their studies, and sufficient surpluses to ensure the future development of products and services.

Strategic Initiatives

The Department of Education is focusing on the delivery of quality education to all South Africans. It also considers distance education as an important means to attain their goals of redress and access, in collaboration with others. To deliver quality education using distance education methods, various short, medium and long term initiatives must be undertaken. These are outlined below.

1. USE OF THE CRITERIA FOR QUALITY DISTANCE EDUCATION IN EXTERNAL BODIES FOCUSING ON ASSURING QUALITY
Various external bodies are being set up under the auspices of SAQA for assuring the quality of education and training across all sectors. Although they might have different names in different sectors these bodies (Education and Training Quality Assurers - ETQAs), will perform broadly the same function - that of accreditation of providers in terms of quality management, facilitation of moderation across constituent providers, monitoring of provision and the undertaking of quality systems audits.

ETQAs could use the Criteria for Quality Distance Education in two ways:
- as a framework for assessing the quality of education and training making use of distance education methods;

- as a basis for the construction of their own set of criteria for the monitoring of any educational provision - not necessarily only that using distance education methods.

In employing the criteria the focus should be on developmental, 'quality building' functions rather than using the criteria as a set of punitive measures or as a gatekeeping mechanism. If professional development is needed in order to build the capacity of ETQAs to use the criteria effectively in their work, it ought to be provided.

2. ENSURING LEGAL UNIFORMITY IN TERMS OF DISTANCE EDUCATION PROVISION
The amendment of the Correspondence College Act (Act 59 of 1965) to be brought in line with South Africa's new constitution should continue as a matter of priority. In the longer term, investigation into the Correspondence Colleges Act should be conducted to look at the governing of private institutions and programmes operating in South Africa not covered by existing legislation.
Reviewing of existing and planned legislation should be undertaken to ensure that there is legal uniformity in terms of quality in distance education provision and in terms of treatment of private and public providers of education and training.

3. ESTABLISHMENT OF STRUCTURED RELATIONSHIPS BETWEEN CURRENT INITIATIVES AND THE QUALITY STANDARD FRAMEWORK IN DISTANCE EDUCATION

- There should be integration of the Criteria for Quality Distance Education into the initiatives proposed by the Technology Enhanced Learning Initiative. The possibility of using the decision making framework and the Criteria for Quality Distance Education together in planning and evaluating of courses and programmes which make use of distance education methods should be examined.

- Developments in Further Education should be brought in line with the thinking around the Criteria for Quality Distance Education to assure the including of distance education in future decisions and legislation.

- A relationship with the SAQA structure should be established to include the Criteria for Quality Distance Education in further development of quality assurance and controlling mechanisms.

- The various bodies proposed in the Department of Labour's HRD Strategy should be familiarized with the Criteria for Quality Distance Education, both to support their general work and to strengthen their relationships with various SAQA bodies, particular the ETQAs.

- The Criteria for Quality Distance Education should be used by the HEQC (and bodies to which it delegates their functions) as a framework for assessing the quality of education and training making use of distance education methods.

- The Criteria for Quality Distance Education must support and be considered in the development of the new Curriculum and specifically in the Quality Assurance and Assessment developments within the Department of Education.

- The Criteria for Quality Distance Education must support and be considered in the developments in ABET and specifically in the Quality Assurance and Assessment developments within ABET.

4. *Development Of Learning Charters*

Learner charters should be developed in an effort to protect the rights of students enrolled in educational programmes offered at a distance. Specifically the national learning charter to be drawn up should make specific reference to the rights and needs of such students and distance education institutions should develop learning charters in conjunction with their student bodies. In both cases the Criteria for Quality Distance Education should be used as a basis when such charters are developed.

5.   ESTABLISH PROVINCIAL STRUCTURES OF DISTANCE EDUCATION TO EFFECTUATE NATIONAL POLICY ON PROVINCIAL LEVEL

Provincial teams responsible for distance education in provinces must be established. These teams should take national policy and develop provincial policy on distance education.

In order to accomplish this, provinces must participate in a National Audit of existing distance education practices in provinces. The findings of such an audit will be used to facilitate ongoing development of quality distance education practices in South Africa.

Through the provinces all educational planners and decision makers should actively encourage the ongoing development of internal processes to build and assure the quality of education and training at all levels of the system.

Internal quality assurance processes implemented by institutions using distance education methods should be based on the guidelines provided in the Criteria for Quality Distance Education.