

Quality Assurance

in Open and Distance Learning



Training toolkit

Quality Assurance in Open and Distance Learning

Trainers' Kit 005

*The Commonwealth of Learning
and
Asian Development Bank*

© The Commonwealth of Learning 1999

Any part of this document may be reproduced without permission but with acknowledgement to The Commonwealth of Learning and Asian Development Bank. Commercial use of these materials is prohibited without the prior written permission of The Commonwealth of Learning and Asian Development Bank.

ISBN 1-895369-68-1

Published by:

The Commonwealth of Learning
600 – 1285 West Broadway
Vancouver, British Columbia
Canada V6H 3X8
Telephone: (1 604) 775 8200
Fax: (1 604) 775 8210
Email: info@col.org

Asian Development Bank
P.O. Box 789
0980 Manila
Philippines
Telephone: (63 2) 632 4444
Fax: (63 2) 632 2444

FOREWORD

Human development is one of the strategic objectives of the Asian Development Bank. The Bank recognises that social and economic development ultimately depends on the quality of human development. People with basic education are more productive and more likely to play an active role in development. Well-nourished people are healthier and learn better. The synergies among education, health and nutrition are well documented, and it is universally recognised that investment in human development is an essential component of any development plan.

The Bank has been investing directly in human development for more than twenty years. Since 1990 alone the Bank has provided over \$2 billion and \$.5 billion for health, or about seven percent of overall Bank lending for development in that period. Within its education portfolio, there has been a substantial shift in recent years towards primary, lower secondary, and non-formal education in recognition of the fact that investment in basic education has a much higher rate of return. The Bank continues to support higher and technical-vocational education but is increasing its focus on basic education.

Within basic education, the Bank understands that quality and access are perhaps the two most critical issues. People must be able to attend school, and the education provided to them must be good enough to enable them to learn effectively. Provision of adequately trained teachers is all too often an impediment to providing quality basic education. Distance education has been shown to be an effective means of reaching untrained teachers in remote areas, enabling teachers to receive information and techniques that would otherwise have to be acquired through prohibitively expensive classroom-based instruction.

The Bank has in the last decade supported a number of regional activities in the area of distance education, and extended that support to the area of distance education for primary teacher training in the context of a regional technical assistance project implemented together with United Nations Educational, Scientific, and Cultural Organization (UNESCO) and The Commonwealth of Learning. The project aimed to develop national action plans for primary teacher training through distance education in selected countries and to develop capacity to plan and implement distance education programmes. The Commonwealth of Learning collaborated with the Bank to undertake a series of training workshops in distance education and to develop materials for these workshops.

Those materials comprise three topics in this series of six: (i) planning and management of open and distance learning, (ii) use and integration of media in open and distance learning, and (iii) designing open and distance learning materials. The materials have been designed in a flexible manner so that they can be used by a

variety of trainers in a variety of situations. Their basic aim is to contribute to the development of essential skills related to the design and implementation of distance education programmes – an aim of great importance to both the Bank and The Commonwealth of Learning in their efforts to ensure that quality education is made available to all persons in a cost-effective manner.

YANG WEIMIN

Director

Agriculture and Social Sectors Department (East)

Asian Development Bank

GAJARAJ DHANARAJAN

President

The Commonwealth of Learning

TABLE OF CONTENTS

FOREWORD

Background and Introduction

TOPIC 1: Introduction to Open and Distance Learning

TOPIC 2: The Concept of Quality Assurance

TOPIC 3: Techniques of Quality Assurance

TOPIC 4: Quality Assurance in Open and Distance Learning

TOPIC 5: Related Case Studies

BIBLIOGRAPHY

GLOSSARY

CASE STUDIES

Quality Assurance in Open and Distance Learning

1. Background

The Commonwealth of Learning (COL) and the Asian Development Bank (ADB) are pleased to provide this toolkit for your use and we sincerely hope that it will be a valuable resource for anyone planning and conducting training in the practice of open and distance learning.

The development of this toolkit and others, in various topics related to open and distance learning, has involved the time and dedication of a number of organisations and individuals. The impetus and financial support which enable COL to embark on this undertaking came from the Asian Development Bank. Under the terms and conditions of the ADB Regional Technical Assistance Project for Capacity Building in Distance Education for Primary Teacher Training, COL was commissioned to prepare training materials for use in three training workshops in the Asian region. In addition, COL decided to concurrently develop an additional three toolkits. Therefore, toolkits will be available in the following topic areas:

- overview of open and distance learning
- designing open and distance learning materials
- planning and management of open and distance learning
- use and integration of media in open and distance learning
- quality assurance in open and distance learning
- learner support in open and distance learning

Each of the training toolkits will incorporate several elements including:

1. detailed trainer's guide including training strategies, exercises and activities
2. master overhead transparencies
3. recommended reading list
4. case studies of best practices

The toolkits are designed to stand alone although it is envisaged that trainers may choose to use complementary segments from other kits in order to customise training workshops for particular audiences. It is assumed that the ultimate user of the toolkit, the trainers, will have extensive experience and knowledge of the subject area and will augment and embellish as required.

Professional staff at COL were responsible for developing the preliminary blueprint for each of the six topic areas. The International Extension College, Cambridge, UK, was then commissioned to prepare the toolkits. IEC staff, COL staff and trainers, who were responsible for the first pilot test of the materials, consulted regularly throughout the development process.

A special thank you is extended to Dr. Charles Currin, Senior Education Specialist, Asian Development Bank, who has provided encourage and support throughout the RETA project. Sincere appreciation also goes to Dr. Barbara Spronk, Executive

Director, IEC and her staff, for their dedication, commitment and hard work in developing and producing the toolkits.

Finally, a special note regarding the case studies section of the toolkit and the gracious co-operation of the many colleagues from around the world who so readily agreed to share their experiences and prepared a case study for inclusion in the toolkits.

The training of people in the practice of distance education continues to be a priority for The Commonwealth of Learning and we are hopeful that this series of toolkits will be a valuable resource for the distance education community. We of course would welcome your comments and feedback so that we can continue to improve and enhance the toolkits.

2. Introduction to the Kit

In the pages that follow, you will find a variety of resources intended to assist you in preparing and offering a workshop on quality assurance in open and distance learning.

The materials are arranged by topic, five in total, followed by a bibliography of suggested readings, glossary of terms used in open and distance learning, and a set of case studies. Within each 'topic' section, you will find

- a complete table of contents;
- an overview of the section and the sources from which materials were drawn;
- a variety of material, including definitions, descriptions, diagrams, and checklists;
- a set of practice exercises; and
- a set of masters from which to make overhead transparencies.

Interspersed throughout the materials are examples of the issue or practice that is being outlined. These examples have been set out in indented sections like the following:

Example: The experience of the Open University in the United Kingdom provides a number of examples of long-standing quality assurance activities that have become standard practice in a number of distance teaching universities around the world.

Suggestions for involving your workshop participants in the generation of additional examples that are drawn from their own experience are set out in screened boxes like the following:

Discussion: Do your participants agree that a concern with quality assurance is more characteristic of open and distance learning providers than it is of conventional provision?

The case studies are provided as yet another source of illustrative examples of actual practice. Topic 5 also includes four extensive case studies that are related to the topic of quality assurance in open and distance learning. Note that in the topics that follow, *case studies* refers to the brief additional case studies at the back of the kit, not to the four more extensive case studies that comprise Topic 5 (Related Case Studies).

These materials are not intended as a course in quality assurance in open and distance learning. There are no ‘objectives’, no prescriptions, and no statements of what you should be able to do as a result of having worked through the kit. Neither are the materials intended as an outline of an actual workshop, for you are faced with new audiences, new contexts, and new challenges each time you set out to conduct a workshop. You may adapt these materials to any situation, as in these examples:

- you may be asked to provide a ten-day workshop to a group of academics, who represent a number of universities in a given country, to orient them to the significant features of open and distance learning for their context. One of these days is to be devoted to quality assurance; or
- you might have two weeks to spend with an audience that consists of employees of a foundation that provides funding for educational television, coaching them in the principles of materials design and media integration for distance learners, with two days devoted to quality assurance in materials design; or
- you may be asked to do a workshop on materials design for people who are primarily managers who need a clearer understanding of what is involved in quality assurance in all aspects of managing distance education programmes, in order to fulfil their jobs more effectively.

As an experienced trainer you know that designing an effective workshop is the same as designing an effective course: the participants’ needs and contexts come first, and your decisions about what you will present and how you will present it will follow from what you are able to find out about your audience. Of course your workshop design will also be influenced by your own experience, expertise, and point of view, because you bring a wealth of knowledge, skills, and understanding to your task. Consequently, a ‘trainers’ kit’ can aim only to supplement your own resources and to offer some ideas and materials to use or not use as you choose, based on your tasks and needs.

We hope you will find these materials useful. They are based on the real-life training experiences of a range of distance educators, some of whom prepared the outline for the kit, some of whom prepared the topic-by-topic materials, some of whom provided the case studies, and yet others who reviewed and piloted the first version and offered valuable advice and suggestions as a result. We look to you for continuing advice and suggestions, especially in the form of training materials that you have found useful and would be willing to share with others via the agency of The Commonwealth of

Learning. Please contact the COL Project Manager, Patricia McWilliams, at the address provided in this kit, with your comments.

TOPIC 1

Introduction to Open and Distance Learning

Overview

Source materials for this topic

The concept of open and distance learning

Definitions

Distinguishing the types of open and distance learning

Time and place continuum

Open and distance learning systems

Advantages of open and distance learning

A systems approach to open and distance learning

Functions of open and distance learning

Kinds of open and distance learning

Practice exercises

Categorising various institutions

Application to home institutions

1. Overview

These materials support an introductory discussion on the topic of open and distance learning. The discussion is in two parts.

The first part discusses the concept of open and distance learning by defining terms and distinguishing the various types of open and distance learning, and then by establishing each type along a time and place continuum. The various sections of the first part can be used as follows:

- The *definitions* section focuses on the six features common to most definitions of open and distance learning. You may want to reword these definitions, or add to them. A discussion of *accreditation*, for example, can show how open and distance learning involves both teaching and learning and thereby is different from entirely self-directed learning. A discussion of *two-way communication* can raise points about learning theory that are central to distance approaches. A discussion of *industrialised processes* can be a starting point for discussing ways in which the teaching function in open and distance learning is reconfigured into *course development* and *course delivery*, setting open and distance learning apart from more conventional approaches to teaching and learning.

- The *distinctions* section provides material that will help you establish a working vocabulary for your workshop. Some examples are provided, but you will want to draw examples from your own experience and from the experience of your participants.
- The *time and place continuum* section provides an opportunity to discuss the varieties of delivery systems possible in open and distance learning. Again, you will want to draw examples from both your own and your participants' experience.

The second part looks at the types of open and distance learning systems, and can be used as follows:

- The first section lists the *advantages* that open and distance learning offers. This section is intended to prompt discussion of the problems that participants expect open and distance learning to help them solve.
- Open and distance learning applications are then studied using a *systems approach*, which recognises that all parts of the system are interrelated.
- Then the *functions* list provides one way of describing and labelling the tasks involved in operating an open and distance learning programme. You may have another list. The point is to emphasise how distance makes a difference in carrying out these functions.
- Finally, the *modes* or types of open and distance learning institutions and programmes are described. Again, you will doubtless have many examples to offer, and you may also want to take this opportunity to start participants thinking about the mode of open and distance learning in which they are operating or plan to operate.

1.1 Source materials for this topic

Jackling, N. Weaving my own design. In M. Parer (ed.) *Development, design, and distance education*. Churchill, Australia: Centre for Distance Learning, Monash University, 1989.

Keegan, D. *The foundations of distance education*. London: Croom Helm, 1996.

Keegan, D. (ed.) *Theoretical principles of distance education*. London: Routledge, 1993.

Koul, B.N., and J. Jenkins (eds.) *Distance education: a spectrum of case studies*. London: Kogan Page, 1993.

Mugridge, I. (ed.) *Distance education in single and dual mode universities*. Vancouver: Commonwealth of Learning, 1992.

Mugridge, I. The language of distance and open learning. *Journal of Distance Education*, IV: 2, pp. 83–85, 1989.

Sewart, D. et al. (eds.). *Distance education: international perspectives*. London: Croom Helm, 1983.

Sparkes, J. The problem of creating a discipline of distance education. *Distance Education*, 4:2, pp. 179–86, 1983.

2. The concept of open and distance learning

2.1 Definitions

There is no one definition of *open and distance learning*. Rather, there are many approaches to defining the term. Most definitions, however, pay attention to the following characteristics:

- **separation of teacher and learner** in time or place, or in both time and place;
- **institutional accreditation**; that is, learning is accredited or certified by some institution or agency. This type of learning is distinct from learning through your own effort without the official recognition of a learning institution;
- **use of mixed-media courseware**, including print, radio, and television broadcasts, video and audio cassettes, computer-based learning, and telecommunications. Courseware tends to be pre-tested and validated before use;
- **two-way communication** allows learners and tutors to interact as distinguished from the passive receipt of broadcast signals. Communication can be synchronous or asynchronous;
- **possibility of face-to-face meetings** for tutorials, learner–learner interaction, library study, and laboratory or practice sessions; and
- **use of industrialised processes**; that is, in large-scale open and distance learning operations, labour is divided and tasks are assigned to various staff who work together in course development teams.

Discussion: Take advantage of the wealth of examples available both from your own and your participants' experience. The case studies provided with this kit describe institutions around the world that exemplify the characteristics of open and distance learning.

2.2 Distinguishing the types of open and distance learning

The term *open and distance learning* and its definition are relatively new in the field of education, having gained prominence only in the past 15 to 20 years. The language and terms used to describe distance learning activities can still be confusing, and geographical differences in usage — for example, between North America and Europe — can add to the confusion. Among the more commonly used terms related to open and distance learning are the following: *correspondence education, home study, independent study, external studies, continuing education, distance teaching, self-instruction, adult education, technology-based or mediated education, learner-centred education, open learning, open access, flexible learning, and distributed learning*.

Correspondence education, home study, and independent study

These distance learning methods are:

- well over a century old;
- based on stand-alone, self-study materials. Learners do not have to leave their homes to study; and
- often print-based with communication through postal services or telephone. They can, however, use a variety of means for tutor–learner contact, including the postal system, telephone, electronic mail, television and radio broadcasts, and video and audio cassettes.

Example: Many university programmes in North America have, in the last 15 years, renamed their correspondence programmes to more current titles such as *open and distance learning* or *independent study*.

External studies

The term *external studies*:

- applies to instruction that takes place somewhere other than on a central campus, such as a classroom remote from campus; and
- includes a variety of delivery options like audio, video, or computer conferences or home study.

Example: The Centre for External Studies at the University of Namibia is responsible for open and distance learning programming.

Continuing education

The term *continuing education*:

- usually applies to non-credit education;
- refers to courses that can be delivered on campus or at a distance; and
- has varied meanings.

Example: See the case study on the Distance Education Unit at the University of Botswana, which is part of continuing education at the university.

Distance teaching

The term *distance teaching*:

- refers to only half of the open and distance learning equation: open and distance learning encompasses not only teaching but learning; and
- emphasises the teacher's role rather than the system.

Self-instruction

The term *self-instruction* refers to a process in which:

- materials take learners step-by-step through an instructional process;
- self-assessment exercises are a central feature; and
- instruction can be paper-based or computer-based.

Example: The Faculty of Medicine at Chulalongkorn University in Thailand makes a variety of self-instructional packages available via computer-assisted instruction on topics such as the circulatory system. Many language schools offer self-instructional packages that consist of print materials and audio cassettes.

Adult education

The term *adult education*:

- emphasises the principles of adult learning, often known as *andragogy*, as compared to *pedagogy*, or child-centred learning.

Example: See the case study on the University of Botswana, Distance Education Unit, which offers a Certificate in Adult Education at a distance.

Technology-based or mediated education

The term *technology-based education*:

- refers to systems of teaching and learning in which a technology other than print has a major role; and
- takes two major forms: stand-alone (for example, computer-assisted learning and computer-managed learning) and conferenced (for example, audio, video, or computer).

Examples: The University of the West Indies uses audio conferencing to link its various campuses and learning centres. Two of the postgraduate degrees available in distance open and distance learning — those offered by Athabasca University and the Open University of the United Kingdom — use computer conferencing as a primary mode of delivery. See the case studies on both the University of Guyana, Institute of Distance and Continuing Education, which uses audio teleconferencing, and the Open Learning Information Network in Canada, which delivers courses via the World Wide Web.

Learner-centred education

In learner centred education, integrity and freedom of the individual is primary. Therefore, the teaching and learning process provides:

- flexible sequences of study;
- negotiated objectives and content;
- negotiated learning methods;
- negotiated methods of assessment; and
- a choice of support mechanisms.

Open learning

The educational philosophy of open learning emphasises giving learners choices about:

- medium or media, whether print, on-line, television, or video;
- place of study, whether at home, in the workplace, or on campus;
- pace of study, whether closely paced or unstructured;
- support mechanisms, whether tutors on demand, audio conferences, or computer-assisted learning; and
- entry and exit points.

Example: Many institutions use the term *open* in their names.
See the case studies for:

Open Access College and the Open Learning Institute of
Charles Sturt University, both in Australia;

Open Learning Information Network in Canada;

Indira Gandhi National Open University in India;

Open University of the University of the Philippines; and

Open University of Sri Lanka.

Open access

The term *open access* implies a lack of:

- formal entry requirements;
- prerequisite credentials; and
- an entrance examination.

Flexible learning

The term *flexible learning* emphasises the creation of environments for learning that have the following characteristics:

- convergence of open and distance learning methods, media, and classroom strategies;
- learner-centred philosophy;
- recognition of diversity in learning styles and learners' needs;

- recognition of the importance of equity in curriculum and pedagogy;
- use of a variety of learning resources and media; and
- fostering of lifelong learning habits and skills in learners and staff.

Example: See the case study for Deakin University, which describes the challenges of implementing a flexible learning system.

Distributed learning

The term *distributed learning*:

- emphasises the learning itself rather than the type of technology used or the separation between teacher and learner;
- makes learning possible beyond classrooms; and
- when combined with classroom modes, becomes *flexible learning*.

Discussion: You and your participants can provide a wealth of examples of different types of delivery systems from your experience in open and distance learning. The case studies included with this kit are a ready source of examples as well.

2.3 Time and place Continuum

Open and distance learning programmes fall somewhere along two continua: the continuum of time and the continuum of place. The *place* continuum has at one end all learners and their tutor or instructor gathered at the same place, and at the other end all learners and their tutor or instructor in different places. The *time* continuum has at one end all learners and their tutor or instructor interacting in ‘real time’, that is, at the same time, and at the other end all learners and their tutor or instructor interacting at different times.

The following chart demonstrates how these two continua intersect. Their co-ordinates are numbered and match four scenarios for open and distance learning. Most open and distance learning providers use a combination of the four scenarios.

Scenarios for Open and Distance Learning

	Same Time	Different Time
Same Place	1	2
Different Place	3	4

1. *Same place and same time:* Classroom teaching, face-to-face tutorials and seminars, workshops, and residential schools.

Example: See the case study for the Open Learning Institute, Charles Sturt University in Australia, for an example of an institution that relies on residential schools to provide interaction between learners and tutors is being challenged.

The case study for the University of Nairobi describes a programme that is implementing more residential schools, to replace its tutorials.

2. *Same place but different time:* Learning resource centres, which learners visit at their leisure.

Example: See the case study for the Open Access College in Australia for an example of an institution that has a number of resource centres.

3. *Different place but same time:* Audio conferences and video conferences; television with one-way video, two-way audio; radio with listener–response capability; and telephone tutorials.

Example: See the case study for the Indira Gandhi National Open University for an example of an institution that is using audio conferencing and television with one-way video and two-way audio.

4. *Different place and different time:* Home study, computer conferencing, tutorial support by e-mail, and fax communication.

Example: The case studies provided with this kit describe a wide variety of ways to make learning materials available for this kind of independent study.

3. Open and distance learning systems

3.1 Advantages of open and distance learning

Open and distance learning offers a number of advantages to both learners and to providers of opportunities for learning. Problems such as distance and time, which are barriers to conventional learning, are overcome in open and distance learning.

Overcoming physical distance

Open and distance learning can overcome problems of physical distance for:

- learners in remote locations who are unable or unwilling to physically attend a campus; and
- learners and teachers geographically separated in that teachers in urban settings instruct learners in rural settings.

Example: See the case study on the University of Guyana, Institute of Distance and Continuing Education, for an example of an institution that is serving a widely scattered and remote population using open and distance learning.

Solving time or scheduling problems

Open and distance learning can solve time or scheduling for:

- client groups unwilling or unable to assemble together frequently;
- learners engaged in full-time or part-time work, both waged and volunteer; and
- family and community commitments.

Example: See the case study for the Southern Africa Extension Unit for a description of a programme for training councillors in local government.

Expanding the limited number of places available

Open and distance learning can expand the limited number of places available for:

- campus-based institutions few in number; and
- stringent entrance requirements.

Example: See the case study for the Open University of Sri Lanka for an example of an institution that is expanding access to university education in a country where the number of places available at conventional universities is very limited.

Accommodating low or dispersed enrolments

Open and distance learning can accommodate:

- low enrolments over a long period of time; and
- low enrolments in one geographic region but additional enrolments elsewhere.

Example: See the case studies for the University of Guyana and the Open Access College in Australia for examples of institutions that are meeting the challenge of dispersed enrolments.

Making best use of the limited number of teachers available

Open and distance learning can make the best use of the few teachers available when:

- there is a lack of trained teaching personnel relative to demand;
- teachers are geographically concentrated; and
- teachers with certain expertise are in short supply.

Example: See the case study for the Open Access College, Australia.

Dealing with cultural, religious, and political considerations

Open and distance learning can deal with differences, and consequently:

- widens women's opportunities to learn;
- meets the needs of populations affected by violence, war, or displacement; and
- makes learning possible even when group assemblies are proscribed.

Discussion: Use this opportunity for a discussion of the problems your participants are trying to solve.

3.2 A systems approach to open and distance learning

A systems approach sets the conditions for proceeding in an orderly way. A systems approach also recognises that all the components of the system are interrelated. A change in one component will bring about changes in the others.

Open and distance learning programmes, units, and institutions use a phased model for problem solving:

analyse → design → develop → implement → evaluate → revise

Analysis: a detailed examination of all facets of the problem

- What is the problem to be solved?
- Is the problem an instructional problem or an environmental problem?
- Who has the problem?
- What are the resources available to solve the problem?
- What are the constraints or limitations to be faced?

Output from the analysis phase:

- a clear statement of the problem
- a detailed description of the target population
- identification of the resources and constraints

Design: requires the preparation of a detailed solution

- Who are the target population and other stakeholders?
- What will the solution accomplish?
- How will the participants be different after the course or programme?
- How will the participants achieve the objectives?
- How will the course or programme be developed?
- How will you know your solution is effective?

Output from the design phase:

- a detailed plan that describes how, when, by whom, and at what cost the problem will be solved

Development: must address the following kinds of questions

- What strategies, media, and methods will be used for each objective or task?
- What learning resources will be required?
- Where, when, and how will learners be ensured of feedback as they practise their skills?
- Where, how, and when will evaluation activities be used?
- What will be the consequences of success or failure or both?
- How will the instruction be evaluated and revised?

Output from the development phase:

- a complete course or programme package, including all materials, tools, equipment, and plans for delivery, learner support, learner evaluation, and course evaluations

Implementation: putting the solution into practice

- Are all necessary resources (human, physical, financial) in place?
- Are data collection mechanisms in place?
- Are problem-solving and recording mechanisms in place?

Output from the implementation phase:

- learner progress and performance records
- data from a variety of sources (for example, records and solutions)
- other evaluation data (for example, interviews, questionnaires)

Evaluation: not an 'add-on' but an integral component

- How well does the system meet the goals initially identified?
- How well does it meet the needs of the learners and other stakeholders?
- Do you have sufficient specific information? How will you obtain it?
- What specific changes can be made to improve the system?

Output from the evaluation phase:

- analyses of records and data
- specific solutions, including time, cost, and other resource estimates

Revision: including a review of all decisions and activities of previous phases

- Were the original analyses complete and correct?
- Have circumstances changed sufficiently to require a major review of the analyses?
- What changes, modifications, or improvements are evident in the evaluation data?
- Are sufficient resources available to complete the recommended changes?
- What action needs to be taken?

Output from the revision phase:

- revised course or programme, including the course materials, learner support and evaluation plan, and a revised course evaluation plan

3.3 Functions of open and distance learning

Regardless of the size of the programme, unit, or institution undertaking development and implementation of an open and distance learning system, the following functions must occur at some level. Valuable considerations in relation to each open and distance learning task are listed following.

Obtaining and managing money and other resources

- grant-sustained, cost recovery (self-financing);
- higher development and start-up costs; and
- human support relatively expensive component.

Developing or acquiring programmes and courses

- considerable development time required for full-scale development and production;
- buying or leasing courses from other open and distance learning providers may be more effective use of resources; and
- continuum of approaches, from single author to large teams of specialists.

Example: See the case study for the University of Lincolnshire and Humberside for an example of *course franchising*.

Recruiting and promoting

- analyse and assess the needs of your prospective learner populations;
- make information available at right place and time;
- provide sufficient accurate information about time, cost, effort required;
- provide sufficient accurate information about when, where, and how to get involved; and
- reassure potential learners about legitimacy and credibility.

Physically producing, reproducing, storing, and disseminating materials

- course materials requirements may demand print, audio, video, or computer software;
- dissemination may require post, courier, transport companies, telecommunications, broadcasts, satellites;
- physical production and reproduction time consuming; and
- specialised equipment and personnel required for storage, handling, packaging, dispatch, inventory.

Enrolling and registering

- process varies from simple manual lists to complex electronic systems;
- fixed or rolling entrance dates; and
- range of delivery options available.

Delivering programmes and courses

- two-way communication required;
- evaluation and feedback;
- collaboration with other agencies;
- library services; and
- record systems.

Providing learner support

- personal support such as advice or counselling;
- academic support such as tutoring, grading, and examining; and
- face-to-face or mediated support.

Examining, crediting, and granting credentials

- range of credit options available;
- exam taking and credit evaluation requirements; and
- involvement of professional associations and external agencies.

Evaluating and revising processes, procedures, programmes, and courses

- learner performance;
- learner satisfaction;
- meeting goals and objectives; and
- resistance to change.

Training and developing staff

- orientation and adjustment to new technologies and approaches; and
- awareness of advantages and limitations of open and distance learning operations.

Discussion: There are many ways of labelling and describing these functions; the ones provided here are only suggestions. Extend your list with examples from both your own and your participants' experience.

3.4 Kinds of open and distance learning

A variety of terms describe the type of educational provision that involves some version of an open learning approach and uses open and distance learning techniques to a greater or lesser extent.

Single mode institution

- set up to offer programmes of study at a distance;
- some face-to-face interaction involved, but often optional;
- teaching and learning process 'mediated' in some way
 - by print, including correspondence;
 - by audio, including radio (one-way, two-way), cassettes, telephone, or audio conferences;
 - by video, including television (one-way, two-way), cassettes, or video conferences; and
 - by computer, including computer-based training, e-mail, computer conferencing, or World Wide Web;
- characterises many of the world's 'mega-universities', including Indira Gandhi National Open University (IGNOU), Universitas Terbuka, Sukhothai Thammathirat Open University (STOU), and United Kingdom Open University (UKOU).

Example: See the case study for IGNOU included with this kit.

Dual mode institution

- offers two modes:
 - one using traditional classroom-based methods; and
 - one using distance methods;
- may also offer the same course in both modes, with common examinations;
- regards the two types of learner as distinct: on-campus and external; and
- may or may not allow 'cross-over' registrations.

Example: See the case studies for the Open Learning Institute of Charles Sturt University, the University of Nairobi, the University of Botswana, and the University of Zambia for discussions of issues facing dual mode institutions.

Mixed mode institution

- offers learners a wide choice of modes of study
independent, group-based, or some combination; and
face-to-face, mediated, or some combination;
- maximises flexibility of place and pace of study;
- the result of ‘convergence’ of face-to-face and distance modes; and
- increasingly characterises organisations that were once ‘single mode’ or ‘dual mode’.

Example: The case studies for Deakin University and Murdoch Universities provide examples of institutions that are now ‘mixed mode’.

4. Practice exercises

4.1 Categorising various institutions

Instructions: Divide the participants into small working groups (no more than five to a group). Give each group a set of three case studies — a single mode institution, a dual mode institution, and a mixed mode institution — without labelling the institutions as such; the case studies that are part of this kit are suitable for this purpose. Ask each group to

- agree on the category they think is most appropriate to each of the three institutions;
- list the main characteristics of each institution that justify the category; and
- report their findings to the group as a whole.

Use the findings of the working groups as a springboard for discussion of the challenges involved in defining *open and distance learning*.

Timeframe: Depending on the language level and experience of the participants, the small group work can take as long as an hour.

Materials: Case studies (see the case studies that are included with this kit); flip chart paper or overhead transparencies, and marker pens.

4.2 Application to home institution

Instructions: Ask participants to spend half an hour, working on their own, describing the programme in which they work, in terms of how the supporting institution (or department or faculty) fulfils the ten functions of an open and distance learning system that have been discussed as part of this topic.

On the basis of this description, ask them to work with a partner to determine what kinds of changes will have to take place in each of these functions to make their institution function more effectively as an open and distance learning operation.

Timeframe: An hour in total, half an hour for individual work and half an hour for paired discussion.

Materials: Paper and pen or pencil for each participant.

TOPIC 2

The Concept of Quality Assurance

Overview

Source materials for this topic

Quality in open and distance learning

What do we mean by quality?

Quality assurance or quality control?

Quality assurance in teaching institutions

Why the concern with 'quality assurance'?

The industrial model of quality assurance

Total quality management

Applicability to education

Development of a quality culture

The importance of organisational cultures

The 'machine' bureaucracy

The 'professional' bureaucracy

Creating a unified quality culture

Checklist for a quality assurance programme

Practice exercises

What is quality assurance?

What is a quality assurance system?

1. Overview

These materials support a discussion on the topic of the terminology of quality assurance, especially as it applies to open and distance learning.

1.1 Source materials for this topic

Barnett, R. *Improving higher education: total quality care*. Buckingham: Society for Research in Higher Education and Open University Press, 1992.

Deming, W.E. *Out of the crisis*. Cambridge: MIT, 1986.

- Haughey, M. Can Quality management help us cope with change? In A. Tait (ed.), *Quality Assurance in open and distance learning: European and international perspectives*, pp. 117–25. Cambridge: Open University, 1995.
- Juran, J. *Quality control handbook*. New York: McGraw-Hill, 1979.
- Lentell, H. Quality: is it always a move to better things? In D. Sewart, ed., *One world, many voices: quality in open and distance learning*, vol. 2, pp. 121–24. Birmingham: Open University, 1995.
- Mintzberg, H. *The structuring of organisations*. Englewood Cliffs, New Jersey: Prentice Hall, 1979.
- Robinson, B. Assuring quality in open and distance learning. In F. Lockwood, ed., *Materials production in open and distance learning*, pp. 185–94. London: Paul Chapman, 1994.
- Sallis, E. *Total quality management in education*. London: Kogan Page, 1993.
- Tait, A. Systems, values, and dissent: Quality assurance for open and distance learning. In A. Tait (ed.), *Quality assurance in open and distance learning: European and international perspectives*, pp. 241–51. Cambridge: Open University, 1995.
- Tait, A. Introduction: international perspectives on quality assurance in open and distance learning, the importance of context. In A. Tait, ed., *Perspectives on distance education: quality assurance in higher education, selected case studies*, pp. 1–8. Vancouver: The Commonwealth of Learning, 1997.
- West-Burnham, J. *Managing quality in schools*. Harlow: Longman, 1992.

2. Quality in open and distance learning

2.1 What do we mean by 'quality'?

Discussion: Begin this discussion by distributing pieces of paper, one to each participant, and asking participants to write down — in letters large enough for the group to see — their definition of *quality* in an educational setting. When participants have finished, ask one of them to collect the sheets and pin them up in front of the group. Draw out the features common to them all, point out the differences, and ask whether there are features to be added.

The features mentioned might include the following:

- chosen standards or criteria;
- the relative nature of quality;
- services as well as products;
- perceptions as well as measured outcomes; and
- relevance.

Additional points to be made might include the following:

- Everyone agrees on the desirability of quality.
- There is less agreement, however, on what quality is.
- This is because ‘quality’ does not exist in isolation from its context of use.
- Also, judgments differ according to whose views are being sought; for example, there is an amalgam of different meanings under the label *quality*; different stakeholders have different perspectives on quality; and different functional areas within a single organisation have different views.
- Priorities will vary according to who is making the assessment; and for what purposes the assessment is being made.

Discussion: Ask participants to provide examples of these points about quality from their own experience.

2.2 Quality assurance or quality control?

Following is a preview of some terminology that will be dealt with in greater detail in this topic:

- *Quality* is a characteristic of the products and services an organisation offers.
- *Quality assurance* is a process directed toward achieving that characteristic. It is the set of activities that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service.
- *Quality control* operates retrospectively, ‘inspecting out’ or discarding faulty products that fail to conform to a predetermined standard.
- *Quality control* and *quality assurance*, together with the *assessment of quality systems* — the monitoring, evaluation, and audit of procedures — are overlapping functions in regulating how an organisation or venture works.

All of these tasks have a role in quality management approaches, the best known of which is *total quality management*.

In summary:

- *quality assurance* involves pro-active measures taken to avoid faults;
- *quality control* involves re-active measures taken to remove faults;
- quality assurance plus quality control plus continuous monitoring and evaluation equal *total quality management*.

Discussion: Do any of these terms or distinctions cause participants difficulties? Examples are always useful in

clarifying such terms. Ask participants to provide examples from their own experience as you preview the list.

3. Quality assurance in teaching institutions

3.1 Why the concern with 'quality assurance'?

While 'quality assurance' may be a recently applied term in the educational context, there is nothing new about educational organisations' undertaking systematic review and inspection of products and services to ensure their quality.

Discussion: Take this opportunity to solicit examples from participants of the ways in which the processes of review and inspection have been used in their contexts to ensure quality of educational products and services. In addition, almost all the case studies that are included with this kit contain examples of processes aimed at improving quality.

More recent use of and emphasis on the label, '*quality assurance*', can be attributed to factors such as the following:

- governments' interest in return on public investment in education relative to other areas of expenditure;
- the assertion that education and training is essential to economic recovery, growth, and competitiveness;
- the assertion that the institutions responsible for education in the recent past have failed in their mission to meet demand because of ivory tower or anti-business attitudes; and
- insistence that education costs should be reduced and educational organisations made more accountable.

Discussion: Does this list of external factors fit with your participants' experience? Do they have other factors to add?

3.2 The industrial model of quality assurance

Quality assurance has its origins in the manufacturing industry and the military. Initially these 'quality systems' emphasised:

- quality control, those measures taken to remove faults at the end of the production process;
- the setting in place of systems to obtain better data about discrepancies between proposed and actual performances;
- the necessity of statistical processes to control non-compliance;
- using budgets as incentives and penalties to encourage units to tighten up procedures and reduce errors; and

- using market analyses and client satisfaction surveys to help keep clients interested in the products and services.

Discussion: Ask participants for examples from their own experience of applying these kinds of procedures to improve the quality of products and services. Also suggest they look for examples in the case studies which are included with this kit.

3.3 Total quality management

Over the last fifty years, industry has moved increasingly from *quality control* — measures taken to remove faults at the end of the production line — to a more proactive process called *quality assurance* — measures taken to avoid faults. Even these measures were insufficient to enable them to reduce error costs in order to compete in increasingly global markets. Out of this need for more effective ways to increase and assure quality of products and services developed the system known as *Total Quality Management*, or TQM.

The relationship among these processes is represented in the following ‘equation’.

The Total Quality Management Equation

Quality Control
+
Quality Assurance
+
Continuous monitoring and evaluation
=
Total Quality Management

West-Burnham (1992) outlines the basic points of total quality management as the following.

Basic Points of Total Quality Management

Element	Purpose and Scope
Focus	Internal and external customers
Definition	Meeting customer requirements
Scope	Every aspect of the organisation
Responsibility	Everyone

Standard	Right the first time (fitness of purpose)
Method	Prevention not detection
Measurement	Zero defects
Culture	Continuous improvement

3.4 Applicability to education

Discussion: Begin this discussion by asking participants for their thoughts on whether this industrial approach to quality assurance is appropriate for education. Where does the approach fit? Conversely, what problems arise?

Is this industrial approach to quality assurance appropriate to educational institutions? The points of contention centre on two features of the approach:

- organisational mission; and
- terminology.

Organisational mission

The organisational mission to be adopted by institutions following a quality assurance or total quality management approach is summed up by Sallis (1993:84) in the following statement. Sallis writes that in a total quality management environment there should be

... a single command for each process — the key processes, whether they are curriculum, pastoral, or administrative need to be charted and organised so that each process is brought under a single chain of command.

The processes in which the providers of education are engaged, however, are teaching and learning, that is, fostering the creation and sharing of knowledge. They may not lend themselves to such a tightly defined organisational mission.

Terminology

Given the nature of the ‘business’ in which educational institutions are engaged, debate also centres on the terminology characteristic of total quality management in particular. Examples include:

- fitness of purpose;
- the product;
- customers and learners; and
- services.

Fitness of purpose

The term *fitness of purpose* can usefully force us to ask questions about our ends, for example, about the nature of our audience or the style of our teaching.

Purposes in an educational institution are varied, and in some cases conflict. For example, our job as educators is to facilitate our learners' learning. At the same time, however, we are expected to enforce certain educational standards of performance, which our learners may fail to meet. No business faces such a conflict.

Oversimplified notions drawn from the business sector and uncritically applied in educational contexts ignore the sometimes contradictory demands of various stakeholders, including:

- learners;
- academic and professional interest groups;
- research funders and practitioners;
- governments;
- employers;
- society at large; and
- future generations.

Discussion: Ask participants for examples from their own experience of ways in which the interests of these various stakeholders can contradict each other.

The product

The aims of the educational process are to bring about changes in learners'

- knowledge;
- skills; and
- attitudes.

Upon successful completion of the process set out by the educational organisation, the learner may be awarded a credential of some kind.

These outcomes — changes in knowledge, skills, and attitudes and awards of credentials — may be called 'products' but they are considerably more complex than are the products of a manufacturing process.

Customers and learners

In quality assurance, all actors within and outside an organisation are customers, providing a service to others.

Unlike businesses, in higher education institutions we have to fail ‘customers’ (learners) from time to time, acting in accordance with other stakeholders such as professional bodies, academic peers, and prospective employers.

Thus elements of formal education, which is not based on the purchase of a service, remain in the relationship.

Services

The ‘services’ provided by educational organisations are as varied and complex as their ‘products’.

Services in support of learning include

- provision of information to prospective applicants;
- pre-enrolment counselling and advising;
- screening of applicants;
- enrolment and registration;
- teaching;
- supporting learning by means of tutoring, counselling, advising, materials provision, libraries, and learning technologies;
- assessing learners’ performance; and
- post-course advice and counselling.

Of these services, screening of applicants and assessing their performance in particular set off education provision from other kinds of services.

Discussion: Do your participants agree with these points?
What would they add, by way of agreement or disagreement?

4. Development of a quality culture

4.1 The importance of organisational cultures

Quality initiatives will inevitably flounder if the organisation implementing them does not take into account its organisational cultures. This requires a recognition that education organisations are not ‘people-incidental’ systems. Rather, they exist critically as the creation of their staff and learners.

It is often assumed that all employees, regardless of their terms and conditions of employment, share the same vision. Rather, education organisations tend to possess a plurality of cultures that significantly influence their operations. Most education organisations can be characterised by at least the following cultures (drawn from Mintzberg 1979 as presented in Lentell 1995):

- *faculties and schools*: the ‘professional bureaucracy’; and
- *administration and operations*: the ‘machine bureaucracy’.

4.2 The 'machine' bureaucracy

The administration and operations group is found in all units of the organisation. It includes:

- secretarial and clerical staff;
- technicians;
- warehouse workers;
- printers; and
- administrators.

This group is concerned with making the organisational 'machine' work on a daily basis. Typically workers in this sector have specialised and segmented knowledge of the business. This means that the power and the ability to see the enterprise as a whole tends to lie with the top managers. This bureaucracy tends to favour rules and regulations. Decision-making tends to flow in a chain of authority. Clerks and other main grade employees tend not to expect to be consulted and have limited discretion over work patterns.

4.3 The 'professional' bureaucracy

The 'professional' bureaucracy comprises the academic staff, who are primarily involved in developing, maintaining, and teaching courses. In having to rely on trained professionals, the organisation has to surrender some power to them. The academic and teaching staff tend to have considerable autonomy. In theory authority is horizontal, that is, between peers. But in practice there are considerable differences in status and authority based on factors such as

- seniority;
- academic standing within the wider academic community; and
- the kind of contract one has, for example, full-time or part-time, term or continuing.

Professionals tend to work independently. Power over the carrying out of work rests with the individual professional, subject only to the collective control and regulation of colleagues. This regulation is based on shared professional values. Their work is normally too complex to be prescribed.

4.4 Creating a unified quality culture

A 'quality culture' in educational terms is one that puts the interests of the learner and the facilitation of learning at the centre of its activities at every level, constantly striving to improve the effectiveness and efficiency of these activities in every way possible.

The variations in working conditions, tasks and roles, and levels of commitment among employees shape their attitudes to their work and their vision of the organisation. For example, professional staff are more likely than support or

administrative staff to be critical of attempts at ‘shared vision’ and more protective of their autonomy.

Tait (1997) suggests that creating a commitment to quality assurance among all employees, whether support or professional, requires managers to recognise the following:

- the importance of a mechanism of self-evaluation in relation to meeting quality standards, so that professional staff and academic staff in particular feel they own the system;
- the connected importance of peer review and site visits by external experts accepted as unbiased specialists in the field;
- the importance of reporting in such a way as to facilitate development and improvement rather than judging or ranking; and
- relationships between outcomes of a quality review system and funding, which should not be direct and rigid since this will lead to a ‘compliance culture’ rather than a real interest in quality assurance.

Discussion: Ask participants to provide examples from their own experience of variations in organisational culture and how they deal with them in implementing quality assurance strategies.

4.5 Checklist for a quality assurance programme

To review, quality assurance focuses attention on operational processes and systems. It has three main elements:

- You set standards for a product or service.
- You organise the production or delivery of a product or service so that the standards are consistently met.
- You thereby create confidence in the client or recipient that what is promised is what will happen.

To implement these procedures, it is helpful to ask the questions in the following quality assurance checklist. (These are taken from a workshop developed for IEC by Bernadette Robinson and subsequently published in Robinson 1994:187–88.)

Quality Assurance Checklist

Quality policy and plan

- Has your organisation developed a policy on quality with which all staff are familiar?
- Has this policy been translated into a practical plan?

Specification of standards

- Are specified and clearly defined standards in place?

- Have they been communicated to all concerned?
- Are they specified for key activities?
- Are they achievable?
- Are they reasonable?
- Are they measurable?

Identifying critical functions

- Have the critical functions for achieving the standards been identified?
- Have they taken the learner as the starting point?
- Have the procedures to achieve them been analysed?

Documentation

- Are the procedures to be followed clearly documented?
- Are they explicit?
- Do they represent fact or fiction?
- Are they consistent in different documents?
- Are they concentrated on essential procedures?
- Are they in a readable and user-friendly form?
- Do all those who need them have access to copies?

Staff involvement

- Have all staff been involved in the development of quality assurance systems?
- Have their suggestions been built in?
- Has enough time been given to this process?

Monitoring

- Are there systematic monitoring mechanisms for critical functions?
- Do they check whether standards are being met and procedures followed?
- How do you know?
- Are the findings disseminated?
- Are they harnessed to appropriate action?
- Do they result in improved performance or a review of practice, or a reappraisal of standards?
- Do they provide effective feedback loops between providers of products and services and learners or clients?

Training

- Is there adequate provision of training and staff development?
- Is this linked to the achievement of standards?

- Are there effective mechanisms for assessing training needs?
- Are these reviewed regularly?
- Are there resources allocated to meet them?

Costs

- Is there a strategy for monitoring the costs of implementing and maintaining quality assurance activities?
- Does this strategy take account of human and financial costs?
- Are the costs greater than the benefits?
- Is there a review process to find out?

5. Practice exercises

5.1 What is quality assurance?

Instructions: Ask participants to take 5 to 10 minutes to try to develop individually their own definition of *quality assurance* in an educational setting. Then ask participants to share their definition with the other participants in the workshop (depending on numbers of participants, perhaps share definitions first within a small group and then have each group report to the group as a whole the definition on which they have agreed).

Timeframe: Between half an hour and an hour, depending on size of group and extent of discussion required.

Materials required: Flip chart paper and pens if reporting back to large group is required.

5.2 What is a quality assurance system?

Instructions: Ask participants to answer the question, 'How would the structure of your own organisation have to change in order to become committed as a whole to quality assurance?' As a facilitating device, ask them

- to pair themselves off;
- to each draw, for and with their partners, a chart of their organisation as it exists at the moment;
- to indicate on it using a different colour of marker the kind of activities that are necessary at each level of position to foster commitment to quality assurance;
- to post these charts on a wall, for description and discussion.

Timeframe: Approximately three-quarters of an hour.

Materials required: Flip chart paper and a variety of coloured markers.

TOPIC 3

Techniques of Quality Assurance

Overview

Source materials for this topic

Tools for improving quality

The quality assurance cycle

Some quality assurance tools

Using formal standards

What are formal standards?

What advantages do formal standards offer?

What are the limitations of formal standards?

Performance indicators

Terminology

Audiences and purposes

Categories

Key programme indicators

Characteristics of 'good' indicators

Concerns about indicators

Practice exercises

Listing performance indicators

Applying quality assurance tools

1. Overview

These materials support a discussion on the topic of quality assurance techniques that are appropriate to educational organisations. First, the materials review the steps that comprise the continuous cycle of quality assurance implementation, and then present five tools which you may find useful for improving quality.

Second, the materials discuss the advantages and limitations of using formal, published standards in implementing your quality assurance scheme. The materials then discuss the concept of 'performance indicators', which are part of many quality assurance schemes in education.

The materials close with two practice exercises, one on performance indicators and the other on applying quality assurance tools.

1.1 Source materials for this topic

Davis, D. *The real world of performance indicators: a review of their use in selected Commonwealth countries*. London: Commonwealth Higher Education Management Services, 1996.

Guri-Rosenblit, S. Quality assurance procedures at the Open University of Israel. In A. Tait (ed.) *Quality assurance in higher education: selected case studies*, p. 32. Vancouver: The Commonwealth of Learning, 1997.

Robinson, B. Assuring quality in open and distance learning. In F. Lockwood (ed.), *Materials production in open and distance learning*, pp. 185–94. London: Paul Chapman, 1994.

Tait, A. (ed.) *Quality assurance in open and distance learning: European and international perspectives*. Cambridge: Open University, 1993.

2. Tools for improving quality

2.1 The quality assurance cycle

At a practical level, actually doing quality assurance involves a continuous cycle that comprises the following steps:

- setting standards for a key activity;
- carrying out the activity;
- judging achievements against the standards;
- planning for improvement; and
- taking action to implement desired changes.

2.2 Some quality assurance tools

Here are five tools that you may find useful in implementing this cycle. They were developed by Bernadette Robinson for workshops delivered for IEC, and later published (Robinson 1994).

Tracking the source using the five whys

The first reason given for a failure of quality may not get to the heart of a problem, yet typically this is where most questioning stops at this point. The reasons need to be tracked back to source. One simple technique is to ask ‘why?’ five times (more if necessary) in answer to each response. This gets to a deeper level of understanding and analysis.

Example: The institution has a system of ‘second marking’ for all assignments submitted by students enrolled in its M.A. course. This means that part-time tutors mark an assignment and then send it to central office for second marking by a member of the full-time teaching staff before it is returned to the student. In one instance a full-time faculty member

reduced the grade the tutor/first marker gave to an assignment by only one percentage point, without consulting the tutor. This upset the tutor, making her feel demeaned and incompetent.

Why did the faculty member do this?

Because she wanted to make it appear that she was more than a 'rubber stamp'.

Why?

Because she came from a university system that does not routinely involve second marking, and did not understand the role of second marker.

Why?

Because this role had never been discussed with her or thoroughly explained.

Why?

Because the director of the programme took it for granted that all universities operated this way and that hence all faculty members would understand the role of second marker and the procedures they were to go through (for example, the obligation to discuss any differences of opinion with the first marker).

Why?

Because assuming something to be the case is easier than checking it out when one is exceedingly busy with this and other duties, including a great deal of travelling.

And so on.

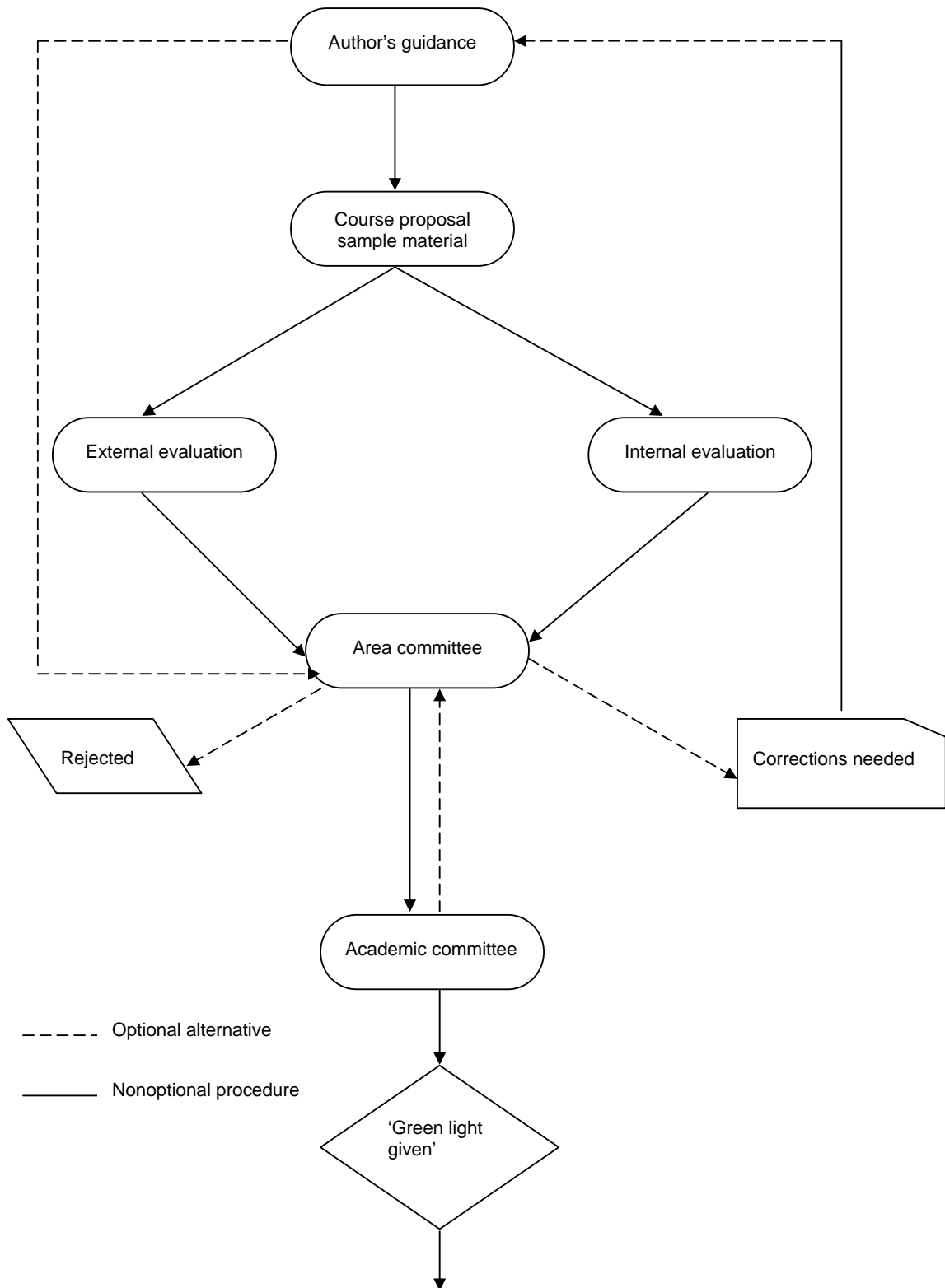
Flow diagrams

Flow diagrams are useful for mapping processes so they can be understood. Flow diagrams provide a way of tracking and displaying how quality is shaped through several stages or phases. As Robinson (1994:190) points out, flow diagrams are useful for:

- systematically recording steps, decisions, and activities required in a sequence;
- providing a clear diagrammatic representation of a process as a way of sharing information about what happens;
- identifying critical points or bottlenecks;
- displaying the consequences of planned change;
- standardising practice;
- training; and
- tracking and diagnosing the sources of failure.

The following flow diagram presents the process of course approval at the Open University of Israel (Guri-Rosenblit 1997:32).

A flow diagram: Course approval procedures at the Open University of Israel








An economist called Pareto is quoted by Robinson (1994:191) as suggesting that 80 percent of problems arise from 20 percent of causes. If you track the causes that create most failures of quality, you can concentrate your efforts on those areas that pay the most dividends. To apply this, you need to:

- identify the problems;
- try to quantify them; and
- use this information to make a simple bar chart which ranks the categories.

Example: An educational organisation tracks the nature of complaints received on a student ‘hot line’ from learners enrolled on their courses, categorises them, and records their frequency. The results of this tracking over the first month of classes are set out below. The fact that the top five complaints all relate to the bookstore operation gives managers a major clue as to where to focus their efforts in order to improve the quality of service to students.

A Pareto Analysis Bar Chart

Top Five Complaints	Frequency
	50 100 150 200 250 300 350
Set texts not available at start of course.	
Not enough set texts available for number of students in class.	
Hours of bookstore inconvenient for students who work part-time.	
Far too many set texts prescribed at too high a cost.	
No used-book sales scheme in place.	

Fishbone diagrams

A ‘fishbone’ diagram maps in a structured way:

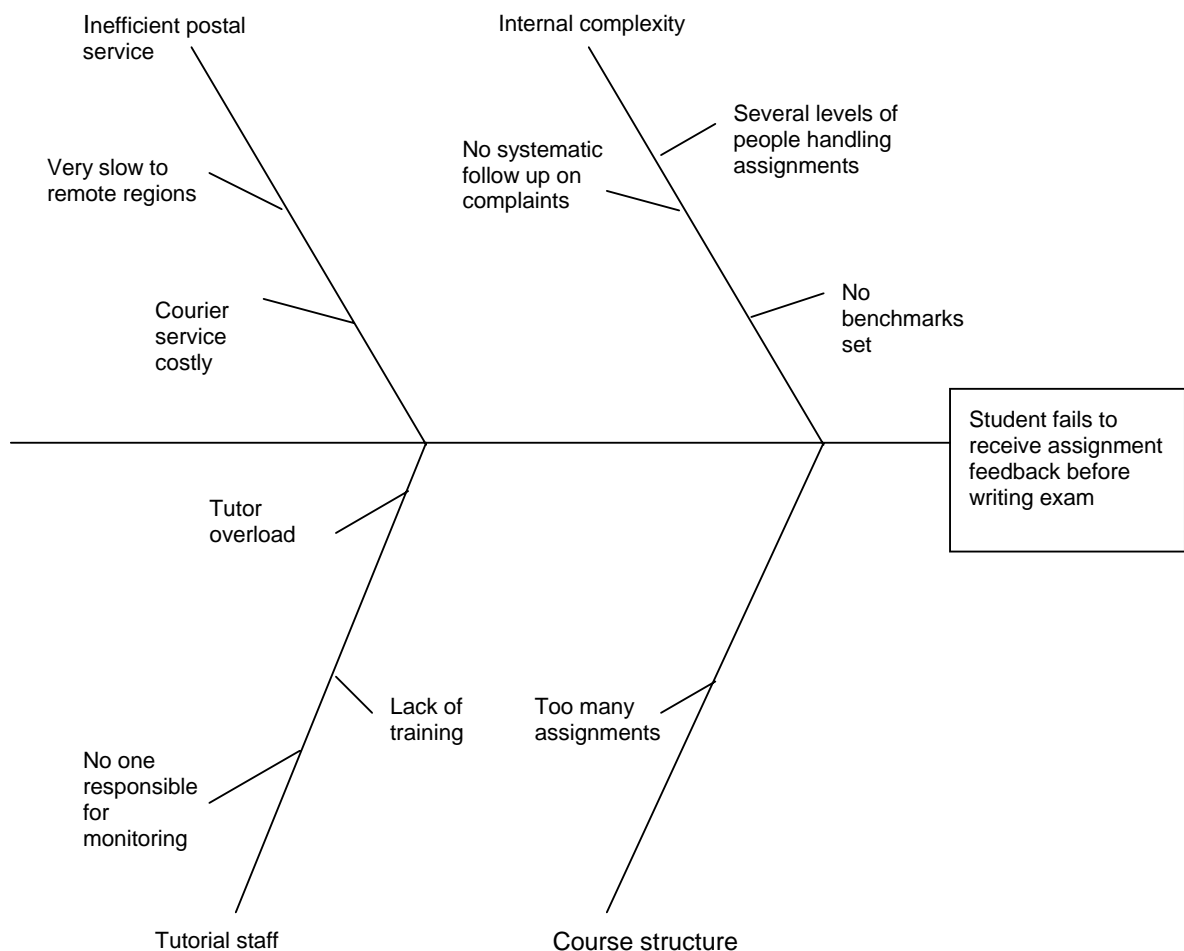
- the causes of a problem, both major and minor;
- the effects; and
- the factors involved.

It is useful in helping to diagnose and analyse problems with colleagues, especially when there is more than one cause. To use this you need to:

- identify the problem in a few words and put this as the head of the fishbone;
- identify the main issues or causes (four is a manageable number);
- under each of these four, explore the component factors or sub-causes (using a ‘brainstorming’ technique or the ‘five whys’);
- discuss the completed diagram, trying to distinguish between symptoms and causes; and
- agree on the one main cause and highlight it so that plans for remedies are focused on it.

Here is a sample fishbone diagram. The problem under discussion is put into the box at centre right.

A Fishbone Diagram



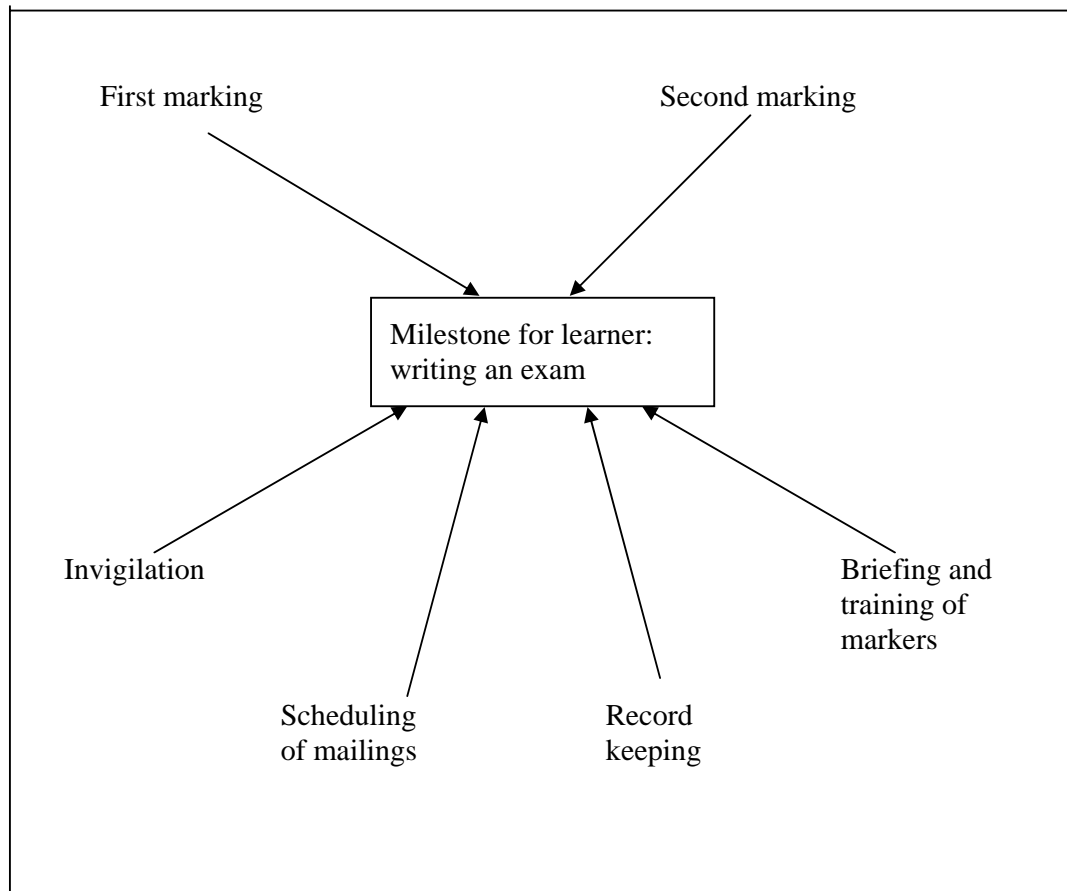
Milestones and barriers

This technique charts the learner's progress through the institution or programme to identify key milestones and barriers. Once identified, the processes that converge on these milestones and barriers are mapped and examined in detail. They are then reviewed and evaluated. This highlights critical points in systems, from the learner's point of view. The same can be done for other key players, for example,

- corporate clients;
- tutors; and
- support staff.

The points of hand-over or junction between stages or players are often critical barriers or milestones. Following is an example.

A Milestone Map



3. Using formal standards

3.1 What are formal standards?

Formal standards are nationally or internationally agreed rules for judging quality and excellence. They

- aim to state clearly the way in which an activity is to be performed and how it is to be measured, verified, or evaluated;
- encompass basically the cycle: plan, do, check, and act;
- aim to bring consistency to products, services, and processes; and
- ensure that what is specified is what you get but say nothing about the quality of a product itself.

Example: BS (British Standards Institution Quality Systems) 5750 is a series of British standards for quality management. The standards also exist as EN 29000 (European Norm) or in international version (ISO 9000). Some of the standards in the series provide definitions and guidelines; others are used for external quality assurance purposes, such as certification. All versions are more or less equivalent.

3.2 What advantages do formal standards offer?

Because formal standards originate in manufacturing, their application to education and training is not straightforward. Nonetheless, they can prove to be useful in:

- providing a framework for an organisation's own system for managing quality;
- providing an external reference point;
- enabling comparisons to be drawn between stated policy and actual practice;
- facilitating communication in transactions;
- regularising procedures;
- clarifying expectations and contracts;
- assisting in the definition of roles and responsibilities;
- identifying ownership of processes and the accountability of individuals for them;
- reducing uncertainty;
- offering a framework for audit and review; and
- carrying external validation and recognition (formal certification).

3.3 What are the limitations of formal standards?

Unfortunately formal standards also have limitations in that they

- may fail to provide a holistic view of an organisation's quality assurance management;

- may be mechanistically implemented, resulting in a reductionist view of quality;
- can involve too much paperwork so that documentation becomes an end in itself;
- may omit some important aspects of the product;
- are no guarantee of the quality of the product;
- may fail to take sufficient account of professional judgement and expertise;
- are static while needs and the environment are not;
- involve a heavy investment of staff time; and
- can create a ‘checklist culture’.

4. Performance indicators

4.1 Terminology

Distance educators increasingly are being required by their funding agencies, governments in particular, to develop sets of indicators by which institutional performance can be measured.

This exercise is closely tied to the process of *quality assurance*. Two important distinctions must be made between these processes, however:

- quality assurance is primarily focussed on quality, whereas performance indicators tend to focus on quantitative measures; and
- quality assurance tends to be primarily an internal activity, whereas performance indicators tend to be externally driven and mandated.

The term *performance indicator* is rather loosely and variously used. There is general agreement, however, that performance indicators, although based on the same data as management information, are clearly evaluative measures, clearly related to institutional or sector goals.

Here is a working definition:

Performance indicators provide a measurement for assessing the quantitative performance of a system.

Discussion: Again, you may wish to begin this discussion by drawing out participants’ own definitions of what constitutes a ‘performance indicator’ and using those as a basis for what follows.

3.2 Audiences and purposes

There are many audiences for performance indicators, each with particular purposes and needs. Some of these audiences and their purposes are set out in the following table.

Discussion: You might wish to first draw out participants' ideas of who constitutes the audiences for performance indicators and the purpose these indicators serve, in the context of their own programmes.

Performance Indicators of Various Audiences

Audience	Purpose
Units and institutions	<ul style="list-style-type: none"> • Internal management • Comparison with other units and institutions • Marketing, image building • Evaluation of teaching and research activities of individuals and departments
Government	<ul style="list-style-type: none"> • Accountability • Policy and planning • Allocation of resources • Funding • Value of investment in research • Human resources planning
Public	<ul style="list-style-type: none"> • Accountability
Learners	<ul style="list-style-type: none"> • Institution choice
Industry	<ul style="list-style-type: none"> • Research funding • Graduate employment
Research councils	<ul style="list-style-type: none"> • Selective distribution of research funds

As you can see, the purpose of quality assurance exercises and the development of performance indicators overlap a great deal. But, again, the performance indicator exercise is most often performed in response to pressure from external agencies. Performance indicators become the object of controversy when they are used as a ranking device to allocate esteem and resources differentially.

3.3 Categories

A number of different approaches can be taken to the development of performance indicators that provide a basis for their categorisation. One common approach is based on a production model. Another is based on internal and external measures.

Discussion: What categories do your participants use now?

Measurement of input, process, and output

- *Input:* resources used (for example, financial and physical facilities, learners and staff);
- *Process:* management of teaching, research, and services; and
- *Output:* products of teaching, research, and services.

Internal, external, and operational indicators

- *Internal:* market share of undergraduate applications, and graduation rates;
- *External:* first destination of graduates, publications, and citations; and
- *Operational:* unit costs, staff-to-learner ratio.

3.4 Key programme indicators

The following table lists some key programme indicators that are used in these approaches.

Key Programme Indicators

Indicator	Purpose
Learner indicators	<ul style="list-style-type: none">• Population• Entry qualifications• Progression and completion rates• Destination• Learner satisfaction
Staff indicators	<ul style="list-style-type: none">• Qualifications (for example, staff with Ph.D.)• Gender balance• Age ratios• Academic-to-support staff ratios• Value of investment in research

<p>Resources and finance statistics indicators</p>	<ul style="list-style-type: none"> • Manpower planning • Operating funds • Research funding • Other income • Staff-to-learner ratio • Expenditures on academic centres, central administration, and library • Different ratios of income-to-expenditure • Other selected financial ratios
<p>Research indicators</p>	<ul style="list-style-type: none"> • Number of research students • Research funding <ul style="list-style-type: none"> public sector research funding industry research funding total research income per academic staff member research expenditure per academic staff member ratios of research expenditure and income • Publications <ul style="list-style-type: none"> number of journal articles number of books other publications and conference papers • Patents and licences <ul style="list-style-type: none"> income earned
<p>Estate management and physical resources indicators</p>	<ul style="list-style-type: none"> • Space utilisation • Performance in maintenance, improvement, and capital expenditure

4.5 Characteristics of 'good' indicators

There is general agreement on the criteria for good indicators. They should be:

- relevant;
- able to be updated;
- based on reliable figures;
- understandable; and
- valid, that is, measure what is supposed to be measured.

Indicators should be clearly related to the defined functions, objectives, and mission of the institution. Where there are common indicators across a system, however, different values might be put on low or high figures by different institutions, reflecting different objectives.

Example: High learner-to-staff ratios are desirable in open and distance learning, since one of the advantages of open and distance learning provision is its ability to make a relatively small number of teachers and other experts available to a wide population. Conventional institutions, however, may well pride themselves on low learner-to-staff ratios, as an indicator of small class sizes and hence a personalised and individualised approach to learners.

3.6 Concerns about indicators

There are also many concerns about performance indicators. Among these are:

- the costs of providing additional data when the data required cannot be extracted from existing information;
- an emphasis on one particular aspect of performance (e.g. financial performance) at the expense of others;
- the inappropriateness of trying to rank institutions on the basis of performance indicators when institutions have different objectives;
- the tendency to use performance indicators in isolation rather than in conjunction with measures using professional judgement such as peer review;
- the fear that diversity among higher education institutions might be lost as institutions seek to maximise performance on the same set of indicators;
- the imposition of indicators may be used as an instrument of control by government;
- the limited value of indicators in measuring 'quality' including the quality of teaching and learner outcomes; and
- the fear that the use of performance indicators will stress efficiency and economy rather than quality.

Discussion: What concerns do your participants have about the use of performance indicators in their programmes? What indicators of performance seem to be important to the institutions profiled in the case studies?

5. Practice exercises

5.1 Listing performance indicators

Instructions: Divide participants into small working groups. Ask each group to

- review the list of key institution indicators, and the list of concerns about performance indicators;
- draw up their own list of concerns focusing on the difficulties that distance education programmes are likely to encounter when they are compared with conventional programmes in terms of the same set of indicators; and
- present their lists to the group as a whole.

Timeframe: Approximately three-quarters of an hour, including a half hour for discussion and fifteen minutes for presentations, depending on the size of the group.

Materials required: Flip chart paper and marker pens.

5.2 Applying quality assurance tools

Instructions: Divide participants into five working groups. Assign one of the ‘tools’ discussed in this section to each group, and ask them to use it to analyse and map or diagram a problem that is characteristic of the institution or institutions from which they come. Have them present their diagrams to the group as a whole when they have completed them. Use the diagrams as a springboard for discussing the strengths and limitations of each approach.

Alternatively, after you have discussed each tool, ask participants to pair off and try their hand at using the tool to identify more clearly some problem in their organisation which they would like to solve. A few or all of the pairs can then present their findings to the group as a whole, time permitting.

Timeframe: Approximately one hour.

Materials required: Flip chart paper and marker pens or overhead transparency slides.

TOPIC 4

Quality Assurance in Open and Distance Learning

Overview

Source materials for this topic

Applying quality assurance techniques in open and distance learning

Distance educators as 'early achievers'

Systemic factors

Value-driven factors

Aspects of quality assurance in open and distance learning

Monitoring instruction

Monitoring learner support

Monitoring learner achievement

Issues of quality assurance in open and distance learning programmes

Programme structure

Validation of programmes

Monitoring staff at a distance

Collaboration and resource sharing

Staff training and development

Practice exercise

Aspects of quality in open and distance learning

1. Overview

These materials support a discussion on the topic of the methods, approaches, and issues concerned with quality assurance in open and distance learning.

1.1 Source materials for this topic

Commonwealth of Learning. *Perspectives on distance education: student support services*. Vancouver: COL, 1992.

Evans, T. *Understanding learners in open and distance education*. London: Kogan Page, 1994.

Mills, R., and A. Tait (eds). *Supporting the learner in open and distance learning*. London: Pitman, 1996.

- Paul, R. *Open learning and open management*. London: Kogan Page, 1990.
- Perraton, H. *Administrative structures for distance education*. Vancouver: The Commonwealth of Learning, 1991.
- Posner, G., and A. Rudnitsky. *Course design: a guide to curriculum development for teachers*. 4th ed. London: Longman, 1994.
- Robinson, G. *Training and staff development for distance education: a strategic perspective*. Vancouver: The Commonwealth of Learning, in press.
- Rowntree, D. *Preparing materials for open, distance, and flexible learning*. London: Kogan Page, 1994.
- Tait, A. Introduction: international perspectives on quality assurance in open and distance learning, the importance of context. In A. Tait (ed.), *Quality assurance in higher education: selected case studies*, pp. 1–17. Vancouver: The Commonwealth of Learning, 1997.

2. Applying quality assurance techniques in open and distance learning

2.1 Distance educators as ‘early achievers’

Alan Tait (1997) points out that while quality assurance may be a recently applied term in the educational context, there is nothing new in open and distance learning about systematic review and inspection of products and services to ensure their quality.

This is the case for both the production of course materials and for presentation systems for learner support.

Major quality assurance methods are in place in most open and distance learning programmes, including:

- peer review;
- performance indicators;
- customer feedback; and
- a philosophy of continuous improvement.

Thus quality assurance measures have been in place in open and distance learning programmes from the beginning.

Example: The experience of the Open University in the United Kingdom provides a number of examples of long-standing quality assurance activities that have become standard practice in a number of distance teaching universities around the world. These include:

- the course team, who collaboratively and without hierarchy work and rework drafts of materials;
- developmental testing of course materials before general availability;

- monitoring of correspondence teaching;
- monitoring of learner assignment turnaround times;
- inspecting and supporting tutorial and counselling staff face-to-face activities; and
- collecting feedback from learners.

Why have distance educators been ‘early achievers’ in this field? Tait argues that there are a number of factors involved, some systemic, some value-driven.

2.2 Systemic factors

The characterisation of distance learning as an industrialised form of learning (Peters 1983) has meant that the move from the ‘craftsperson’ approach to the division of labour that characterises open and distance learning brought with it the need for inspection of process.

This ‘industrialised’ process is applied primarily in large scale institutions such as the Indira Gandhi National Open University, Universitas Terbuka, Sukhothai Thammathirat Open University, and the Open University UK, where learner numbers have reached unprecedented levels.

Here the industrialised system creates greater transparency than is characteristic of conventional universities, where lectures are essentially private; in contrast the course units produced by open and distance learning providers are published documents that are widely available and therefore open to criticism and review.

In addition, because open and distance learning has had to fight for parity of esteem with more conventional educational providers, distance educators have had to work that much harder.

2.3 Value-driven factors

It has long been part of the ideology of the open learning movement of which so many open and distance learning programmes are a part that learners should drive what is provided by the institution to a greater extent than is true in conventional higher education institutions.

This ‘learner-centredness’ is to be found in the way in which instructional materials are designed as well as in the provision of tutorial and counselling support, which is often one-on-one.

Discussion: Do your participants agree that a concern with quality assurance is more characteristic of open and distance learning providers than it is of conventional provision?

3. Aspects of quality assurance in open and distance learning

3.1 Monitoring instruction

In open and distance learning, unlike more conventional learning, instruction tends to be carried by instructional materials that have been designed to structure and facilitate learning as learners work through them.

A variety of media are used: print, radio and television broadcasts, audio and video cassettes, and computer-based programming.

Aspects of the instructional design process

The following aspects of the process that is used to design these learning materials make an appropriate focus for quality assurance monitoring and evaluation:

- the planning process by which the materials were produced;
- the proposed aims, objectives, and content of the materials being designed;
- the proposed teaching strategy; and
- the appropriateness and effectiveness of the media chosen for implementing the strategy.

Preliminary evaluation

All of these aspects might be examined before the learners ever begin studying the materials. It can be valuable to have an outside ‘expert’ look over your materials before you make them available to learners, paying attention to aspects such as academic credibility and likely effectiveness.

Academic credibility

You might want to ask some expert in the subject matter questions about your materials such as those in the following checklist.

Checklist to Evaluate the Academic Credibility of Learning Materials

- | |
|--|
| <ul style="list-style-type: none"><input type="checkbox"/> Are the aims and objectives sufficiently explicit?<input type="checkbox"/> Do the aims seem relevant to the needs of the target audiences?<input type="checkbox"/> Do the objectives support the aims?<input type="checkbox"/> Should any additional aims and objectives be included?<input type="checkbox"/> Is the content up-to-date?<input type="checkbox"/> Is the content accurate?<input type="checkbox"/> Are the content and presentation culturally appropriate?<input type="checkbox"/> Are there any important omissions?<input type="checkbox"/> Do there seem to be any faults of emphasis? |
|--|

- Are the assertions made adequately supported by evidence?
- Do the materials avoid oversimplification or overgeneralisation?
- Are they true to the nature of the subject or discipline?
- Are they balanced, and at pains to present opposing points of view when appropriate?
- Are the media that have been selected being exploited appropriately and to their full potential?

Likely effectiveness

The questions in the following checklist can be asked about how educationally effective the materials are likely to be.

Checklist of to Evaluate the Likely Effectiveness of Learning Materials

- Does the structure seem sensible and coherent, using introductions or previews, and summaries or reviews where appropriate, and providing a means that allows learners with different needs to use the lesson in different ways?
- Are adequate steps taken to motivate the learners and make clear to them what they are to do with the material and to get out of it?
- Are the materials pitched at the right level of difficulty and matched to the assumed prerequisite skills and understandings of learners?
- Is the tone that of a rigorous but friendly tutor, lively and interesting?
- Is the language plain and straightforward?
- Are analogies, examples, case studies, and illustrations used where appropriate to develop understanding?
- Are questions, exercises, and activities properly integrated into the materials to encourage learners in the self-assessment and practice of relevant skills?
- Are print and electronic media effectively integrated?
- Is the form of presentation conducive to effective learning?
- Are learners given sufficient information and practice of a kind likely to help them achieve the objectives?
- Is the relationship between assessment items and aims and objectives clear?
- Are assessment items clear in what they demand of learners?
- Are assessment items likely to result in answers that can be marked with reasonable consensus of agreement among different markers?
- Is the likely learner workload reasonable for the topic?

Discussion: A useful exercise at this time is to have sample course materials available for participants to assess against these checklists for appropriateness to their own contexts.

Developmental testing

Developmental testing involves trying out materials with learners in the hope of developing or improving those materials for the benefit of other or future learners. Methods of developmental testing include:

- *tutorial tryouts*: trying the materials out on one learner or a small group of learners; and
- *field trials*: using larger numbers of learners (20 to 30) in circumstances as similar as possible to those in which your eventual learners will work.

Continuous monitoring

Once the learning materials are in delivery, you will want to ‘keep an eye on things’ to see what problem areas need addressing, what good things are emerging and should be enhanced, and what to prepare for end-of-course evaluation.

Mechanisms available for this kind of formative evaluation include:

- *a course log book*: used to record the main things you notice in the running of the course and the main in-course corrections you have used;
- *casual evaluation*: appraising what is happening in day-to-day situations and responding to it; and
- *deliberate evaluation*: actively seeking specific kinds of information, through discussions, interviews, and questionnaires.

Summative evaluation

When the course is completed, a summative evaluation of its effectiveness may address questions such as:

- Did the course attract enough learners?
- Were they sufficiently qualified?
- Did enough of them last the course?
- Was the standard high enough?
- Was the course cost-effective?
- Were the learners satisfied?
- Were other stakeholders satisfied?
- What needs to be changed?

Typical instruments and sources for obtaining this information include:

- *questionnaires*: for learners, for tutors, and for others involved in delivery; and
- *interviews*: with selected learners, with tutors, and with others involved in delivery.

The results of these evaluations can then be fed back into the design process as a basis for improvements to both the process and the results.

3.2 Monitoring learner support

Issues in providing learner support

The issues involved in providing support to distance learners emerge in answering questions like the following:

- What are the characteristics of open and distance learning that determine the support needs of distance learners?
- What are the main roles of learner support in the light of these needs?
- What are the different stages in the learning process at which learners require support?
- What are the essential characteristics of a successful support system?

Problems distance learners face

Distance learners face unique problems, including:

- isolation in that distance learning participants may have little or no opportunity for face-to-face contact with the institution, their tutor, and fellow learners;
- difficulties organising studies and finding sufficient time to study;
- difficulties balancing work, study, and family commitments;
- lack of motivation;
- lack of resources and equipment in that learners may not have access to specialist libraries or practical equipment needed for studies;
- difficulties in developing appropriate study techniques such as note taking and essay writing; and
- difficulties receiving feedback on assignments that is timely and useful.

Discussion: Encourage a discussion among participants identifying the unique features of distance learners, their special needs and the strategies which can be adopted to address these needs to ensure a successful learning experience. What services are in place at their respective institutions? How can these be improved?

Special needs of distance learners

Distance learners have special needs, including:

- a need for information to help learners relate to the institution and understand its system;
- a need for contact, specifically human contact with tutors to help maintain motivation and overcome learning problems;

- a need for institutional identity, or some means of helping learners identify with a remote institution and to feel that they are part of a learner body rather than studying in isolation; and
- a need for advice on how to study; as well as that provided within the course itself, learners often need additional support to develop good study techniques.

Instructional support

Role of instructional support

Usually the key support function in open and distance learning is that of providing tuition and academic advice. The cost of providing tutorial support often represents a substantial proportion of the distance learning unit's overall budget. Careful organisation in this area is therefore important for the efficient running of the distance learning unit as a whole.

Academic advice

All tutorial methods allow learners and tutors to interact, so learners can benefit from the advice of tutors and get the most from their materials.

At a minimum, in all learning systems ways have to be found

- to inform learners of who is their tutor;
- to inform tutors of who their learners are; and
- to enable learners and tutors to communicate.

Because of the differences in the media used for communication, tutorial models have different characteristics, as summarised in these questions:

- Does the tutor–learner dialogue take place synchronously or asynchronously? That is, do the tutor and learner need to interact in real time or can a response be delayed?
- Do learners interact solely with a tutor or do they also interact among themselves?
- Can learners access the tutorial service from home or do they need to travel to an access centre?

Non-instructional support

Though less visible than instructional support and less central to the actual process of learning, non-instructional support is vital to the smooth operation of distance learning and must be integrated with instructional support.

Generally speaking, the following types of learner support are available.

Admissions and registration

The admissions and registration support subsystem includes the following functions:

- marketing;

- facilitating applications;
- making offers;
- registering learners; and
- matching learners appropriately with courses by level, subject, and so on.

Counselling

Learner problems that require referral to counsellors include:

- financial difficulties;
- family problems;
- difficulty in maintaining motivation;
- problems in finding sufficient time to study;
- balancing conflicting commitments; and
- physical difficulties or barriers, including limited mobility, hearing, or sight impairment.

Administrative support

A distance learning unit or institution needs to inform learners of the following kinds of information:

- the office hours;
- the best times to call for advice;
- any days when the office is closed;
- the name of the learner's tutor;
- how to contact the tutor;
- who to write to or telephone about different matters;
- deadlines for sending in tutor-marked assignments; and
- dates of examinations.

Depending on the tutorial system that is in place, other required information may include:

- location and hours of nearest learning centre;
- facilities available at learning centre;
- names and addresses of other learners (with their permission); and
- updates on curriculum changes, procedures, and so on.

Finance

Part-time learners are typically disadvantaged in awards schemes. Distance learning programmes therefore typically seek scholarship and bursary funds, which entails fundraising as a function.

Discussion: Provide an example of a working support system, preferably one that is familiar to your participants or at least relevant to their situation. The case studies that accompany this training kit also contain brief descriptions of a variety of learner support systems.

Checklist for successful delivery and support

If your support system is successful, you should be able to answer 'Yes' to the questions in the following checklist.

Checklist for Successful Delivery and Learner Support

- Do you know your learners' geographical location, age range, access to facilities, academic ability, gender, and so on?
- Are staff sensitive to gender, societal, and cultural differences?
- Are staff sensitive to the frustrations and time constraints adult learners often face?
- Do staff have up-to-date knowledge about the institution and its courses?
- Are your support systems flexible and learner-oriented, available to learners when and where they need them?
- Are the resources allocated to learner support adequate?
- Is there an appropriate balance of resources allocated to the development of materials and subsequent support of learning from those materials?
- Does your support function provide support to the internal functions of the distance learning unit as well as to learners?
- Is your decision to keep support services centralised, or to manage them on a regional or decentralised basis, appropriate to meeting the needs of your learner population?
- Does your learner record system contain the following information:
 - personal details, including name, address, age, family circumstances, and employment?
 - academic and professional qualifications?
 - special requirements such as specially adapted materials for disabled learners?

- tutorial record, including dates when assignments were received, grades, and copies of tutor comments?
- list of materials sent, including date of dispatch?
- record of attendance at face-to-face sessions?
- fees paid?
- Are your records detailed, accurate, and up-to-date? Do you ensure that:
 - records systems are regularly monitored to ensure they are functioning efficiently?
 - information is disseminated to the right people at the right time?
 - records are kept in a secure fashion so that only authorised personnel have access to them?
 - legal requirements governing the handling and storage of information are met?

3.3 Monitoring learner achievement

Assessment in open and distance learning may have any of three main purposes:

- *formative assessment*: to give learners feedback on their progress so that they know how well they are doing and can, if necessary, change the way they are tackling the course;
- *summative assessment*: to provide the basis for marks that may contribute to the learner's eventual certification; and
- *as part of the overall evaluation process*: to help the open and distance learning institution to monitor the effectiveness of its courses.

Who should assess?

Assessment may be carried out by any of a number of people, including:

- *the learner him or herself*: generally called self-assessment;
- *other learners*: called peer assessment;
- *the learner's tutor*: –often through *tutor-marked assignments* that are built into the course;
- *examinations*: an examiner or assessor, as may sometimes be the case with summative assessment; and
- *course evaluations*: someone else does the assessment, perhaps a researcher evaluating the course.

How can formative assessment help learners?

Formative assessment can help learners learn in a number of ways:

- *diagnosing learning needs*: early on in a course, assessment can help learners decide which parts of the course they need most, and may form the basis of a learning contract;
- *checking progress*: self-assessment questions during or at the end of study units enable learners to check how they are getting on and provide immediate reinforcement of learning;
- *increasing motivation*: reinforcement helps to keep learners going;
- *providing feedback*: tutor comments on tutor-marked assignments ensure the learner knows what to do next;
- *encouraging a deep approach to learning*: particular types of assessment such as questions that call for reflection, analysis, or application; projects; and practical assignments can help learners improve their approach to learning;
- *facilitating contact between learner and tutor*: tutor-marked assignments are often the main point of contact between a learner and his or her tutor, and are therefore an invaluable way of reducing learner isolation; and
- *increasing learner control*: giving learners the means to assess their own progress can increase their control over their own learning.

When to assess?

In deciding at which times during your course assessment is appropriate, here are some points to bear in mind:

- Early in the course, learners may not have learned anything significant enough for testing.
- On the other hand, an early assignment provides an opportunity for early interaction and feedback and thereby builds the relationship between learner and tutor.
- Relate assessment to major sections of content.
- Spread assessment evenly to spread the load and generate regular feedback.
- Keep in mind the turnaround time and capacity of your tutors.
- If an assignment is prescribed very late in the course, learners are unlikely to receive feedback before any end-of-course examinations.

How to assess?

Learning can be assessed using a number of possible methods, each appropriate for testing certain kinds of aims and objectives.

Assessment Methods

Assessment	Assessed	Advantages	Disadvantages
Essay questions in exams (learners do not see questions before sitting the exam)	Memory for facts, understanding ideas, ability to organise material, ability to develop an argument, original thinking	Easy to set	Time consuming to mark, marking may be unreliable, limited coverage of syllabus, favours fast and fluent writers
Pre-set essay exams (learners are given questions in advance of the exam)	Same as for essay questions. Ability to use references in preparation, sustained reflection	Produces better level of thinking	Same as for essay questions. More difficult to assess validity
Open-book essay exams	Same as for essay questions. Use of reference skills	Reduces emphasis on memorisation	Same as for essay questions. Heavy emphasis on speed
Essay or term paper in mid-course	Same as for essay questions. Use of reference skills	Life-like task if carefully set. Reduces stress on memorisation	Same as for essay questions. Possibility of collusion, plagiarism, or regurgitation

Short-answer written questions	Memory for facts. Understanding of ideas, theories	Broad coverage of syllabus, fast marking, more reliable marking, more feedback to learners	Limited opportunity to show argument or originality
Multiple-choice questions	Memory for facts, understanding of ideas, application of principles, analytic thinking	Fast marking, reliable marking, broad coverage of syllabus, more feedback to learners	Difficult to prepare without faults, cannot assess skills of organising or originality
Oral assessment of tutorial contributions	Oral fluency, assess reasoning behind personal thought, assess personal qualities	Flexible, useful to confirm other assessments, more valid in subjects with oral components	Very time-consuming, low reliability of marking, difficult to standardise questions, 'halo' effect introduces

			bias
Practical exams	Practical (manual) skills, application of principles	Only valid method for assessing skills	Time-consuming, difficult to standardise questions
Field-work	Field-work skills, application of principles	As for practicals	As for practicals, only more so
Projects, theses	Ability to plan original work, ability to seek relevant information, ability to develop an argument, ability to draw appropriate conclusions	Develops important skills in the learner, reveals depth of thought	Difficult to assess objectively

External requirements

As a learning materials designer, decisions in assessment are frequently not in your hands alone. You may also have to take into account:

- *institutional policies and procedures on assessment*: for example, the requirement that an invigilated examination be given for every course
- *requirements of employers*: for example, a requirement for demonstration of competence in some particular skill
- *policies and other requirements of accrediting agencies or associations*: for example, accountancy designations, nursing registration, and teachers' certification
- *examination boards*: for example, in the British context, GCSE (General Certificate in Secondary Education) and 'A' (Advanced) level examination boards, NVQs (National Vocational Qualifications)

Discussion: Ask your participants for examples of external requirements that they may have to meet in assessing their learners' performance.

4. Issues of quality assurance in open and distance learning

4.1 Programme structure

Curriculum development

A curriculum or programme needs to ensure as far as possible that the range of topics covered, the structure of the courses, and their length, level, workload, teaching approach, and format are what is needed and wanted by the potential learners and other stakeholders. These stakeholders can include:

- the providing institution;
- the funding agency;
- employers;
- course developers;
- tutors and course support staff;
- existing learners or trainees; and
- potential learners.

Discussion: You will want to add other stakeholders to this list in relation to the programmes offered in your own and your participants' contexts.

Identifying learning and training needs

The methods that are available for identifying learning and training needs include:

- organising a task group or working party that represents the spectrum of interests;

Example: A small group of key people are typically charged with developing a plan. In the case of the development of a primary teacher upgrading programme, for example, the group is likely to involve Ministry of Education officials and district supervisors, teacher training colleges, teachers, and community representatives.

- consulting experts, clients, and target audiences;

Example: This approach generates high quality and quantity of information, but those consulted may not be typical of the people whose views and opinions you seek. For example, an expert in teaching at the tertiary level may not be an appropriate expert to consult even though he is readily accessible.

- accurately measuring knowledge and skill shortage areas;

Example: A researcher may be contracted to conduct a desk study of national trends, other training opportunities, and related developments, using documents that are available from government ministries, think tanks, research institutes, and libraries.

- monitoring and analysis of demand for existing courses;

Example: You may have data on trends in registration and learner profiles over time available in your own records.

- studying employers to identify current and anticipated training needs; and

Example: Existing case studies may be available, or you can conduct your own focus group discussions or surveys, depending on the resources and time you have available.

- studying existing and potential learners to identify their current and anticipated needs.

Example: Again, depending on the time and resources you have available you can collect case studies, or conduct focus group discussions or surveys.

What will be taught?

Useful distinctions can be made between:

- knowledge-oriented courses;
- methodological courses; and
- mixed courses that are issue-based or problem-based or interdisciplinary.

Examples: A course on the history of open and distance learning is primarily knowledge-oriented, whereas a course on how to design effective instruction is primarily methodological.

A course on instructional design may be mixed, however, combining learning theory with application.

Such a course may also be problem-based (for example, where the outcome of the coursework is a design for an actual course), or interdisciplinary (drawing on principles from psychology, sociology, and anthropology for course design).

Is the course really necessary?

Out of your needs assessment may emerge the existence of an established curriculum that you could adopt or adapt.

Rather than give into the 'not-invented-here' syndrome, ask the questions from the following checklist about this curriculum.

Checklist for Choosing an Existing Curriculum

- How suitable is it? Are its objectives, methods, and outcomes appropriate to your learners?
- How effective is it? Does it achieve satisfactory results?
- How big is it? How much time, staff, and resources does it need? How many subjects? What range of learners?
- How complete is it? Does it need extra supporting material?
- How flexible is it? Is there room for innovation and adaptation by teachers and learners?
- How different is it? Is it sufficiently distinct from other approaches in outcome, method, and cost?
- How repeatable is it? Do any special factors such as unusual teachers or local resources hinder repetition elsewhere?
- How compatible is it? Would it interfere or fit in with the rest of the existing system?
- How ready is it? Can it be started this week, term, or year?
- Can it be sampled? Could you give it a trial run and abandon it if unsuccessful? Or would the decision have to be all-or-nothing as with a computer system?
- How expensive is it? What are the initial costs, installation costs, and running costs?

4.2 Validation of programmes

Validation of programmes is carried out by means of programme evaluation.

The three steps of evaluating can be labelled:

- measuring;
- comparing; and
- correcting.

Each presents special problems in an open and distance learning programme.

Measuring

Measuring the learning activity of learners is complicated by openness and distance.

Openness makes problematic the definition of what constitutes learner success.

Whose definition does one use: the learner's? the institution's? that of other stakeholders?

Distance delivery makes determining such apparently straightforward indicators as rates of learner progress or drop-out surprisingly difficult to do on a continuous basis, especially in programmes which enrol learners throughout the year.

Only in the vital areas of academic quality is measurement in a distance programme easier than elsewhere, for the team approach to course development and services delivery both encourages quality and ensures a wide awareness of any shortcomings.

It is rather ironic that, although the team approach gives distance courses more quality, and usually quantity, than their conventional counterparts, the notion that distance study is substandard dies hard in traditional circles.

Comparing

Comparison of distance programmes with conventional ones in terms of performance is also problematic.

In the area of economic performance, standards borrowed from conventional education should be used with caution.

Example: Capital-to-operating cost ratios tend to be considerably higher for conventional than for distance programmes (except in cases where a distance programme has had to make a major investment in technological infrastructure).

In the area of learner performance, especially in terms of retention and graduation rates, comparing distance with conventional learners may be difficult given probable differences in entry qualifications and circumstances of study. Even comparing one distance programme with another is difficult, since different programmes tend to adopt different definitions of who counts as a 'learner'.

Example: Some programmes count as learners all those who have enrolled in a course, whereas others limit the use of the term to those who actually sit the exam, and discount the fact that only a small percentage of those initially registered have actually stayed with the course long enough to write the exam.

Correcting

Because the standards of conventional programmes may often not be appropriate to open and distance learning programmes, the proper response to a gap between the measure and the standard may be to revise the standard rather than to initiate corrective action.

Where corrective action is required, however, the highly integrated and complex nature of an open and distance learning programme may make implementation somewhat problematic.

In addition, although open and distance learning programmes tend and need to be flexible they can respond effectively to learners' needs and circumstances, this flexibility should not be abused. Staff and learners do not appreciate being part of a continuing experiment in which all the variables are undergoing constant modification.

Finally, the cost implications of corrective action may be more far-reaching in an integrated system of the kind that tends to characterise open and distance learning programmes.

Example: The introduction of a new technology for delivering the teaching component of the programme, even if it is confined to one course in the programme, will have consequences for all aspects of the programme, from recruiting and marketing to staffing and training to development, production and dispatch of materials.

4.3 Monitoring staff at a distance

Needs

The management of open and distance learning programmes will almost always involve managers in the monitoring and support of staff who are at a distance from central office.

These staff may include regional centre staff, tutors, and learning materials producers (for example, writers of print materials and scripts for media production).

It has become somewhat of a truism in open and distance learning that learners in open and distance learning programmes need continuing contact with the programme and support from programme personnel as they undertake and work through their studies.

Staff at a distance need the same kind of support and contact, especially since they are frequently working under conditions such as the following:

- they lack proper orientation and training;
- they tend to be part-time, with major affiliation and commitment to some other institution;
- they tend to be on short-term or annual contracts;
- they likely have no regular face-to-face contact with supervisors and colleagues;
- their roles are frequently diffuse and ill-defined; and
- too often the adage, 'Out of sight, out of mind', means not just isolation but invisibility for distant staff when it comes to decisions on policies and procedures, which tend to be made without due attention to their particular circumstances and needs.

Mechanisms for managing staff at a distance

Because of the distance factor, it is even more important with distant staff to practice effective staff relations, by means of:

- clear role descriptions, expectations, and reporting lines;
- a thorough induction into the programme, its history, goals, policies and procedures;
- frequent and effective two-way communication (e-mail is an excellent medium for this where available);
- opportunities for face-to-face meetings;
- frequent performance review and monitoring;
- accurate and efficient records systems;
- continual updating on changes in policies and procedures; and
- opportunities for input into decisions that affect their work.

4.4 Collaboration and resource sharing

Why collaborate?

Collaboration between educational institutions, agencies and programmes is becoming increasingly the order of the day, both in industrialised and less affluent countries. There are a number of reasons, among them:

- public funding for education at all levels is decreasing, and governments are requiring institutions to work with each other and in many cases with industry in order to qualify for funding; and
- institutions and agencies are responding to decreasing levels of funding by seeking collaborative arrangements that can make scarce resources go further.

Collaboration in open and distance learning

Open and distance learning programmes are far from the only ones affected by these pressures. Nonetheless, they are among the foremost seekers and implementors of collaborative arrangements, because of the nature of their work. For example:

- Learning materials development represents a major cost to distance programmes. Producers of such materials can share costs through co-development arrangements, or recoup costs by sales and leases of materials. Low-resource programmes can save on staffing and other recurrent costs by purchasing materials rather than developing their own.
- Learners are seeking flexibility, especially in terms of being able to apply credits taken in one programme to the completion of requirements for another. Credit transfer arrangements place great demands on institutional collaborative arrangements.

- The technologies used in delivery of distance programmes are forcing collaboration, partly because delivery agencies need to share the costs, and partly because of the nature of the technologies themselves, which increasingly make distinctions between ‘distance’ and ‘conventional’ programmes irrelevant and meaningless.

Examples: Collaborative arrangements in open and distance learning are many and varied. Here are examples of only a few.

A number of international organisations have been created to foster course-sharing and other kinds of collaboration among their members, including The Commonwealth of Learning, CIIFFAD (*Consortium d’institutions francophones de formation a distance*) and the *Consortio-red de educacion a distancia*.

Colisa is a consortium of distance teaching universities and organisations in South Africa, including Vista University, the University of South Africa, Technicon SA, the South African Institute of Distance Education, and the SACHED Trust, that have joined together to share course materials and programmes.

Some postgraduate degrees in open and distance learning have been the results of collaboration, for example between Deakin University and the University of South Australia, and between the University of London Institute of Education, the International Extension College, Deakin University and the Open Learning Agency.

The Contact North network in northern Ontario, Canada, makes delivery facilities available for a number of institutions to offer secondary and tertiary-level programmes to widely scattered populations.

Required skills and knowledge

For managers of open and distance learning programmes, this increasing collaboration means a need for the following kinds of skills and knowledge:

- a heightened awareness of and sensitivity to differences in institutional cultures;
- skills in building effective trust relationships; and
- the ability to define, perceive and monitor mutual benefits in collaborative arrangements.

In many ways these are skills similar to those required for members of teams. Managers of open and distance learning programmes need skills not only in managing teams but also in being part of them on a wider scale.

Quality assurance in collaborative ventures

Ross Paul in his book, *Open Learning and Open Management* (Kogan Page, London, 1990) draws the following lessons for managers of programmes who are involved in collaborative projects:

- ensure that clear benefits from the collaboration are established and understood by all partners;
- ensure that clear and specific objectives and measures of achievement are spelled out;
- remain open to renegotiation if necessary;
- keep the number of partners involved to the fewest possible to make the collaborative venture successful;
- delegate clear authority and responsibility to specific partners and individuals;
- take seriously the need to understand differences in corporate cultures;
- scrutinise the collaborative venture on a regular basis and disband if it is no longer meeting its objectives; and
- ensure that agreements have the full support of the executive officers of all the partner institutions.

4.5 Staff training and development

Why is training needed?

Training of both new and existing staff in open and distance learning programmes is essential to the development of the competencies listed above.

It is important that senior managers see training as an investment rather than a cost, and give it high priority in organisational plans and funding allocations.

It is also important for senior managers to ensure that when training is provided, the organisation is ready to utilise the new learning so that opportunities for capacity building are not lost.

When is training needed?

The practice of open and distance learning generates a variety of roles and needs. Staff are often required to learn new work practices and skills. Individuals and groups have to:

- take on new roles, especially if open and distance learning is unfamiliar;
- adapt to new ways of teaching and communicating;
- use new technologies which alter familiar processes of teaching and communication;
- manage dispersed and decentralised organisations or complex processes;
- be responsible for supporting learners at a distance;

- develop better skills in teamwork, co-ordination, and the management of schedules and records; and
- take on unaccustomed roles as trainers.

What kinds of staff need training?

The categories of staff who need training can be grouped as follows:

- newly-appointed staff, needing routine induction and orientation to open and distance learning in general;
- staff taking on new responsibilities and roles;
- staff in traditional institutions adapting existing knowledge or skills to open and open and distance learning applications;
- all staff periodically, to ensure maintenance of skills and standards and their continuing professional development; and
- staff who face specific changes in their work as a result of change within the organisation as a whole (for example, the introduction of a new technology; see the Deakin and Murdoch Universities case studies).

What problems do organisations face when implementing staff training?

A number of concerns about staff training are commonly experienced by open and distance learning programmes. These include:

- the difficulty of getting institution commitment and resources;
- the inconsistency in training provision within organisations;
- the slowness of organisations to develop policies and plans for staff training, especially for part-time and field-based staff;
- weak integration of training with institutional policy and plans;
- uncertainty about where to locate responsibility for staff training within the organisation;
- the status of training and perceptions of its value amongst staff and management;
- the limited nature of the needs analysis commonly done;
- the weak use of evaluation; and
- discontinuity between training given and its application to ‘real life’ on the job.

Discussion: Take advantage of the wealth of examples available both from your own and your participants’ experience. Participants may also have problems they wish to add to this list, either from their own experience or from reading the case studies.

How closely is training linked to strategic goals in your organisation?

Here is a checklist of questions to ask about the links between the training your programme offers and your programme's goals.

Staff Training Checklist

- Is there a training/staff development policy? Is it widely known?
- How are decisions made about training provision? Who decides? Who are consulted?
- What methods are used to identify staff development needs in your programme:
 - at the organisational level?
 - at the job level?
 - at the person/individual level?
- How well are these levels integrated? Which dominates? Why?
- In what direction does the balance need to change, in your view?
- How are priorities decided? On what basis?
- What is the effect of this on training provision?
- In what ways is staff development provision linked to organisational objectives?
- How well is it linked? Could the link be strengthened?
- Who is responsible for this? Who should be responsible at the different levels, in your view?
- Do training objectives and programmes change as soon as there is a change in the organisation's strategic decisions?
- When did this last happen in your organisation? What was the outcome?

Discussion: Work through these questions with your participants.

What are the steps in implementing a training and staff development plan?

Whatever policy and strategy for staff training are adopted, the same steps are involved in implementing the plan. These steps are:

- define and agree within the organisation the general and particular needs for training, based on a systematic needs analysis;
- review possible ways of meeting needs and the availability of financial resources;
- establish priorities;
- select appropriate training events and interventions;
- construct a coherent training plan in the light of available resources;

- communicate to all concerned and build a supportive climate for training;
- prepare an evaluation approach and plan;
- provide the training and evaluate its efficiency and effectiveness; and
- use the evaluation data to assess its impact, to improve training provision and to inform future plans.

What modes of training are available?

Training of staff in open and distance learning programmes can happen in a variety of ways:

- *on-the-job training*: more experienced or senior staff can be assigned to work with new or junior staff on a project to mentor and assist them; this is particularly the case for course authors who are trained in open and distance learning techniques in the context of the course team;
- *face-to-face training sessions*: can happen one-on-one or in small groups, using in-house or imported trainers. They are usually rather formally structured and scheduled; and
- *courses offered face-to-face and at a distance*: a growing number of formal courses are available for training staff in a wide variety of aspects of open and distance learning. Some of these courses require staff to travel to the site where the course is offered, but increasingly these courses are offered at a distance, some of them on-line via the Internet and the World Wide Web. For example, there are a number of programmes available at the postgraduate diploma and master's level in open and distance learning, including those offered by Indira Gandhi National Open University, Deakin University and University of South Australia, University of London and International Extension College, Athabasca University, and the Open University in the United Kingdom. The latter two programmes provide tuition and support to learners primarily on-line.

How is a training needs analysis conducted?

Training needs can be assessed on three levels, at the level of

- the organisation;
- the job; and
- the individual.

An effective strategy is to start at the organisational level and work towards the individual level, although the diagnosis of training needs at an organisational level requires quite sophisticated skills of analysis and evaluation as well as access to a wide range of information.

Transfer of skills acquired during training to the actual job to be performed is not automatic. A number of factors affect the effectiveness of this transfer, including:

- the nature of the skills learned; for example, interpersonal skills transfer less well than psychomotor skills;
- the time lag between learning something and using it in a ‘real-work’ context; new skills need to be used in practice before they deteriorate;
- the number of elements common to the training and the job situation; that is, the greater the number, the stronger the transfer;
- perceptions of relevance and quality of the training by participants; and
- attitudes of colleagues, departments, and the organisation as a whole towards the training.

How can training be evaluated?

Here are a number of questions that can be asked of the training process in order to evaluate its effectiveness.

Context in which the learning event takes place

- How accurately were needs initially diagnosed?
- What information was used? How was it analysed to establish these needs?
- Was training an appropriate solution to the problem?
- Why was this particular kind of event and form chosen?
- How were learning objectives selected?
- What learning objectives were set? At which level of outcomes?
- How does this learning event link to others in the participant’s experience, and to other training events provided? Does it fit with an organisational plan for training?

Inputs to the training

- What resources were available for the training event?
- What were actually used (personnel, physical, and financial resources, time)?
- What were the learning structure, content, media, and methods? Did they incorporate sound principles of learning?
- What was the final cost?
- Was the selection of participants appropriate?
- Did they attend the training provided? What was the take-up?
- Was this the best and most appropriate way of training?

Reactions to the training

- What reactions to the learning event did participants and trainers have?
- Was it perceived to have achieved its original objectives?

Outcomes from the training, as input to planning for subsequent training

- Was it efficient?
- Was it effective?
- Was it cost-effective?

5. Practice exercise

5.1 Aspects of quality in open and distance learning

Instructions: Divide participants into four working groups.

Make available to each group a copy of the framework accompanying this exercise, which outlines four major aspects of quality in open and distance learning.

Assign one aspect to each group.

Ask each group, in terms of the aspect of open and distance learning that they have been assigned, to develop for presentation to the group as a whole the following lists:

- the major issues facing organisations in assuring quality in this aspect of open and distance learning provision;
- the strategies and techniques available for assuring this quality of provision; and
- the ways in which this quality can be demonstrated.

Timeframe: Allow approximately three-quarters of an hour to an hour for the exercise. In the discussion that follows, make sure to emphasise the fact that these are all aspects of the same system and the ways in which all four aspects are integrated.

Materials required: Flip chart paper or overhead transparencies and marker pens.

Framework of Aspects of Quality in Open and Distance Learning

The products/outputs	<ul style="list-style-type: none"> • the courses and materials (printed texts, audio, video, and so on)
	<ul style="list-style-type: none"> • number of graduates or successful completers
	<ul style="list-style-type: none"> • examination pass rates of achievement of intended competencies or practical skills
	<ul style="list-style-type: none"> • equivalent results in public examinations.
The processes	<ul style="list-style-type: none"> • learning and teaching processes such as tutoring, assessing written work and providing learner feedback, monitoring field workers and tutors, training group leaders
	<ul style="list-style-type: none"> • advising learners and keeping track of them
	<ul style="list-style-type: none"> • record keeping
	<ul style="list-style-type: none"> • co-ordinating groups of external writers
Production and delivery systems	<ul style="list-style-type: none"> • course production
	<ul style="list-style-type: none"> • print production
	<ul style="list-style-type: none"> • scheduling and progress chasing
	<ul style="list-style-type: none"> • warehousing and stock control
	<ul style="list-style-type: none"> • getting materials to learners
	<ul style="list-style-type: none"> • transmission of radio programmes
As a general philosophy or ethos	<ul style="list-style-type: none"> • policy statements
	<ul style="list-style-type: none"> • attitudes of staff
	<ul style="list-style-type: none"> • management and training of staff
	<ul style="list-style-type: none"> • motto or slogan (for example, 'Only the best')
	<ul style="list-style-type: none"> • images and messages presented to the public (publicity leaflets, brochures, press reports)

TOPIC 5

Related Case Studies

Overview

Source materials for this topic

Quality assurance procedures at the Open University of Israel

Quality assurance practices and principles: the case of Indian distance education

The roots of quality assurance at the British Open University

Quality assurance in the provision of library services in British Columbia

Practice exercise

Discussing the case studies

1. Overview

These materials support a discussion of four case studies that are drawn from the experiences of open and distance learning providers in implementing quality assurance schemes in their institutions.

The practice exercise consists of a list of questions to be used as guidelines for participants as they work in small groups to develop a presentation of the case study their group has been assigned.

1.1 Source materials for this topic

Guri-Rosenblit, S. Quality assurance procedures at the Open University of Israel. In A. Tait, (ed.), *Quality assurance in higher education: selected case studies*, pp. 29–41. Vancouver: The Commonwealth of Learning, 1997.

Koul, B. Quality assurance practices and principles: the case of Indian distance education. In A. Tait (ed.), *Quality assurance in higher education: selected case studies*, pp. 42–56. Vancouver: The Commonwealth of Learning, 1997.

O’Shea, T. and A. Downes. The roots of quality assurance at the British Open University. In A. Tait (ed.), *Quality assurance in higher education: selected case studies*, pp. 57–66. Vancouver: The Commonwealth of Learning, 1997.

Seaborne, K. Quality assurance in the provision of library services in British Columbia. In A. Tait (ed.), *Quality assurance in higher education: selected case studies*, pp. 77–88. Vancouver: The Commonwealth of Learning, 1997.

Tait, A., (ed.) *Quality assurance in higher education: selected case studies*. Vancouver: The Commonwealth of Learning, 1997.

2. Quality assurance procedures at the Open University of Israel

By Sarah Guri-Rosenblit

Introduction

Many of the full-fledged, autonomous distance teaching universities that were established in the early 1970s, following the model of the United Kingdom Open University (UKOU), have initiated special quality mechanisms in designing their learning materials, monitoring their learning and teaching process, and assessing their students. These quality assurance procedures purported both to improve the quality of academic teaching in a distance learning setting, and to ensure its respectability and credibility in the context of the national higher education system.

This case study examines the quality assurance procedures exercised by the Open University of Israel (OUI) in relation to comparable and different procedures employed by some other large distance teaching universities. With a small nucleus of full-time academic faculty and heavy reliance on external colleagues from traditional universities, the OUI has adopted unique quality mechanisms in its everyday operation and organisation.

This case study analyses the special quality assurance processes used by the OUI for course approval, for course development, and for monitoring the learning, tutoring, and teaching functions. The merits and the problems associated with employing these quality procedures are elaborated.

Before presenting and examining the quality assurance mechanisms at the OUI, the meanings attached to *quality* in higher education settings, in general, and in distance teaching universities, more specifically, are discussed.

Quality Assurance in Higher Education

The pursuit of quality is an important issue in higher education world-wide. In the last decade both national governments and international organisations have shown a growing interest in defining and assessing quality in higher education institutions (Vught and Westerheijden 1993; Westerheijden et al. 1994). But quality is a vexed, complex, and relative term. Vught claims that “The concept of quality is as elusive as it is pervasive. Universal agreements on the meaning of quality or a final answer regarding the definition of this concept seems impossible to reach” (Vught 1994: 36). Harvey and Green in trying to define what quality is in higher education have reached the conclusion that “it means different things to different people, indeed the same person may adopt different conceptualisations at different moments ... There is a variety of ‘stake holders’ in higher education, including students, employers, teaching and non-teaching staff, government and its funding agencies, accreditors, validators, auditors, and assessors ... Each have a different perspective on quality. This is not a different perspective on the same thing, but different perspectives on different things

with the same label” (Harvey and Green 1993: 10). Harvey and Green had grouped the various definitions of quality into five categories:

- quality as exceptional;
- quality as perfection or consistency;
- quality as fitness for purpose;
- quality as value for money; and
- quality as transformation.

Traditionally the notion of quality in higher education has been associated with meritocracy, with belonging to a small, privileged, and exceptional class. Education at Oxbridge or at the Ivy League universities in the United States, for example, implies distinctiveness and exclusiveness. All of the distance teaching universities (DTUs) have been established on a totally different philosophy. They were meant to open up the higher education systems to diverse and heterogeneous clienteles, to widen access to university studies, and to contribute to the democratisation of higher education systems. Concurrently, they have had to prove that the education they offer is valuable and on a high level, and in some aspects of an even higher quality than their traditional counterparts.

Excellence is often used interchangeably with *quality*. Excellence sees quality in terms of high standards (Moodie 1988; Reynolds 1986). Aspiring for excellence in research is a common goal of all universities, but excellence in teaching is rarely rewarded. Many scholars consider instruction as a compulsory task that they have to perform, and devote most of their efforts and energy to their scholarly studies. But DTUs by their very nature pay special attention to teaching. By establishing high standards in distance teaching, the DTUs have ensured themselves a unique and respectable position in the academic world. Clearly, one of the important areas in which DTUs choose to excel is the development of high quality learning materials, which are designed to facilitate and enhance self study. The preparation of the materials is at the centre of the learning and teaching system at all DTUs, taking up the largest proportion of academic faculty time. The course materials produced by DTUs are “transparent” in the sense that they are open to scrutiny and criticism, and thus there is control over the quality of instruction by virtue of its public nature (Perry 1976; Reddy 1988; Guri-Rosenblit 1993).

The fact is that DTU students are not the only beneficiaries of high quality learning materials. Faculty and students at most traditional universities use extensively the materials developed by the DTUs as university textbooks, because of their clarity, integrated structure, and overall appealing design (Guri 1987; Guri-Rosenblit 1990). The learning materials are routinely scavenged by faculty at traditional universities for ideas and content presentation. Some DTUs have become the biggest academic publishing houses in their countries. In this sense, many DTUs have contributed most conspicuously to the production of high level university textbooks, mainly at the undergraduate level. Furthermore, since the textbooks or study units are written in the spoken language of each national setting, many DTUs, such as those in Spain, Israel, and Germany, have played a crucial role in assisting all first degree students to

overcome some of the difficulties they encounter when assigned to read mainly in English.

In order to achieve high quality learning materials, each DTU had to define special quality assurance procedures. It is important to distinguish between these and quality control procedures. The latter refers to a set of operations that measure, and if necessary adjust, a product's appropriateness according to a set of predetermined required criteria. Quality control in relation to academic teaching entails considerable conceptual and practical difficulties (Alexander and Adelman 1982; Guri-Rosenblit 1993). It is particularly complicated to define exact standards against which it is possible to evaluate the fitness of an academic course for its purpose—whose purpose, and how should fitness be assessed?

Quality assurance does not purport to clarify the standards or specifications against which to measure or control quality. "Quality assurance is about ensuring that there are mechanisms, procedures and processes in place to ensure that the desired quality, however defined and measured, is delivered. The assumption implicit in the development of quality assurance is that if mechanisms exist, quality can be assured" (Harvey and Green 1993: 19–20).

In the context of this case study, it is important to state that most of the procedures employed at DTUs for monitoring the quality of the self-study courses are mainly quality assurance procedures, rather than quality control mechanisms that specify exact criteria against which the quality of the final products such as study units, textbooks, and readers can be assessed.

Course Approval Procedures

In most traditional universities, course proposals are rarely subject to a thorough evaluation. Frequently the appraisal process is no more than a "rubber stamping formality at faculty or Senate level which ensures that outward forms of appraisal—title, syllabus and examination arrangements are consistent with prevailing practices" (Adelman and Alexander 1982: 9).

In DTUs, mainly at those that focus their activity on the development of learning materials, course approval is usually subject to more stringent quality assurance procedures as compared to traditional universities. The need to employ special control regulations for course approval at the OUI stemmed mainly from its unique model of operation. From the outset, the OUI was planned to base its academic work upon a nucleus of internal faculty members working together with outside contributors from other major Israeli universities. The OUI was established in 1974 by the Government of Israel and by the Rothschild Foundation, and it has been greatly inspired by the remarkable success of the UKOU. Interestingly the OUI has in some respects followed the recommendations of the UKOU's planners more closely than the UKOU itself. When the UKOU was initiated, both the planning and the advisory committees had recommended that it be based on a small internal faculty. "The Advisory Committee envisaged that the University would require a central professional staff of between forty to fifty. This total included not only academic staff, but also the administrative and operational staff that would be required" (Perry 1976: 77). But the first vice-chancellor, Walter Perry (now Lord Perry), invested a huge effort to alter this decision and to mobilise a substantially greater number of

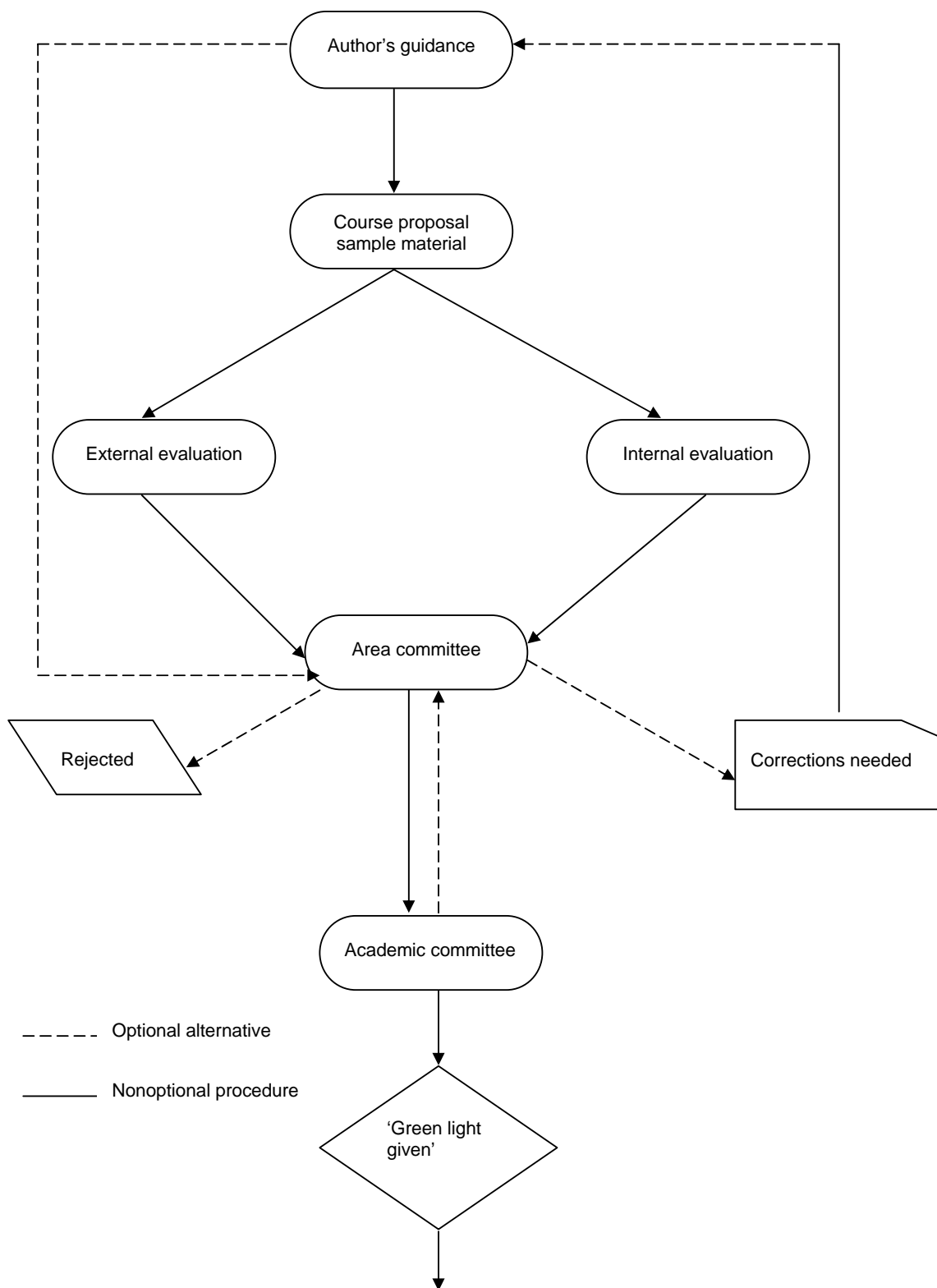
academics. He insisted that the academics engaged in developing a course be full-time members of the institution: “I am quite sure that we were right to employ as our main course creators full-time academics of the Open University, and eschew the original idea of the Advisory Committee, and indeed of the Planning Committee, of using mainly consultants or people of secondment from other universities” (Perry 1976: 92).

Naturally, the size of the academic faculty influences the quality assurance procedures employed by each DTU in approving course proposals and in developing its courses. The German Fernuniversität had, in 1991, 430 professors with around 53,000 students (*EADTU News* 1993). In 1992, the UKOU had an academic staff of 810 with nearly 100,000 students (Open University 1992), while the Spanish Universidad Nacional de Educacion a Distancia (UNED) had over 800 professors with nearly 100,000 students (UNED 1992). In contrast, in 1994, the OUI had only 32 full academic faculty members with over 23,000 students (Open University of Israel 1995).

Obviously, a DTU like the OUI, which depends heavily on the employment of external academics from other universities, faces specific problems and has to establish totally different quality assurance procedures compared with a DTU that possesses a large staff and develops its materials mainly with its internal faculty.

As a consequence of the small internal faculty at the OUI, several hundred scholars from the seven traditional Israeli universities are employed on short-term contracts to consult, write, and re-write varying portions of its courses (Guri 1987). The co-operative work between internal and external faculty and the continuous recruitment of outside contributors have led to the creation of special course approval rules, described schematically in Figure 1.

Figure 1. Course approval procedures at the Open University of Israel



The recruitment of external academics is performed in several ways, which range from personal acquaintance to a systematic search for experts. Guidance is crucial for outside contributors, since most of them are not aware of the special characteristics of the OUI's learning system. Jenkins (1983) specified several models for training writers at DTUs:

- training by correspondence;
- self-tuition;
- intensive workshops; and
- in-service training involving an editor and a writer working closely together.

The OUI uses an alternative model in which the external academics are personally matched and guided by the internal academic faculty. Obviously, some course teams also combine both internal and external authors. All of the external contributors receive guidance on the elements that compose a self-study written course, and are advised on how to prepare the course proposal and write the sample material.

The decision to request sample materials from tentative authors resulted from a series of previous failures, in which many of the written study units did not meet the basic requirements of an instructional text, and had to be dumped. Even brilliant scholars with an outstanding reputation in the academic world can fail to transfer their knowledge and expertise into an instructional written discourse. Writing texts with a didactic apparatus suitable for self-study settings requires special skills that are quite often different from those required for writing a scholarly article or lecturing. Some of the external professors were either surprised or shocked when presented with challenges to their assumptions about teaching and were forced to rethink how they should present their subject matter. A few resisted training and criticism and resigned from writing for the OUI.

The need to institutionalise quality mechanisms for approving and writing learning materials at the OUI results partially from the fact that part-time external faculty lack the institutional commitment of full-time permanent staff. "Conflicting loyalties among part-time writers may result in the production of material which is unsuitable for distance learners. Also, because of the academic freedom they have previously experienced, they may be reluctant to allow any modifications to be made to their work by the permanent staff" (Carr 1984: 17). Naturally, the contracted authors are much more concerned with the students in their own institution than with the needs of students learning at a distance. Many of the authors may be too busy to devote sufficient time and energy to the development of self-study courses.

It is important to note that the prevailing ethos about academic autonomy in each national setting is a crucially important variable that influences the nature of the quality mechanisms employed in each DTU. The concept of academic autonomy assumes that what goes on in a particular classroom is the sole responsibility of the professional scholar concerned, which rests on a view of the academic "as professionally competent over the full range of activities he [or she] undertakes, and this competence includes the necessary knowledge and skills to make or seek

insightful and valid appraisals of his work and act on these appraisals” (Adelman and Alexander 1982: 16). In Germany and Spain, for example, where the ethos of academic autonomy is most valued and sacred, it was unthinkable to develop formal compulsory quality assurance procedures for evaluating the learning materials written by professors at UNED or at the Fernuniversität. Both of these DTUs employ the author and editor model (Smith 1980). In this model the materials written by a faculty member are edited by a professional editor. The work of the editor may be limited to proofreading and assisting with graphics and layout, or it may involve substantial restructuring of the author’s work. But even the editor’s employment at UNED and at the Fernuniversität is not mandatory, but just available and recommended.

At the UKOU, on the other hand, the evaluation of writing by colleagues is an integral ingredient of the course team approach. It seems that in the United Kingdom it was easier to implement quality assurance of teaching as compared to DTUs in continental Europe. The external examiner system in the United Kingdom attempts to ensure comparability of standards across higher education institutions. The external examiner system, by its very nature, puts limits to the practice of academic freedom, by appointing external academics to evaluate and even change the content and structure of the final exams, in courses taught by fully established academics. In such an environment, it might be speculated that it was simpler to implement the UKOU’s course team approach.

The OUI faced the most complicated situation. The ethos of academic autonomy is most guarded and valuable in Israeli universities, comparable to the situation described in Germany and in Spain. But the OUI had decided to employ stringent quality procedures for developing its courses. As a result, some scholars from the Israeli traditional universities had felt reluctant to undergo procedures of inspection and criticism, and did not co-operate with the OUI. Some even claimed openly that assessment contradicts the very basic concept of academic autonomy (Guri-Rosenblit 1993).

Those contracted scholars who are willing to write for the OUI are asked to submit a detailed course proposal (the same procedures apply also to the OUI’s internal faculty). In the proposal they must specify the following details:

- the theme of the course;
- its place in the disciplinary programme;
- the level of the course (introductory, intermediate, or advanced);
- the course’s prerequisites;
- the course’s overall goals;
- the structure of the course and its division into study units;
- specific objectives of each learning unit;
- a brief description of each study unit;
- audio-visual material to accompany the written learning materials;
- prospective radio, television, computer, or satellite programmes to be developed;

- the academic staff who will comprise the course team;
- proposed academic consultants to whom the study units will be sent for evaluation; and
- a tentative timetable for completing the writing.

The detailed course proposal is usually sent for evaluation to as few as three and as many as seven experts in the field, who work at other Israeli universities or, in a few cases, abroad. Some of the evaluators may be internal faculty, who may also comment on the sample material, which is usually a study unit or a substantial part of it, in relation to the clarity and pedagogical quality of the written text. Comments are asked from both an academic and an editor.

The course proposal evaluators are asked to comment on the following matters:

- the scope of the course's content as reflected in the proposal;
- the structure of the course and its division into sub-themes;
- the appropriateness of the content to the course's specified goals; and
- the update of the course's content.

The comments of outside experts are needed to gain a variety of possible perspectives on a given topic from several professionals. It enables the OUI's subject committees, which are composed of academics coming from different disciplines to discuss each proposal constructively. The area committee of social sciences, for example, is composed of psychologists, economists, sociologists, educators, and political scientists. In such a structure in which very few experts represent any given discipline, it is impossible to evaluate a course proposal without the assistance of expert outsiders.

Subject area committees then discuss each proposed course in the presence of the author or authors. In such meetings three alternative decisions might be reached:

- to approve the development of the course as it was proposed;
- to approve the course proposal with restrictions, in which case revisions are needed; or
- to reject the course proposal.

Between thirty to forty proposals are discussed in the various subject committees each year. Approximately 20% are rejected on the grounds of inadequacy or poor quality material, and another 20% require redrafting. Decisions are taken by a majority vote of the subject committee's members. If corrections are needed, the author is advised how to go about them. Sometimes the subject committee will reassemble to discuss a revised proposal. Minor corrections are sent to the committee's members individually for comments. If the course is approved without restrictions, the subject committee submits its decision to the academic committee, the OUI's higher academic authority (comparable to the senate in other universities).

The academic committee, composed of the OUI's academic faculty and professors from other Israeli universities, is chaired by the OUI's president. Only rarely does the

academic committee refute the decisions of the subject committees; however, its members might ask for clarifications and require changes or reconsideration of various elements. The fact that the academic committee is comprised of scholars from a broad spectrum of disciplines, working at different universities, enables it to perceive the development of a specific course in the context of the total higher education system. This perspective is particularly beneficial when dealing with an interdisciplinary course. After the academic committee approves a proposed course, a “green light” is given, and it enters the development phase.

Course Development

Course development at the OUI takes between three to five years, the greatest proportion of that time being devoted to the writing and rewriting of learning materials. Most of the course materials are approximately 1,000 pages, divided into ten to twelve study units. Eighteen to twenty-four courses are required to complete a bachelor’s degree. The development of a course involves a team of professionals and costs over \$250,000.

A given course may be written by several authors or by just one, but there is always a course team chair who is responsible for the scope and content of the total course. The course team chair determines the course’s structure and methodology and is responsible for directing the other authors, if any.

The course team includes all of the academics involved in writing the study units and a course co-ordinator, whose task is to regulate the team’s work and to provide a link between the authors of the study units and the others participating in the course production process, such as academic consultants, editor, graphic designer, media specialist, librarian, publishing office, and so on. Course co-ordinators are usually doctoral students or they hold a master’s degree in the specific course area. The course’s chair and the co-ordinator constitute the “nuclear course team”.

Successful co-operation between the “nuclear course team” and the other members of the team depends greatly on the management skills and the personality of the course co-ordinator, especially when an external academic is responsible for the development of a course. Around 15% of approved courses are dropped in mid-production due to a variety of problems, the most common of which is the submission of poor quality texts or the failure of external academics to devote enough time to completing the study units according to the timetable they had promised. In order to encourage external authors to submit their texts according to a given schedule, the OUI has initiated a special incentive. The authors are promised to be paid twice the amount of money for writing a study unit if they complete it by the deadline agreed upon between themselves and the head of the course development administration. A course chair is paid twice the sum for developing a course if the development of the whole course is accomplished according to the deadline specified in the initial contract. This specific policy, which has been in practice only since the end of the 1980s, has resulted in a significant improvement in the pace of course development.

Whether the writer is an external academic or an internal faculty member, the first draft of each study unit is addressed to the nuclear course team. If the chair or the co-ordinator do not recommend any drastic changes, it is sent for comment to two to five outside and internal experts in the appropriate field (Guri 1987).

Evaluation of the study units is performed on the basis of some definite questions, the most common of which are (the order does not imply any priority):

- Is the material up to date and accurate?
- Are the explanations clear and fluent, and do they meet the standards of self-study materials?
- Are the presentations interesting and stimulating?
- Do the learning activities and assignments enhance learning and assist the student to comprehend the main points and critical issues?
- The study unit is designed for 15 to 20 learning hours. Does the scope of the unit meet this criterion? Is it too overloaded, or is it too limited?

The goal of the evaluation at this stage is to analyse the content and instructional quality of the learning materials carefully and critically. By using the intellectual resources of other universities, the OUI tries to upgrade academic instruction through collective criticism and intensive brainstorming. Obviously, collaboration with other universities is essential in the OUI, which, as stated before, is based on a tiny internal staff.

If most of the critical comments recommend a revision, the nuclear course team meets with the author, and the required revisions are discussed. Some authors take it upon themselves to revise and even to rewrite their first draft, while others prefer to pass the mandate to the course team, mainly to the course co-ordinator. Occasionally, a unit has to be rewritten by a different author. In all cases, the nuclear course team has a crucial role in deciding on the instructional design of each unit.

The OUI's quality assurance mechanisms in the course development process may be analysed in relation to some other models. Smith (1980) classified course development procedures in distance teaching universities into five broad categories:

- the course team model;
- the author/editor model;
- the contract author/faculty model;
- the educational adviser model; and
- the intuition model.

The OUI's model combines some components of the "course team model" and the "contract author/faculty model", adding to them its own unique elements (Guri 1987). The concept of a course team, consisting of academics, television and radio experts, editors, graphic designers, educational technologists, tutors, and others as needed, has been developed by the UKOU. The OUI is based on a scaled down version of the course team approach, because it relies on a small internal faculty. The OUI invests great energy in guiding external contracted scholars, and in ensuring a flowing communication among team members. Naturally, in teams consisting largely of outside contributors "communication among them and the co-ordination and integration of their individual contributions in terms of content, pedagogy, etc., are more difficult to achieve" (Carr 1984: 18).

The contract author/faculty model is used by universities that rely on external contributors. According to this model, outside experts are contracted to write a course or a unit, “but the material is vetted by the full-time faculty of the University” (Smith 1980: 65). Smith indicates that this “model enables courses to be developed much more quickly than would happen under a course team arrangement, but significant amendments and revisions to the original drafts are much more difficult to effect under this system” (Smith 1980: 65).

The basic elements of the contract author/faculty model exist in the OUI, but with substantial modifications. The drafts written by external authors are subject to the same quality assurance procedures as those written by internal faculty. Quite often the external work requires more substantial revision than the materials written by the OUI’s faculty. Thus the development of courses based heavily on outside contributors takes more time than those produced by internal academics.

Halperin argues that the involvement of external academics in writing the OUI’s courses has had an impact on improving the academic teaching at the traditional universities. He claims that the OUI has contributed to Israeli higher education “by paying pre-eminent attention to effective pedagogy and by addressing the crucial question, ‘what is quality in higher education?’” (Halperin 1984: 99). As hundreds of professors from the traditional universities have come to be involved in the OUI’s work, “the spin-offs for improved teaching elsewhere cannot be doubted” (Halperin 1984: 99).

Monitoring the learning, tutoring, and teaching processes

Developing high quality learning materials does not suffice for assuring the quality of the learning and teaching process. The DTUs that have adopted an open admission policy, like the UKOU and the OUI, had to invest special efforts to ensure that their “exit requirements” are stringent, in order to establish their credibility in the academic world.

Open admission, by its very nature, attracts heterogeneous student clienteles, some of whom lack basic study skills or are unable to cope with academic studies for a variety of reasons. On one hand, the DTUs have had to construct special support devices to assist those who might benefit from university level education with appropriate help and encouragement. On the other hand, they have had to define high learning and teaching standards, which naturally result in a relatively high drop-out rate, especially at the initial stage of the studies. Opening the university gates to anyone who wishes to pursue academic studies constitutes a most advanced and liberal admission policy. Those who are capable of coping with the study requirements irrespective of their prior formal qualifications succeed and progress; those who find it too difficult, drop out.

Special quality assurance regulations to ensure the quality of the learning, tutoring, and teaching processes have been constituted at the OUI. Some mechanisms refer to the unique interaction between the teaching course co-ordinators and the senior academic faculty, and others relate to the monitoring of tutors by the teaching course co-ordinators.

The reliance on a small academic faculty has dictated the transfer of most of the tutoring and teaching responsibilities to junior academic staff, who include the teaching course co-ordinators and the student support team. At the OUI in 1995, 192 teaching course coordinators were responsible for the instruction of 339 courses, studied in 2,359 study groups held in over 100 study centres (Open University of Israel 1995). The teaching course co-ordinator is responsible for the whole range of activities that are part of the learning and tutoring processes: preparing the assignments and final exams; recruiting and guiding the tutors; preparing instructional aids for the intensive tutorials held once a week; monitoring the tutors' work; checking the final exams; and recruiting external examiners, if needed. Clearly, the teaching course co-ordinators possess a significantly wider and greater academic responsibility compared to teaching assistants at traditional universities. Some of the teaching course co-ordinators hold a doctoral degree, but most of them are either doctoral students or hold a master's degree in the specific relevant areas of the course or courses they are responsible for. Ideally, the course co-ordinator, who had been responsible for the development of a given course, becomes the teaching course co-ordinator after the development phase has been completed. But it is not always the case.

Special mechanisms were established so that senior academic faculty could monitor the teaching course co-ordinators. Those who have not completed their doctoral studies must submit all of the final exams for evaluation by the senior faculty. In areas in which no internal expert exists at the OUI, external academics are contracted for that purpose, usually those who were in charge of developing the relevant courses. Once a year all of the assignments and exams prepared by the teaching co-ordinators are evaluated by senior academic faculty, and submitted to the head of the teaching administration (who is an academic faculty in charge of the overall teaching operation). The teaching course co-ordinators are promoted professionally on the basis of their performance's evaluation.

In several areas, such as in education, mathematics, and computer sciences, teams composed of both senior and junior faculty are responsible for teaching courses in the relevant disciplines. In 1995, a special revision committee, headed by Professor Ginzburg, who was the OUI's president from 1977 until 1987, has recommended that the OUI's activities be restructured on disciplinary departments, and that the division between course development administration and teaching administration be abolished. This committee stresses that the current volume of the OUI's operation justifies the enlargement of its senior academic staff and the enhancement of the collaboration between the senior and junior academic faculty in the teaching phase.

The teaching course co-ordinators are responsible for mobilising the tutors and for guiding them in their responsibilities and teaching activities. Each tutor is assigned a certain number of students (from 15 to 40) with whom he or she interacts in writing (checking assignments); orally (counselling via the phone); and in a tutorial group meeting. It is important to note, that currently over 80% of the OUI's student body prefer to study in the framework of intensive tutorials, which means meeting with the tutor once a week for three hours in each course. Since distance does not constitute a real obstacle in Israel, the OUI has gradually moved towards providing more face-to-face tutorials, at the students' request. Such a situation, puts a heavier role on the tutor's shoulders, and threatens the centrality of the learning materials in the learning

and teaching process. Thus monitoring the tutoring sessions is crucially important to both ensure comparability of standards in hundreds of study groups spread across Israel, and to guarantee the centrality of the instructional test in the OUI's operation.

The intensive tutorials had led to the creation of staff development training, in which newly recruited tutors are initiated to the unique elements inherent in a distance teaching university, like the OUI. They are encouraged to elaborate various topics presented in the study units. But it is emphasised strongly that the written text with its didactic apparatus is in place of the professor in a regular university, and by no means are the tutors expected to lecture or teach the subject matter instead of the textbooks. They are to facilitate the students' learning, and assist in comprehending difficult and complicated issues.

In order to ensure common standards, the teaching course co-ordinators are urged to prepare general syllabi for the tutorials, and to provide slides, overhead transparencies, and television and satellite programmes, if relevant. The quality of the tutorials and their effects are evaluated and researched constantly by the evaluation division, resulting in recommendations for ongoing changes and improvements. Each semester, the teaching course co-ordinators are submitted a report as to the students' achievements in each study group, as well as the results of evaluation questionnaires reflecting the students' evaluation of the learning materials and the tutorials. In addition, the teaching course co-ordinators must visit at least once per semester each of the study groups they are responsible for, and to submit a summary report to the head of the teaching division. Furthermore, samples of the assignments, checked by the tutors, are evaluated each semester by the teaching co-ordinators, in order to guarantee as much as possible common evaluation measures.

An additional quality assurance procedure relates to the final exams, which refer only to the content presented in the study units. In order to ensure comparability of standards, the final exam is checked not by the group's tutor, but by either the teaching course co-ordinator or external examiners contracted for that purpose by the OUI.

Concluding Remarks

All of the quality assurance procedures at the OUI discussed in this case study provide an example of how a small internal academic faculty can manage quite efficiently the operation of a relatively large scale distance teaching university. The OUI has succeeded in doing it by tapping the intellectual resources of other neighbouring universities, and by defining special quality assurance regulations to ensure the quality of its learning materials and of the learning and teaching processes.

Such an example might be of special interest to both developing and small size developed countries, in which a large DTU like the UKOU, based on a large academic staff, is not feasible.

However, it is worth mentioning that the insistence on assuring quality in the context of the Israeli OUI has its pitfalls and prices. The fact is that the internal academic faculty is "over-worked", and torn between many responsibilities. It is difficult to recruit on an ongoing basis external academics for writing and revising the learning materials. It is already clear at this stage of the OUI's development, that there is a real

need to extend the size of the academic faculty. The move towards the departmental structure described here will ease the burden on the internal faculty. Compared to some other large DTUs, however, even if the OUI's internal academic faculty doubles or triples, it will still constitute a small faculty.

References

- Aldelman, C., and R. Alexander. 1982. *The Self-Evaluating Institution*. London: Methuen.
- Carr, R. 1984. "Author Employment in Distance Teaching Universities", *ICDE Bulletin*, 6: 16–20.
- EADTU News. 1993. *FernUniversität – Gesamthochschule Hagen, Special Institutional Insert*, 12 (January).
- Guri, S. 1987. "Quality Control in Distance Learning", *Open Learning* 2 (2): 16–21.
- Guri-Rosenblit, S. 1990. "The Potential Contribution of Distance Teaching Universities to Improving the Learning/Teaching Practices in Conventional Universities", *Higher Education*, 19: 73–80.
- Guri-Rosenblit, S. 1993. "Quality Assurance Procedures in Developing Academic Courses: A Comparative Study of Five Distance Teaching Universities". In A. Tait (ed.), *Quality Assurance in Open and Distance Learning: European and International Perspectives*. Collected papers from the Cambridge International Conference on Open and Distance Learning, 99–113. Cambridge: The Open University.
- Halperin, S. 1984. *Any Home a Campus: Everyman's University of Israel*. Washington: The Institute for Educational Leadership.
- Harvey, L., and D. Green. 1993. "Defining Quality", *Assessment and Evaluation in Higher Education*, 18 (1): 9–34.
- Jenkins, J. 1983. "Tell Me How to Write". In D. Sewart, D. Keegan, and B. Holmberg (eds.), *Distance Education: International Perspectives*, 319–320. London: Croom Helm.
- Moodie, G. C. 1988. "The Debates about Higher Education Quality in Britain and in the USA", *Studies in Higher Education*, 13: 5–13.
- Open University. 1992. *Pocket Guide to OU Figures*. Cambridge: The Open University Press.
- Open University of Israel. 1995. *President's Report*. The Open University of Israel Press.
- Perry, W. 1976. *Open University: A Personal Account of the First Vice-Chancellor*. Cambridge: The Open University Press.
- Reddy, G. R. (ed.) 1988. *Open Universities: The Ivory Towers Thrown Open*. Sterling Publishers Ltd.
- Reynolds, P. A. 1986. *Academic Standards in Universities*. London: Committee for Vice-Chancellors and Principals of Universities in the United Kingdom.
- Smith, K. C. 1980. "Course Development Procedures", *Distance Education*, 1 (1): 61–67.
- UNED. 1992 *Memorio Curso Academico*. Universidad Nacional de Educacion a Distancia.

- Vught, F. A. van, and D. F. Westerheijden. 1993. *Quality Management and Quality Assurance in European Higher Education: Methods and Mechanisms*. Luxembourg: Office of Official Publications, EC.
- Vught, F. A. van. 1994. "Intrinsic and Extrinsic Aspects of Quality Assessment in Higher Education". In D. F. Westerheijden, J. Brennan, and P. A. M. Maassen (eds.), *Changing Contexts of Quality Assessment: Recent Trends in West European Higher Education*, 31–50. Utrecht: Uitgeverij Lemma B.V.
- Westerheijden, D. F., J. Brennan, and P. A. M. Maassen (eds.). 1994. *Changing Contexts of Quality Assessment: Recent Trends in Western European Higher Education*. Utrecht: Uitgeverij Lemma B.V.

3. Quality assurance practices and principles: the case of Indian distance education

By Badri N. Koul

Introduction

At one time, standards of education in India were maintained through a prescribed syllabus and a final examination to evaluate student performance. Even though this approach to quality control did not quite serve the purpose, most of the efforts to improve it came to naught. Then, after independence in 1947, a conceptual shift from quality control to quality assurance was noticed. Efforts made to improve the quality of education through inputs like streamlined funding, appropriate infrastructure, and relevant guidelines pointed to a new guiding assumption, that if the quality of the inputs improved, then the quality of education stood assured. Reality, however, did not seem to confirm this stimulus–response relationship. In 1982, debate on quality issues became more intense when the first open university in the country was established. This debate has led to yet another shift—to total quality management in which the attention has shifted from inputs to the processes of education. Such a close parallel between education and industry is obvious today in the context of distance education, where the phenomenon of total quality management is just emerging. The next ten years will see how it shapes and influences education in India.

Quality Consciousness in Indian Education: The Background

Ever since university education was introduced in India (1857 to be exact), its quality has remained generally intractable. It is true that well-meaning educators have, from time to time, expressed their concerns about its quality, but, by and large, the overall dynamics of education have been governed by market forces—mainly the vast gap between supply and demand:

..hitherto Allahabad has conformed to the practice of the three original universities, and confined itself to conferring degrees on candidates who pass its examinations ...” (*Quinquennial Review of 1897–1902*, 22)

The ever increasing demand for personnel to support a rapidly expanding bureaucracy for the education of an exponentially rising population allowed us to accept mediocrity even a century ago as we do today—no wonder that we have become hoarse talking about falling educational standards for decades now.

In spite of the various significant steps towards reform taken in the late 1920s, the scene at the end of the first quarter of the century did not show any appreciable improvement:

... the theory that a university exists mainly, if not solely, to pass students through examinations still finds too large acceptance in India, ... They have been hampered in their work by being overcrowded with students who are not fitted by capacity for university education and of whom many would be far more likely to succeed in other careers. (*Simon Commission Report of 1929*, 29–30)

If the theoretical standards of the curriculum were really enforced, the elimination would be much higher, but the University of Calcutta has depended for the finances of its post-graduate work on Matriculation fees, and for financial reasons among others has kept its standards low. This low standard in the end-examination means lax promotions, and lax promotions means ill-graded classes, and ill-graded classes mean an impossible task for the teacher and consequently worse teaching; ... a vicious circle ... (West, 111)

By the time India became independent, the weaknesses of the institution of Indian education were quite conspicuous:

Anyone who studies the story of universities in India since 1857 cannot escape the conclusion that the system of higher education inherited at independence from the British Raj was dangerously weak in three ways: (i) During the British rule we failed to set and maintain the quality of teaching and the standards of achievement essential to a university, (ii) We failed to devise, and to persuade Indians to accept, a content of higher education suited to India's social and economic needs and (iii) We failed to establish patterns of academic government and relations between universities and state, which would accord to university that degree of autonomy without which they cannot serve society properly. (Ashby and Anderson, 138)

Efforts to overcome these weaknesses were started in earnest with the Education Commission (1948–49), which assumed that quality assurance was a consequence of adequate inputs. Some of the major steps taken are manifest in the following:

- the establishment of the University Grants Commission (UGC) in 1956;
- the Association of Indian universities;
- the various State Boards of secondary and higher secondary education;
- the Central Board of secondary and higher secondary education;

- the National Council of Educational Research and Training (1961);
- the Asian Institute of Educational Planning and Administration (1962); and
- the establishment of Academic Staff Colleges (in the mid 1980s) to provide orientation and refresher programmes for the junior academic staff of colleges and universities.

At the level of higher education, the following measures were seen as sufficient to ensure quality in education:

- prescribing qualifications for various personnel to be employed;
- fixing the minimum levels of infrastructure in terms of land, buildings, classrooms, laboratories, furniture, equipment, libraries, and so on;
- providing guidelines for the content and conduct of syllabuses and examinations;
- providing funds and grants in aid for the promotion and development of new subject areas; and
- establishing new institutions.

At the secondary and higher secondary levels, the key to quality assurance continued to be seen in reforming, upgrading, and updating the syllabuses and examinations, as well as enforcing strict adherence to recruitment norms. These measures instilled confidence and for a while it was felt that the quality of education in India had been secured for the future.

The corresponding expansion of education and the speed with which students entered at all levels of admission, together with the rising aspirations of newly awakened populations of diverse learner communities, however, opened the way for independent institutions and unrecognised universities that would neither depend on the University Grants Council for grants, nor observe the necessary conditions to make their operations legally valid.

This contemporary scenario recalls a mirror-image in what has been reported about the situation around a century ago:

The organisers of Bengal High Schools were discovering that these schools could be run on a self-supporting basis without Government grants, and they need not therefore submit to the conditions which the department imposed. (Government of India, 22)

Obviously, the steps taken since 1947, though based on a different paradigm, have not improved the situation to the extent expected.

More recently, with the establishment of open and distance education, the issue of quality has become more serious. Partly because distance education institutions launched courses without any reasonable understanding of the distance education system, very often without sufficiently preparing for effective distance education transactions, the questioned perception that distance education could provide an effective teaching–learning environment and the issue of falling standards came to the fore when the practices and principles of conventional and distance education were compared. The initial reaction of distance educators in India manifested in their

building a defence for distance education as an effective educational system, as if quality was an issue only for distance education systems and not for the conventional system. The perceived effectiveness of conventional education was used as a standard measure for the effectiveness of distance education. Distance education expanded with an overwhelming momentum, both in its use and misuse, as teacher training and science-based programmes began to multiply rapidly on the one hand and professional–vocational and awareness–extension programmes expanded on the other. The debate became broad based as the validity of using conventional notions of effectiveness as a measure for the effectiveness of distance education came to be questioned. The attention of those concerned shifted slowly but steadily from mere perception to the reality—hardly anything in concrete terms could be characterised as a quality assurance mechanism in the Indian educational system, be it conventional education or distance education. The UGC has realised as well that they play a recommendatory and funding role and that, if an institution can mobilise funds independently, it will not bother about UGC recommendations and guidelines. It was time the issue of quality in education was addressed afresh.

This brings us to the latest thinking on and the steps taken to achieve quality in education. Rather than depending on the assumption that quality is assured by ensuring inputs, the paradigm of the 1990s is that quality can be assured only when all the processes involved are ensured through appropriate management—not assumptions but appropriate activities ensure quality. Accordingly, the National Assessment and Accreditation Council (NAAC) was established (in 1995) within the UGC to plan and implement schemes for ensuring quality in higher education. For distance education operations in India, the Distance Education Council (established in 1992) within Indira Gandhi National Open University (IGNOU) is expected to take this responsibility and work in close collaboration with NAAC. Both bodies, however, have as yet taken only what may be called the initial steps.

Quality Assurance: The Case of Higher Distance Education

At present seven open universities operate in India. Of these, two state open universities have yet to start operating; another two have started operating but they have not reached a stage when their quality assurance practices and principles could be looked into. The remaining three universities are Dr. B. R. Ambedkar Open University (BRAOU) of Andhra Pradesh (1982), Indira Gandhi National Open University (IGNOU) of New Delhi (1985), and Yashwantrao Chavan Maharashtra Open University (YCMOU) of Maharashtra (1989).

It is clear from the organisational structures of BRAOU and IGNOU that they have no mechanisms provided explicitly for quality assurance. The tasks involved, however, make it necessary to incorporate various mechanisms which may be labelled *quality assurance scheme* at the conceptual level and *quality assurance operations* at the implementation level. YCMOU, on the other hand, explicitly provides for quality assurance in its management plan. The relevant details of each university's quality assurance activities are as follows.

Dr. B. R. Ambedkar Open University

The main function of BRAOU is the preparation and delivery of educational programmes. Accordingly, quality assurance measures are related to the following six processes:

- planning academic programmes;
- developing curricula and learning materials;
- producing learning materials;
- implementing programmes;
- reviewing programmes; and
- developing human resources.

Planning Academic Programmes

New academic programmes are usually identified with the vice-chancellor through informal discussions with and suggestions or guidelines received from the state government, the UGC, and other national bodies. Faculty may also initiate proposals. Proposals initiated by either the vice-chancellor or faculty are placed before the co-ordination committee, which is a non-statutory advisory body made up all senior functionaries like the deans of the various faculties and directors of the various service units. After the co-ordination committee approves the proposal, the faculty or department prepares a detailed proposal for the consideration of the academic senate, the highest statutory academic authority of the university that is empowered to approve academic programmes. The detailed proposals approved at this stage are submitted to the executive council, the highest policy making and administrative authority of the university, for administrative sanction to launch the programmes.

The vice-chancellor, the faculty, the co-ordination committee, the academic senate, and the executive council, all serve as a means of assuring the relevance and quality of the programmes at the planning stage.

Developing Curricula and Learning Materials

After a programme is finally approved, an expert committee made up of the internal faculty members and external subject experts is constituted to prepare the curriculum. The committee may meet once or twice for this purpose, and the curriculum thus designed is sent for approval to the academic senate. Thus, it is the subject experts and the academic senate who look into the quality of the programme at this stage.

The approved curriculum and syllabus are passed on to the course team, which consists of subject experts (both from the university and from outside institutions) and an audio-visual producer, who is designated for the programme or course. The team is headed by a subject expert, who is designated the editor and is responsible for content editing and the quality of presentation. Language is edited by language experts. The course team also identifies the audio-visual components of the materials, which are developed by the audio-visual centre with the help of the producer and subject experts. Depending on the nature of the course or programme, field practitioners are also associated with the development of learning materials as course

writers, editors, or audio-visual programme developers. In a few cases, the print materials are sent to external assessors for their comments, which are subsequently used to improve the materials. The audio-visual materials are previewed by the internal faculty before they are duplicated for use by students.

The quality assurance mechanisms that function at this stage include:

- editing learning materials for different purposes (content, format, and language);
- co-ordinating with the producer of audio-visual materials and previewing the audio-visual materials before they are duplicated; and
- orienting the course writers to make them familiar with the requirements of quality.

Producing Learning Materials

The learning materials in manuscript form are printed by the material production division of the university with the help of private printing agencies. They follow a style manual that the university prepared with the help of printers and internal faculty members. Internal faculty read the final proofs to ensure error free publications. Similarly, the audio-visual unit is responsible for producing the audio-visual tapes in accordance with an audio-visual manual prepared by the university.

Thus the internal faculty, the audio-visual unit, and the printing division are collectively responsible for the quality of print and media learning materials at the production stage.

Implementing Programmes

When a course is implemented, the three main processes are distributing learning materials, providing student support services, and issuing examinations. Learning materials are distributed from the material distribution division at headquarters, and they are responsible for preparing and adhering to despatch schedules. Student support services are provided by a network of study centres at different locations. The directorate of student services located at headquarters is responsible for ensuring the quality of these services by determining the norms and patterns of support services required at different study centres. The examination branch of the university is responsible for the reliability and validity of evaluation. The schemes of evaluation and the conduct of examinations are developed by the faculty with the help of external experts wherever necessary, and are approved by the academic senate and the executive council before implementation.

Reviewing Programmes

Learning materials are reviewed on the basis of feedback from learners, counsellors, and subject experts and they are updated by internal faculty. The university has set up a separate system evaluation unit, which conducts regular studies on the different aspects of learning materials and implementation processes. The feedback from these studies is used to revise materials and improve practices.

Developing Human Resources

The university has established a separate unit for staff training and development. This unit undertakes orientation and training programmes for the academic and administrative staff to improve the quality of their services.

Indira Gandhi National Open University

At IGNOU, quality assurance activities focus on processes quite similar to those at BRAOU, but the measures taken to achieve the desired quality differ considerably.

Existing built-in quality assurance mechanisms are as follows:

- planning the course or programme;
- developing the course or programme;
- producing the learning materials;
- implementing the course or programme;
- reviewing the courses and follow up activities; and
- developing human resources.

Planning the Course or Programme

Each school or division is expected to present a perspective plan covering a period of about five years. This perspective plan must be approved by the co-ordination committee and, subsequently, after incorporating the modifications the committee suggests, the perspective plan must be approved by the planning board. Within the approved perspective plan, the school or division is expected to prepare a project concept pertaining to each course or programme that they want to launch. This project concept is developed through the services of experts in the relevant field or any other means such as workshops, brainstorming sessions, and so on. The project concept is submitted to the co-ordination committee and then to the planning board for their approval.

After the project concept is approved by the planning board, the school or division develops a detailed outline of the curriculum components of the course or programme. The project design must be enriched in consultation with an expert committee, made up of subject experts and instructional designers. It is then submitted to the school board for approval.

After looking into various aspects of the project design and enriching it through interaction with experts, it is finalised as a project report, which presents the total instructional design of the course or programme for the academic council to consider.

While the project report is being shaped, another document called the *launch document* is developed in co-operation with the admission and evaluation division and the communication division. The launch document outlines relevant schedules as well as the infrastructure needed and the kind of services required to implement the course or programme. The launch document is also submitted to the co-ordination committee for approval.

At this point the planning stage is over. So far the mechanisms for quality assurance at the concept and design stages lie with the co-ordination committee, the planning board, the school board, and the academic council. Following these steps meticulously, the quality of the course or programme is sure to meet the objectives of the university, social relevance, economic viability, and operational feasibility.

Developing the Course or Programme

Using the approved project report and the launch document, the school or division moves on to the stage of course or programme development. Usually, the task of co-ordinating development is given to a course or programme co-ordinator, who assists the course contributors, content editors, language editors, instructional designers, audio-visual producers, and personnel involved in the project.

Course contributors, the main constituent of this team, are usually identified with the help of an expert committee. They undergo a two-day orientation programme so that they may design materials in accordance with the house style adopted by a particular school.

First drafts received from the course contributors are passed on to content editors (who are subject experts), language editors, and format editors (who are instructional designers). They look into the pedagogic and presentational attributes of the materials and make changes. The final draft is prepared and thoroughly proofread before camera-ready copies are prepared.

Besides developing the learning materials, course contributors are expected to suggest topics that need audio-visual support. These suggestions are written up as *academic briefs*, which are further developed as *academic notes*, which outline in detail the expected academic content of the audio-visual materials to be prepared. Sometimes the academic briefs and the academic notes are prepared by the course contributors; other times they may be prepared by the internal academics themselves. The academic note is passed on to the communication division, who assign a producer to produce the programme. The producer and the academic work together to build both the script and the production script. The producer plans and arranges for the technical facilities and technical support required to produce the materials. Rushes collected from outdoor as well as indoor shooting are edited at the post production centre to finalise the first version of the audio-visual programme, which is previewed by a committee of internal academics and technical personnel. After approval the programme is passed on for duplication and packing.

The quality assurance of course or programme development, and print and audio-visual materials, therefore, relies on the following mechanisms:

- orienting the course contributors;
- content editing by subject specialists;
- language editing by language experts;
- format editing by instructional designers;
- collaborating to identify themes for audio-visual materials;

- combining academics with audio-visual producers and providing high-level technical facilities; and
- previewing the audio-visual programmes before finalising them.

Producing the Learning Materials

The quality of learning materials production depends on the following:

- the quality of the paper on which they are printed;
- the cards in which they are bound;
- the quality of the printing itself;
- the appropriateness of layout;
- accuracy in typography; and
- the placement of diagrams.

Similarly, in the case of audio-visual materials, quality depends on the quality of blank tapes and duplication, which is carried out at the university.

The mechanisms to ensure the quality of paper, card, and blank tapes are the advisory technical committees, which set the minimum standards for the quality of the materials the university is to use. The general quality of printing is assured by penalty clauses in the agreements with the printers. Duplicated copies of audio and video tapes are also randomly checked.

Implementing the Course or Programme

A course or programme is implemented through many processes: the despatch of materials; counselling, tutoring, and practical work at study centres; assignment handling; query handling; feedback; and evaluation. The quality of these processes is assured by ensuring the prerequisites which support them as follows:

- *Despatch of materials*: availability of materials in the warehouse, availability of schedules, adherence to schedules, quality of packing;
- *Counselling, tutoring, and practical work*: availability of schedules, adherence to schedules, punctuality, regularity, availability of facilities, attendance of learners, quality of learners, quality of counselling or tutoring, practical work and interaction, use of audio-visual materials, learner satisfaction;
- *Assignment handling*: availability of schedules, adherence to schedules, short turn-around time, quality of assessment;
- *Query handling*: pre-admission services, on-course services, and post-course services;
- *Feedback on*: quality of print materials, quality of audio-visual materials, quality of counselling, tutoring, and practical work, quality of assignments, quality of support services in general; and

- *Evaluation*: availability of schedules, adherence to schedules, conduct of examinations, turn-around time in the case of assessment, handling of appeals made by the students and discipline issues, results (time taken for declaration) and their accuracy, regular and timely certification.

At study centres and regional centres, quality assurance mechanisms comprise the various monitoring schemes and related feedback mechanisms that originate there. Regional centres are expected to monitor study centres for the quality of their management, tutoring, and counselling, and their general function and facilities, while study centres provide feedback on their infrastructure, the functioning of tutors and counsellors, and learner behaviour.

Reviewing the Courses and Follow Up Activities

Course review activities depend mainly on the feedback made available to regional centres and, in turn, to headquarters. Along with the project report at the start of the course, a review document is prepared, which outlines a timetable for receiving feedback as well as the various areas under which feedback is to be received. Feedback informs decisions about whether the course should continue (entailing preparation of new assignments and programme guides for every year), be modified (entailing maintenance of courses through supplements and minor revisions), expanded (entailing restructuring of courses and also increasing the content by means of revisions), or withdrawn (if the course is no longer relevant).

Developing Human Resources

The Staff Training and Research Institute of Distance Education (STRIDE), an IGNOU constituent, provides staff development programmes for the academic and non-academic staff to improve the quality of their input.

Yashwantrao Chavan Maharashtra Open University

The approach followed at YCMOU is quite scientific in the sense that total quality management was planned for as a significant concern right from the beginning. Accordingly, YCMOU made arrangements to:

- develop a quality system for the university;
- develop a total quality management model for the university;
- implement the quality system in the university; and
- develop and establish a mechanism to perpetuate total quality management in the university.

The quality system in conceptual terms has already been articulated in a preliminary quality manual, indicating clearly the dimensions of quality that will be attended to (namely the *time* a function will be executed, the *product* or *service* specified, and the *costs* involved) as well as the administrative and operational mechanisms needed to materialise the system. The work done so far includes a policy decision to:

- appoint management representatives to co-ordinate the overall quality assurance activities;

- set up a quality advisory council consisting of officers and experts who will be responsible for implementing this quality assurance programme;
- establish a quality assurance centre for total quality management—such a centre would be entrusted with the responsibility of supervision and verification of the quality standards laid down; and
- organise training programmes for in-house staff to implement the quality system.

Further additional work has been completed:

- detailed documents on the interface of departments; the responsibilities of every division, centre, and section of the university; and procedures for reviewing the feedback received from various units, as well as those for revising the details and distribution of the reports; and
- procedures for documentation, both at the institutional and the departmental levels, including those required to materialise the quality system. Accordingly, departmental processes have already been analysed and component activities have been identified. More work needs to be done to make the system completely functional.

Immediate requirements

In the context of quality assurance, IGNOU and BRAOU have operated and continue to operate on more or less similar conceptual lines. Differences at the operational level relate to differences in their administrative structures and the powers of various counterpart authorities and officers.

In actual practice problems that hamper quality assurance occur at various stages. The major problem areas, which provide directions for immediate research work, are as follows:

- It is not unusual to ignore some of the steps at the planning stage. We need to identify the steps that are ignored, the circumstances in which they are ignored, and the reasons they are ignored; and then we need to identify ways to improve the planning process.
- Once the first draft of the printed material is available, it is not subjected to all the checks described here. In many cases, if the various types of editing are actually effected, the proposed modifications are not incorporated in the final versions. Even proofreading does not come up to the mark. Set norms are needed for getting quality work done by course contributors, artists, and so on, as at present their relationship with the co-ordinator remains a long drawn tug-of-war. Consequently, our print materials display inadequacies only after improvement is possible. We need to locate the weak spots in print material production early on, and find their causes and ways to overcome them.
- For audio-visual materials, the only effective quality assurance mechanism is previewing, yet even that does not appear to be sufficient. Another way to improve the quality and utility of these materials must be found and put in place.

- As far as the quality of printing and duplication of audio-visual materials is concerned, various mistakes are made; for example, blank tapes may be sent to study centres; a diagram that should be printed on page 5 appears on page 32; or diagrams are lost at the printers and need to be redone. The reason for such mistakes needs to be found and mechanisms to block them must be developed and used.
- Feedback at the implementation stage is still minimal or unavailable even though procedures to obtain it are in place. Also, the turn-around time for assignments continues to be unreasonably long. To reduce the average turn-around time and to get regular feedback and use it purposefully, we need to find the causes of slackness and tighten the schedule.
- We need a system of post-implementation activities; for example, surveying the types of employment graduates have been able to find.
- Materials intended to be used outside India need special attention to the content presented (it has to be free from Indian bias), the language used (it must have international acceptability on issues like sexism in language), the raw material used (quality of paper, audio-tapes, and so on), presentation (quality of printing, packaging, and so on), and support services. Norms have yet to be developed for this purpose; but beforehand we need to sensitise ourselves to international needs and develop mechanisms for their quality assurance.
- Although stride offers staff development programmes, including long term programmes like the post-graduate Diploma in Distance Education and Master of Arts in Distance Education, a mechanism is needed to ensure the utilisation of these programmes at operational levels.
- Some of these problems have procedural solutions available in the powers or function of school boards. However, school boards do not seem to function as they should (for example, to evaluate educational material and to make suitable recommendations to the academic council, to review the facilities of the study centres, and so on). The implication is that we need to review the function of the school boards and other authorities. Restructuring may already be overdue.
- Exploration into, experimentation with, and implementation of advanced technologies may solve most of these problems. How do we proceed in this case?

Research into solutions to these problems deserves immediate attention, whatever the priorities of university management.

Concluding Remarks

The YCMOU experience may provide useful insights and also guidance, but it must be obtained and detailed before it can be used by others. Obviously, we have a long way to go; total quality management is still a distant goal.

References

- Ashby, E., and M. Anderson. 1966. *Universities: British, Indian, African: A Study in the Ecology of Higher Education*. London: Weidewfeld and Nicolson.
- Government of India. 1950. *The Report of the University Education Commission, 1948-49*, Vol. 1. Delhi: The Manager of Publications.
- Prasad, V. S. 1995. Quality Assurance Measures at Dr. B. R. Ambedkar Open University, Hyderabad. Personal communication.
- Yashwantrao Chavan Maharashtra Open University. 1995. *Quality Manual*. Nashik, Maharashtra.
- Quinquennial Review of 1897-1902*, quoted in *The Report of the University Education Commission, 1948-49*, Vol. 1.
- Simon Commission Report of 1929. Quoted in *The Report of the University Education Commission, 1948-49*, Vol. 1.
- West, M. 1926. *Bilingualism*. Occasional Reports, No. 13. Calcutta: Government of India, Central Publications Branch.

4. The roots of quality assurance at the British Open University

By Tim O'Shea and Anne Downes

Introduction

The founders of the British Open University did not use the term *quality assurance* but they were very much concerned with the design and implementation of robust educational systems. In this case study we will argue that quality assurance principles and processes are inherent in the Open University's approach to supporting distance learning and were demanded by the educational mission of the university.

We take the view that there are three key quality assurance principles for an educational institution:

- that the institution have an educational mission that can be related in a tangible positive way to the educational well being of society at large or some particular community;
- that it is possible to measure success in achieving that mission by focusing primarily on the quality of the student learning experience; and
- that at any time the institution should have explicit goals for the further enhancement of the quality of student learning experience.

Quality assurance processes vary depending on the educational design and delivery methods of the institution but must fundamentally be concerned with the iterative use of feedback information from a range of sources, including admissions data, examinations data, student progress statistics, survey data, interview data, tutor data, graduate employment information, and employer views. Such feedback data can be used to inform changes in provision at a whole range of levels, from small elements of courses and course design to the broader curriculum and arrangements for local or institution wide tutorial or pastoral support. To achieve greatest value, feedback driven processes can also be embedded in hierarchical networks for multiple use. That is to say lower levels of feedback will be aggregated and compared with higher levels of feedback to form synoptic views of the educational provision and the feedback information can also be used to determine what feedback collection processes should be initiated in the future.

Quality assurance has been the subject of much debate in British higher education over the past four years and universities have been subject to both external assessments of teaching quality focused on particular subjects and external academic audits, which address the workings of universities as a whole. The Higher Education Funding Council for England, which is responsible for funding the Open University, has just embarked on a new round of subject-based assessments of the quality of education, and a quite polarised debate about the future of external quality audit and assessment continues (O'Shea, Bearman, and Downes 1996). However, from the perspective of the Open University, concern for the quality of educational provision is not new, and striving for excellence has always been an intrinsic part of the academic professionalism of our staff. So a focus for us has been explicating and communicating our quality assurance processes to external assessors and auditors.

Below, we look at the extent to which quality assurance processes were built into the Open University and how well those measures have served the university in a changing environment. We hope to demonstrate that, as an institution that was established with a modular curriculum, many of the quality assurance processes are embedded in the structure of the institution, and have been evident throughout its life. At the same time, we recognise that current thinking within the institution is much influenced by the methodologies and guidelines of external audit and assessment. We consider whether these influences are directing us towards genuine enhancement of quality, looking as examples at the development of a mission statement, curriculum design and approval processes, and teaching and learning.

Determination of Mission and Objectives

Current audit and assessment methods depend upon a clear statement of the aims and objectives of the provision in the relevant subject area. The Open University has in recent years restated its mission, as follows:

The Open University is –

Open as to people

It will play a leading role in the move to mass higher education by serving an increasingly large and diverse student body.

Open as to places

It will make its programmes and services available to people throughout Europe and beyond.

Open as to methods

It will harness new technologies and educational techniques to serve students in their homes and workplaces.

Open as to ideas

It will be a vibrant academic community dedicated to the pursuit and sharing of knowledge.

These words by no means represent a new strategic approach for the institution. The following extracts from the inaugural address of the university's first chancellor, Lord Crowther, contain a vision of the university which, after nearly 30 years, continues to hold good:

We are open, first, as to people. Not for us the carefully regulated escalation from one educational level to the next by which the traditional universities establish their criteria for admission. The first, and most urgent, task before us is to cater for the many thousands of people, fully capable of a higher education, who for one reason or another, do not get it, or do not get as much of it as they can turn to

advantage, or as they discover, sometimes too late, that they need. Men and women drop out through failures in the system, through disadvantages of their environment, through mistakes of their own judgement, through sheer bad luck. These are our primary material. To them we offer a further opportunity... Wherever there is an unprovided need for higher education, supplementing the existing provision, there is our constituency. ... We are open as to places. This University has no cloisters – a word meaning closed. ... We are open as to methods. ... already the development of technology is marching on, and I predict that before long actual broadcasting will form only a small part of the University's output. ... Every new form of human communication will be examined to see how it can be used to raise and broaden the level of human understanding ... We are open, finally, to ideas. It has been said that there are two aspects of education, both necessary. One regards the individual human mind as a vessel of varying capacity, into which is to be poured as much as it will hold of the knowledge and experience by which human Society lives and moves. ... the (other) regards the human mind more as a fire that has to be set alight and blown with the divine afflatus. That also we take as our ambition ...

The sentiments of this inspiring speech have undoubtedly attracted many staff and students to the university, and have been echoed by a concern for access, equality of opportunity, use of innovative methods of teaching and learning, and the dissemination of knowledge and good practice, throughout the systems and procedures that have been developed to produce and present courses and learning resources over the years.

In 1969, it was sufficiently unconventional for a university to claim to be open, rather than exclusive, and to offer the flexibility of modularity rather than a three-year programme of learning. However, although the mission of the institution may be widely shared by staff and students alike, critics might ask how far the Open University has achieved its standards of openness and equality of opportunity.

Since 1971 (Perry 1976) the university has used its Institute of Educational Technology to lead and guide a range of monitoring and feedback activities and to measure the real effect of admitting students without educational qualifications to undergraduate level courses. In doing so, the university has been looking for the apparent factors that contribute to student success, in terms of preparedness before entry, progress rate, academic support and guidance, teaching media, and learning resources.

These monitoring and feedback processes provide data on which future policy decisions can be based. Many examples of enhanced provision result from the identification of good and successful practice, over the years. However, external scrutiny of process and content, in the form of audit and assessment respectively, has looked for evidence that all parts of the institution are engaged in structured processes of feedback and review, and that the whole university is constantly improving performance towards achievement of its aims. We quickly recognised that quality improvement had been greatest when enthusiastic individuals and groups had used the

available mechanisms to good effect. External scrutiny has been a force for bringing each unit or activity to a minimum level of dialogue about quality assurance, but in some cases the process diverted energy and enthusiasm that might have stimulated excellence on a more piecemeal basis. A fundamental question for the Open University, as an increasing proportion of staff engage in quality assurance related dialogue, is the extent to which we can realistically expect examples of excellence, in our particular disciplines, regions, or courses, to form the baseline quality assurance procedure for all others.

Curriculum Design, Content, and Organisation

The university developed a multi-faceted approach to student learning, which includes teaching materials, correspondence tuition and tutor support, and assessment, each with a range of procedures to assure quality at the outset, and a process of review throughout the life of a course. The system of course planning has been devolved increasingly over the years, and much of the responsibility for carrying forward the development of the course profile now rests with the individual academic units. Nevertheless, the university as a whole maintains oversight of the curriculum profile, and assures that the programme of courses being developed is academically appropriate and that individual course proposals conform to agreed policy and practice. The single most important element of the Open University's approach to quality assurance in this area is the course teams, described below, which collectively have academic "ownership" of individual courses.

The five-year forward plan of each academic unit contains details of the courses, packs, or other provisions that the unit intends to produce and present in each year of that period, given certain assumptions about staffing and resource levels. The plan is approved by the faculty or school board, which comprises all its academic staff, representatives from other academic and service units, full-time research students, and representatives of the student body and tutorial counselling staff. The sum of these unit plans, when approved, represents the university's commitment to curriculum development.

The curriculum is divided into modules or courses, which may contribute to one or more programmes of study leading to an award or may be offered as free-standing courses. Academic approval therefore takes place at two levels:

- the award level; and
- the course level.

Award Approval

A new programme of studies leading to an award is sponsored by an academic unit, through its faculty or school board and approved by a curriculum development committee and by the academic board, acting on behalf of senate (though some new proposals require a full senate discussion). Teaching and assessment strategies are considered by the relevant university-wide committees. The university has to be satisfied that support areas can accommodate the new programme within the capacity constraints that exist. Approval for a new programme of studies is sought in the third

year before the programme is presented for the first time and before consideration of the constituent courses begins.

Course Approval

If it is agreed within the unit that a course proposal is academically appropriate and that there is a likelihood of staff and resources being available to develop and maintain the course over a specified period, the outline proposal is incorporated within the relevant academic unit's five-year plan. Three years before the course is due to be presented, plans begin to be developed in more detail, a formal course proposal is drawn up for approval by the appropriate academic unit board and the procedure for the appointment of an external assessor begins.

This course approval process includes:

- approving the details of course titles, general subject matter and detailed syllabuses, their objectives and the method of assessment, the structure and relationship of the course components, tutorial, broadcast, and resource requirements, and any relevant regulatory requirements;
- appointing members of staff to all course teams, including course team chairs, subject to ratification by the curriculum development committee; and
- nominating external course assessors for the approval of the curriculum development committee and appointment by the academic board.

A separate approval and external assessment is required for every new course, as well as for any significant change to an existing course. A decision on what constitutes a significant change in this context is made by the pro-vice-chancellor (curriculum development). Academic units have delegated authority to approve new courses and packs in certain circumstances, where resource and academic issues have already been resolved. So the faculty or school board is the main forum for debating academic and pedagogic issues connected with the course and for approving the details of the course. Referral to university-level committees takes place when any aspects of the course proposal go beyond agreed policy or practice, and may require specific approval by the appropriate committees of any plans to use broadcasts, audio or video cassettes, computing, or residential schools.

The Course Team

The course team is led by a chair, who provides its academic leadership, and the formal responsibilities of this role are specified in the university's government structure. Other members include a course manager, who is responsible for the administrative arrangements of course production; a number of writing academics; possibly one or two academic reading members; a BBC producer if television or radio programmes are included; possibly a member of the Institute for Educational Technology to advise on the delivery of the course; and an editor and designer to assist with the presentation of the final printed texts. Like the course components, the exact mix will depend upon the requirements of the individual course.

The course team carries the academic responsibility for ensuring the quality of the university's teaching of each course. It has a range of tasks:

- the definition and development of the intellectual subject matter of the course;
- the identification and development of the course's teaching strategy, integrating the range of resources for teaching and student support that are available;
- creating and implementing the appropriate assessment strategy for the course;
- ensuring the production of high quality teaching materials;
- planning, implementing, monitoring, and reviewing the presentation of the course to students.

Course team members bring with them the knowledge and expertise gained from being involved in the production and presentation of other courses. An editor not only comments on the format of the printed material, but will be able to advise authors on the way the information is presented.

The team's method of operation is intended to embed quality assurance procedures. Throughout the development and production of a course, the peer group constantly monitors, discusses, and revises the draft course material, which is subjected to a process of collective criticism and development. Having work constantly scrutinised by a peer group, and being involved in discussion of teaching and learning strategies for each course, serves as ongoing staff development for all members of staff and produces high quality courses. This process is also applied to the academic content in a wider sense, and to the teaching of the subject matter, and the examination and assessment policy. Integration is crucial in developing a successful course, both in terms of content and the use of different media to provide students with a stimulating learning experience.

When a course is being produced, some or all of it may be developmentally tested on a group of students with appropriate experience and attainments. If the course is to be a re-made version of a course that has been, or is about to be discontinued, notice will be taken of the evaluations of its predecessor, including the views of students, tutors, and external examiners.

Open University courses are divided into "units" (broadly the material required to teach a student for 12 to 15 hours per week) and "blocks" (which are groups of associated units within a course). Before a course is finalised for presentation to students it will have been scrutinised, in part and in whole, by an external assessor and by assessors of individual blocks.

The university encourages innovation in its academic staff, and innovation is one of the criteria for promotion. Innovation is also encouraged through the university's study leave policies. Encouragement to pursue research and participate in course development as inter-relating activities both feed the course development process, and offer opportunities to disseminate research findings widely.

The university has always been proud of its innovation in curriculum and course and programme design, and the quality assurance processes that support them. External scrutiny has usefully encouraged us to be more explicit about these processes, and it has also posed some very real questions about the roles we ask staff to assume, and their preparedness to do so. Although the role of the course team chair has long been established, we are now explicitly documenting what is required to undertake this role

effectively, what are the pitfalls in the course production process and how can they be avoided, and how to encourage course teams to access as much information as possible about good practice within and outside the institution. At the same time, tensions develop and trade-offs are made as we attempt to increase the rate of course production, to use new technology to enable more frequent updates of material, and to be more innovative in assessment. The objective has to be to meet these new goals without long-term loss of quality or consistency.

Colling and Harvey (1995) discuss educational teams and the management of quality, and suggest that “Course teams responsible for delivery of academic programmes rarely behave as teams. Experience shows the prevailing culture is one based firmly on individual autonomy, which is often jealously guarded ...”. In the Open University we would argue that is not the case. Our academic staff are committed to the team approach, and the end product, in the form of tangible multi media course materials with integrated teaching and assessment strategies, can be publicly credited to all members of the team. We would argue however that the collaboration upon which the team depends is hampered by external assessment frameworks, in this case for both research and teaching quality, which still focus on a single discipline or subject area, making no real allowances for the interdisciplinarity that is so well served by a course team approach. If, as has often been convincingly argued (Beecher 1989), that many academic staff have a stronger allegiance to their subject than to their institution, then the current external quality assessment methods are likely to further reinforce this single subject focus within the university to the detriment of interdisciplinary innovation in course content.

Teaching, Learning, and Student Support

Supported open learning combines the provision of high quality multimedia teaching materials with tutorial and counselling support. Together they provide an integrated system of course presentation, incorporating advice on preparation for study, and describing options for the choice of course and award, support, and administrative arrangements. Students receive a study calendar, which helps them to pace their studies and links suggested dates for the study of each unit with corresponding broadcasts and assignments. The study calendar is complemented by details of local tutorial support, where applicable, provided by the regional centre.

The university’s 13 regional centres provide a service to enquirers, applicants, and students. Each regional centre operates its own enquiry and advisory service and enquirers about the university’s courses and awards are encouraged to seek personal advice in support of the printed material brochures about particular awards, courses, and packs. When an applicant first accepts a place on an Open University course, they are assigned to a tutor–counsellor. On a designated entry course, the tutor–counsellor will act as both tutor and counsellor. For subsequent or higher-level courses, students will be assigned to a tutor for the specific course, while the tutor–counsellor may continue to provide a counselling service, or this may be provided direct from the regional centre.

The university has a large body of around 8,000 associate lecturers (tutors and tutor-counsellors), all of whom work part time. Many of them also have full or part time work for other organisations. For 10%, the Open University is their sole

employer. They live all over the United Kingdom and the mainland of Europe (including the Channel Islands, and remote Scottish islands), though all are connected to one of the regional centres. Formal responsibility for the appointment of associate lecturers rests with regional directors, advised by regionally based members of academic units (staff tutors and regional managers) and senior counsellors. In addition to recommending associate lecturer appointments, they have a responsibility for supervising their work, and ensuring that tutorial and other support policy and strategy are implemented effectively.

Recruitment needs are therefore assessed annually, and the staff tutors, regional managers, and senior counsellors take responsibility for the recruitment process within their region or academic unit, in accordance with the *Guidelines for the Appointment of Tutorial and Counselling Staff*, which incorporate internal policy and the principles of fair selection and equal opportunities. The various associate lecturer roles are outlined in a recruitment document *Teaching with the OU*. Further details of staff roles are set out in other publications which summarise best practice; for example, *Supporting Open Learning* and *Effective Tutorials*.

In the last few years about 1,000 new associate lecturers have joined the university each year. Dealing with such a large number of staff, at a distance, most of them only working for the university a few hours a week, demands a rather different approach than that used with full time staff. The university communicates regularly with its associate lecturers through written materials and face-to-face meetings. New staff normally attend at least one induction meeting, and experienced staff on average attend a staff development event every other year. Current topics are covered as necessary and often include the future plans of the university. Written communications cover a wide range, from the newspaper *Sesame* to individual letters. Some regions produce their own newsletters for associate lecturers.

The tutor is responsible for correspondence tuition, guided by detailed marking schemes for all courses. The marking of tutor marked assignments is monitored by central and regional full time academic staff (and, in some cases, by experienced tutorial staff), and this monitoring process provides feedback to the tutor and the staff tutor or regional manager on the quality of the grading and qualitative feedback awarded to the student.

The course tutor is also responsible for both maintaining personal contact with his or her students and responding to queries and concerns about the course. The course tutor may respond through face-to-face contact, although other factors, such as geographical distribution, may place greater emphasis on contact by letters and telephone. Within the tutorial strategy for each course, tutorial contact hours are allocated, most of which are likely to be concentrated in the form of evening or weekend tutorial meetings or day schools. Because tutorials are non-obligatory, they are regarded as supportive rather than essential to the teaching and learning process. They are usually focused on tackling students' problems and misconceptions and developing observational and interpretative skills, the ability to discuss, and so on, rather than on the transfer of a body of knowledge. The course tutor can play a significant role in "enriching" the presentation of the course, through tutorial meetings and by bringing contemporary developments to the students' attention within the framework of the course.

On some courses, students spend a week, or shorter period, at a residential school to carry out work for which laboratory or group work has no substitute. The residential schools committee, which is responsible for the central co-ordination of this aspect of the teaching provision, has a quality assurance working group, which developed a framework for quality assurance at residential school, both in terms of staff monitoring and to cover wider aspects of the students' learning experience. The university undertakes to take all practical steps to enable everyone to participate as fully as their circumstances allow.

The external audit of institutions, and assessment of the quality of education, claim to respect diversity among institutions, and discipline areas within the same institution, but have caused us to review how far we can expect to provide the same inputs to the student experience across our range of provision. The argument that what is excellent today becomes expectation tomorrow drives efforts to disseminate good practice, but we must now ask what we can say to students and assessors about the standard of provision they will receive in support of their studies, and which we can assure. The formulation of minimum standards, and the quality control processes that monitor them, are not attractive to academic colleagues, who have never seen control and policing as the route to quality enhancement. Yet there are strong pressures from society in general, apart from the development of quality "terminology" in higher education, towards the issue of student charters, articulated learning objectives (which, by implication, will be achieved if the institution is providing input of appropriate quality), and complaints systems. It is critical to balance the extent to which we transmit these pressures, and the need to perform well in external assessments against the extent to which we allow and encourage diversity at the expense of structures and systems, in deciding on, for instance, internal resource flow, the funding of new initiatives, and collaborative arrangements.

Quality Assurance and Enhancement

The quality and quality assurance mechanisms of the Open University are more exposed to scrutiny than those of any other institution of higher education in the United Kingdom, through the size of its student body, its associate lecturers, the widespread availability of its course materials, and the visibility and audibility of its television and radio programmes. Accordingly, it is not too surprising that the university acquitted itself very well when formal external quality assessment and quality audit were introduced. Also, in this case study we have argued that given the mission of the university and its approach to both the curriculum and to student support, then quality assurance has always been a necessity for us and that the main development in the last few years has been the communication of the associated processes to external bodies.

The approach the Open University has taken has been to create a small number of new staff roles, such as those held by the authors, with a primary focus on quality assurance and a quality assurance panel that takes a university wide view of this area. Our current concern is to maintain a healthy culture of quality enhancement in the face of resource constraints and the negative side-effects of external quality assessment and audit. While our mission is the secure foundation for applying the principles of quality assurance, we argue that there is a real risk that external assessment processes, especially coupled with institutional success in these arenas,

will lead to a stifling of innovation in such areas as interdisciplinary provision and new models of student support and might even result in the creation of bureaucratic procedures that attempt to over-standardise on the perceived critical minimum components that underpinned the past success. In the face of these pressures we need to provide the space in which small and large scale quality enhancement experiments can take place.

Concluding Remarks

If genuine institutional learning is to occur, then a reasonable proportion of these experiments must fail. So we must take calculated risks and at the same time we ensure that we properly document the lessons we learn from both the failures and the successes of different variations on our approaches to supported open learning. These lessons must be shared with the widest possible audience within the university. In tandem we must encourage the development of local groups concerned with quality enhancement. These may be focused on an area of the curriculum, a geographical region in which we operate, or an aspect of the way we support learners. In conclusion, then, we consider that if we are to continue to work towards the Open University's historic mission, then we must support, promote, and gather feedback from quality enhancement driven experimentation, innovation, and diversity in both the curriculum and in learner support.

References

- Beecher, T. 1989. *Academic Tribes and Territories*. Buckingham: Society for Research in Higher Education and Open University Press.
- Colling, C., and L. Harvey. 1995. "Quality Control, Assurance and Assessment: The Link to Continuous Improvement", *Quality Assurance in Higher Education*, 3 (4):30–34.
- O'Shea, T., S. Bearman, and A. Downes. 1996. "Quality Assurance and Assessment in Distance Education". In R. Mills and A. Tait (eds.), *Supporting the Learner in Open and Distance Learning*, 193–205. London: Pitman Publishing.
- Perry, W. 1976. *Open University: A Personal Account of the First Vice-Chancellor*. Cambridge: The Open University Press.

5. Quality assurance in the provision of library services in British Columbia

By Kate Seaborne

Introduction

The University of Victoria offers undergraduate and graduate level distance education courses and degree completion programmes in child and youth care, education, nursing, public administration, and social work for professionals in British Columbia and other western Canadian provinces. Fiscal restraint is forcing a re-examination of the well-established models for the delivery of these programmes. Concerns have

been raised about maintaining the costs of full-service delivery and administrators are asking, “What do learners really need?” Overall, these pressures raise questions among programme managers, faculty, and senior administrators about the nature and effectiveness of the learning environment that they provide. There is an interest, therefore, in developing frameworks for assessing and reconsidering the quality of the services provided.

The recent focus on “quality” in higher and distance education suggests that many educational institutions are beginning to take up the goal of ensuring quality service. But what does quality mean in an educational context? Nunan and Calvert (1992, 31) note that “the issue of quality is often raised in conjunction with concerns about expansion, structural change and fiscal constraints. In this context, the term quality signifies approval, commendation or satisfaction – in short, it provides a means of approbation”. Quality means different things to different people as Moran (1995), Cowan (1994), Robinson (1994), Nunan and Calvert (1992), Freeman (1991), and others have pointed out. Each of the stakeholders of an academic programme of distance higher education (students, faculty, administrators, employers, and government) is likely to have different views about what constitutes quality. Inevitably, therefore, any discussion of quality assurance must take into consideration the lack of consensus evident in the literature and the workplace about what quality service actually looks like. Fortunately, defining quality assurance is less problematic. Freeman (1991, 26) says that the term “quality assurance carries the implication of preventing failure. The emphasis is on ‘right first time’ ... and is suggestive of a pro-active process”. Attempting to synthesise a variety of definitions of quality assurance in higher and distance education, Warren, McManus, and Nnazor (1994, 4) describe it as “a continuing, active and integrative process for maintaining and improving” the delivery of programmes and services. Robinson (1994, 187) defines it as “the set of activities that an organisation undertakes to ensure that standards are specified and reached consistently for a product or service”. This definition accords closely with parallel definitions drawn from the fields of public and business administration. For example, in the context of the Federal Public Service of Canada, a report from Statistics Canada (1995) defines quality assurance as “practices that are intended to improve or maintain” service delivery in the public sector.

This case study will examine a client-focused service unit, INFOLINE Library Services at the University of Victoria, which bears a reputation for excellence in its delivery of services but has no formal quality assurance system. I will first provide some background on the inception of INFOLINE services and the evolution of its mandate and financing over the last 15 years. Drawing on documentary evidence, Robinson’s (1994) framework for quality assurance systems, and two substantial meetings with INFOLINE services staff, I then go on to analyse the degree to which INFOLINE services has in place key elements of a “quality assurance” system. These elements are:

- a quality service policy and plan;
- standards for service;
- functions and procedures required for service delivery;
- documentation of procedures;
- monitoring of service quality; and

- involvement of users.

The INFOLINE Library Service

Background

In 1980, the University of Victoria's Division of Continuing Studies established a service unit to provide library support for students who were enrolled in distance education programmes offered by the Faculty of Education and the Schools of Child and Youth Care, Nursing, Public Administration, and Social Work. The division's goal was to make the full resources of the university libraries easily accessible to students enrolled in the distance programmes. To this end, the unit was placed in a collaborative relationship with Distance Education Services, which provided curriculum development consultation and technical and production support to the university's programmes of distance learning.

The unit, known as INFOLINE, was initially staffed by two library employees: a librarian and a library assistant. Students could access the staff through a toll-free phone number. Books and articles requested by students were sent out by post or courier.

In its first year, INFOLINE served 171 distant students out of a total of 765; handled a total of 397 requests for materials or information; and sent out a total of 2,210 items (articles or books). Over the first decade of its operation, INFOLINE expanded its services, making the full resources of the university libraries, including the services of a librarian, readily accessible through the telephone, the fax machine, or electronic mail to students enrolled in the university's distance programmes. Fifteen years later, INFOLINE has developed a reputation for the fast and efficient delivery of library materials and research resources to University of Victoria students scattered throughout the province. The unit has grown in size to four full time staff, one part time staff member, and one temporary employee and occupies its own office within the library. In 1994–95, the unit served 908 students out of a total of 5,849, handled a total of 1,851 requests, and sent out a total of 11,468 items. Several factors have contributed to this increase in use:

- student enrolments are on the increase for individual courses and for degree programmes;
- more courses are available in each of the distance programmes;
- course writers are encouraged to design assignments that emphasise the use of library resources; and
- student users rate the service highly and recommend it to other distant learners (Seaborne 1995; Brown and Molzahn 1994).

Paying for INFOLINE

From the outset, the INFOLINE unit's budget allocation included salaries for library staff and casual help. It also covered the costs associated with a toll-free telephone line; postage and courier costs; photocopying costs; charges for searches of

commercial on-line data bases; and charges for printing information brochures and administrative forms; as well as travel costs associated with visits to off-campus sites.

By 1990, as concerns about the rising costs of the library service grew, a plan was developed to implement fee-paying services for non-university clients. A set of unit charges was developed for various services; for example, the loan of a monograph from the university libraries, the provision of a copy of a periodical article, a reference, or a literature search.

Since 1990, INFOLINE has negotiated a number of contracts with outside clients, including significant relationships with the provincial government's Ministry of Education and North Island College on Vancouver Island. As anticipated, these contracts have proven to be very beneficial to the university and to the INFOLINE service. The contract revenues have cross-subsidised the traditional services, thereby reducing the university's contribution to INFOLINE's non-salary operating budget. Two-thirds of the non-salary costs of providing the service have, since 1990, been covered by revenue generated from the external contracts and the remaining one-third has been provided through a grant from Continuing Studies. They ensure that INFOLINE's budget can be sustained at a level which enables the unit to continue providing full service to distant learners. In addition, the contract librarian and library assistants who are hired to deal with the new clients provide assistance with regular INFOLINE business as their time permits. Unfortunately, in 1995, the Ministry of Education notified INFOLINE that planned cutbacks in its internal programmes would result in a reduced budget for the library services contract. INFOLINE is also anticipating that the North Island College contract may be reduced as the college increases its permanent collection of library holdings. It is clear that cutbacks in these service contracts will affect the unit's ability to continue to provide the same level of service to distant students. Forecasts of cutbacks in external contracts, coupled with parallel reductions in funding by the Division of Continuing Studies, have forced senior administrators to begin to ask hard questions about the cost and the significance (to students) of a number of services, including INFOLINE.

Quality Assurance at INFOLINE

Library Services

On the face of it, INFOLINE Library Services appears to have provided an innovative and widely appreciated set of services since its inception in 1980. But what procedures and systems did it have in place to provide assurances of service quality?

Documentary data provided a context in which to ground a study of INFOLINE's approach to quality assurance. The co-ordinator of INFOLINE has published several reports describing its service (1993, 1995). They provide historical details and statistical data on the volume of the service. A strategic plan, developed by the staff as part of the Division of Continuing Education's strategic planning process in 1991 and updated in 1995, defines the unit's values and goals. Brochures, request forms, and other informational documents illustrate the ways in which the service is described to users. Surveys of users and interviews with students provided a range of clients' perspectives of the service.

Semi-structured group discussions with the INFOLINE staff provided the opportunity to explore their perspectives on the nature of their service and on elements of quality assurance. In co-operation with the INFOLINE director, I used Robinson's (1994) framework for assessing a quality assurance system to develop a set of interrelated questions to guide four hours of discussion. The following questions were posed at two meetings in December 1995:

- Does INFOLINE have an internal policy on quality service? Has this policy been translated into a plan?
- Has INFOLINE set standards for the delivery of library service? Are all the INFOLINE staff aware of these standards? Are these standards achievable? reasonable? measurable? Are the users (learners, faculty, and external clients) aware of the standards?
- Has INFOLINE identified the key procedures that need to be in place to achieve the standards set for library service? Is the learner the starting point for some of them?
- Are the procedures for library service clearly documented? Are they readable and user-friendly? Does everyone who needs to know about INFOLINE's procedures have access to information about them?
- What kind of monitoring system has INFOLINE designed to reach its standards for library service delivery? Do these monitoring systems check whether standards are being met and procedures followed? Does monitoring result in improved performance of a review of practice or a reappraisal of standards?
- Have the users (learners, faculty, and external clients) been involved in setting and monitoring these standards?

Robinson's (1994) framework for examining quality assurance systems includes several additional elements that seemed relevant only to organisations already explicitly committed to the operation of a quality assurance system. For example, the framework recommends that an organisation take into account the degree to which staff are involved in the development of such a system, the type of training provided to staff and how that training is linked to quality assurance, and the costs of implementing and maintaining quality assurance activities. Since INFOLINE has not explicitly adopted a quality assurance system, these elements were not included in the discussion.

The unit's perceptions of how it functions to provide library support to distant learners and external clients is summarised below. Elements of what Robinson (1994) describes as a quality assurance system that have been incorporated into INFOLINE's approach to the delivery of library services are identified. All quotations are drawn from the transcripts of the interviews.

A Quality Service Policy and Plan

Organisations with a quality assurance system will have a policy on quality with which all staff are familiar and will have translated this policy into a practical plan (Robinson 1994).

INFOLINE does not have an explicit, formal policy for “quality service” or a practical plan to guide delivery of service but, based on the staff’s collective experiences in dealing with clients of the university library, they share the belief that users want:

- rapid delivery of requested books and other resources;
- a sufficient amount of material or information to be useful to the user; and
- a quick response to the user on the status of the request, if we are going to have any difficulty in filling it.

Although the unit lacks a formal policy and plan for providing quality service, they say that the goal statements formulated for their strategic plan reflect their implicit policy on quality and provide the framework for their plan of service delivery:

Goals

- To maintain the quality of the distance education programmes by providing or facilitating access to appropriate library resources as required.
- To provide all users with effective mechanisms to request and receive library materials.
- To enable [University of Victoria] distance students to receive library services comparable to those provided to regular students on-campus.
- To provide a level of service that will encourage external clients to continue their contractual arrangements with INFOLINE for library services.
- To monitor the library services provided to distance students and fee-based clients and to utilise formal and informal evaluation procedures to determine the effectiveness of specific services and the need for any change or enhancement in service level.

(Continuing Studies Library Service: *Strategic Plan*, 1995)

If the unit were to adopt a formal quality assurance system, it could reformulate these components into policy and planning statements.

Standards for Service

An organisation with a quality assurance system specifies and defines reasonable, achievable, and measurable standards for key activities and procedures and communicates them to everyone concerned (Robinson 1994).

INFOLINE has not developed formal standards for service, but staff describe the value statements in their strategic plan as the equivalent of a set of standards:

Values

1. Developing and maintaining credibility with all users by providing prompt and responsive service:

- requests for library materials from distance students and fee-based clients are filled as quickly as possible;
 - all enquiries for library information or materials are acknowledged and given thorough attention;
 - individual users are always informed of the status of their requests;
 - requests from individual users take priority over other duties and tasks.
2. Taking a proactive approach to service:
- library needs are anticipated and mechanisms are developed to fill those needs as required;

(Continuing Studies Library Service: *Strategic Plan*, 1995)

The staff believe that their informal standards for practice (as described in the value statements) are reasonable and achievable under normal conditions. When they encounter problems in achieving them, they tend to perceive the problem to be outside the span of their control:

whether we can supply what they want depends on whether we own it, whether it is on the shelf or whether we can get it through the inter-library loan office. And as much as we can hustle at this end, whether we can deliver in good time, in the end, depends on how quickly other library staff wrap the materials for mailing and on the effectiveness of the priority post service. (Staff interviews 1995)

On the other hand, they are not sure how these standards could be easily measured. They recognised that an examination of service delivery cannot be separated from the individuals who take part in the transaction, in this case, the INFOLINE staff and their clients. They also realise that each transaction is unique and is likely to be judged by the individual client's perception of service quality.

INFOLINE communicates its service standards to its student clients through brochures and library services information that is incorporated in course materials. Fee-paying clients are informed of these standards via intra-agency memos and other documentation. This example illustrates how the standard of timeliness is addressed in the brochure for student users:

The INFOLINE staff attempt to provide as prompt service as possible. In most cases, your request will be handled with 48 hours of receipt. ...The average time to receive material from INFOLINE is one week. ... there may be delays due to the mails or the unavailability of certain items. If you have not had a response from INFOLINE within two weeks of making your request, please call 1-800-563-9494 to check on the status of your requests. (INFOLINE brochure 1995)

The unit has also produced a video for student users, which they hope will dramatise its service standards through a case study of a distant student using INFOLINE to help

her research an assignment. The video introduces the library staff and illustrates how requests are handled:

The idea for the video has been developing since we saw from a couple of surveys that new students feel quite shy about requesting library assistance. We hope it will demystify the process of requesting library material so that they will feel very comfortable about calling in a request.

The video will be distributed to new learners in a variety of ways: as part of an introductory package of information from the individual programme areas, as a component of courses with a library assignment, and through INFOLINE on a loan basis.

If INFOLINE chooses to implement a formal quality assurance system, it will need to develop a set of standards that specify and define how library service will be delivered. The first step they would take would be to diagram their procedures for delivering library service. A table or chart helps to depict the complete set of procedures that need to be managed (Robinson 1994; Lovelock 1992). Working from the diagram, the staff can develop specifications and definitions for standards of delivery which they believe are reasonable and achievable given their working situation, and which they also believe can be measured. For example, a standard for service to distance education students might read: “a student’s request for library materials will be moved through the INFOLINE office in 48 hours from the date of request, or the student will be contacted”. As noted earlier, the INFOLINE staff have indicated that, under normal conditions, they can turn around a student’s request within 48 hours of receipt, so this example would be perceived as reasonable and achievable. This standard could also be measured by having staff keep details of each transaction using a management tool such as a record of activity. This tool permits them to measure themselves against the standards they have set for library service and develop their own plans for self-improvement, if required.

Key Functions and Procedures Required for Service Delivery

An organisation with a quality assurance system has identified and analysed the key functions and procedures required to achieve the standards it has set and has established the clients of the service as the starting point in designing at least some of these functions and procedures (Robinson 1994).

Through its strategic planning process, INFOLINE has done a thorough, though informal, job of identifying and analysing its functions and the procedures required to achieve the standards it has set for itself. The key functions are identified in its strategic plan’s mandate statement. These are to provide

library support for off-campus and distance credit, certificate and diploma programs sponsored by the Division of Continuing Studies
and

... fee-based library services for external organizations, institutions and individuals.

INFOLINE's procedures are based on their assumptions about the user's needs, their collective experience in the delivery of library services, and the values they have articulated in their strategic plan. To a considerable extent, the needs of the clients have been taken as the starting point in identifying and analysing the unit's functions and procedures. The staff believe that the procedures they have designed for service delivery reflect an accurate analysis of user's needs for library service. INFOLINE's procedures for service are summarised below.

The telephone is still the principal medium of access to the INFOLINE staff but, over time, the means of access have been expanded to include regular mail, fax transmission and, more recently, electronic mail. Requests received by telephone are recorded on an answering machine in response to a message on the machine that instructs the user to list the library material they require or to describe the type of information needed for research purposes. A library assistant transcribes the telephone messages each working day. Users are only called back if there is a query about their requests. The requests for specific titles are handled by a library assistant, and requests for reference assistance or literature searches are passed on to a librarian. Fax and e-mail requests are passed on to the library assistant or a librarian, depending upon the type of request. As noted earlier, the unit's objective is to successfully address every request within a 48-hour period. Most material is sent by mail or private courier directly to the student's home address. Small quantities of articles are occasionally sent to students by fax.

Any circulating book in the University of Victoria libraries can be loaned to users. Loan periods are the same as those given to on-campus users. INFOLINE also has a large office collection of uncatalogued materials to support the distance programmes, including duplicate copies of books, articles, and audio-visual items designated as supplementary materials for the various courses. Items from this collection are sent on short-term loan to individual distance students as required. Periodical articles are copied on demand for users from the library collections. Interlibrary loan requests are placed on their behalf when necessary.

In response to requests for reference or subject assistance, literature searches are conducted using the appropriate CD-ROM or on-line databases. Due to the short deadlines in most undergraduate courses, the librarian usually selects materials from the search results to be sent to the distant student. Printouts from the database searches are sent directly to graduate students and provincial government clients so that they can select their own references.

The staff believe that most of the procedural problems they experience lie outside the scope of the unit's responsibility. For example, they describe typical student complaints as revolving

around seeing books on recommended reading lists and not being able to get them from us. The typical situation is that students will see a book and call for it and five other students are on the list to get the book ahead of them and there are only two copies. And that's not our fault. The program area is really at fault here because they are responsible for providing us with additional copies of any books (one for every 10 students registered) that they put on the reading list.

In this case, INFOLINE has developed a procedure to deal with the situation but depends on the academic area to ensure that it is followed and the staff must bear the brunt of student dissatisfaction if it is not. An analysis of this problem from a quality assurance perspective might lead the staff to redesign the procedure they have established with the academic units to deal with the provision of multiple copies of recommended readings.

Documentation of Procedures

An organisation with a quality assurance system in place will have documented its procedures for delivery of service. The documentation will be clear and explicit in its description of procedures, it will represent practice, and the information will be presented in a readable and user-friendly format (Robinson 1994).

The INFOLINE staff are currently developing their first procedures manual as a reference resource. They recognise that, while the current staff is familiar with procedures, it would be very difficult to train new staff without a written discussion of procedures for reference. However, they point out that the procedures manual can be only a guide because so many of the decisions they make about trying to address learners' requests are subjective:

only from years and years of experience can you learn when you're not providing sufficient materials. It is not that six items are not sufficient and seven are. We use judgments every day in what we provide. We have no hard and fast procedures.

If INFOLINE were to adopt a formal quality assurance system, it would need to design a procedures manual that clearly defined the unit's standards for service delivery and described how these would be addressed and measured.

Monitoring Service Quality

An organisation with a quality assurance system in place has set up systematic monitoring mechanisms to check whether standards are being met and procedures followed. The data collected via the monitoring mechanisms are disseminated to everyone concerned and are used to improve performance, to review practice, or to reassess current standards (Robinson 1994).

INFOLINE does not have a regular monitoring system in place. At present, the only formal monitoring is done with those users who request reference assistance (for example, information about a specific topic). Forms that ask for an assessment of the reference service are sent out with the material and the onus is on the users to return them. Apart from this one monitoring mechanism, the unit relies on users' unsolicited comments on the basic library service (for example, requests for books or articles that are listed as supplementary reading in the course materials) to determine whether they are achieving the informal standards they have set for service delivery:

we assume that if we've given the users what they've been looking for then the only variable is time. Did they get it in a timely manner so that they could use it? ... We assume that the user will get back to us if

the request is late or if they didn't get what they asked for. And over the years, the number of people who have complained about not having received materials is very small. We do get delays because of the mail service but that seems to be the most troublesome issue for them.

Unsolicited comments come to them in two ways: either directly to the INFOLINE office by note or phone call or indirectly through learners' comments on evaluations of distance education courses and the services that support course delivery.

In 1993, INFOLINE surveyed its student users about the effectiveness of the delivery procedures and found that, on the whole, learners were very satisfied with the way their requests were handled. Student reviews of the INFOLINE service collected for other studies of the University of Victoria's distance education programmes bear out these findings (Seaborne 1995; Brown and Molzahn 1994). A user satisfaction study conducted with employees of the Ministry of Education determined that there were high levels of satisfaction with the contracted services provided by INFOLINE (Ministry of Education 1995).

The unit believes that it would do a more comprehensive job of monitoring the quality of their service delivery if it had more time and more staff. If INFOLINE were to adopt a quality assurance system, it would need to attach monitoring mechanisms to all its procedures and add responsibilities for data collection and analysis to existing job descriptions. The staff would also need to hold regular sessions in which they could review the collected data and use it to assess standards, procedures, and practice.

Involvement of Users

An organisation with a formal quality assurance system involves the staff and the clients in setting and monitoring standards for service delivery. Staff are also involved as "internal clients" in setting and monitoring standards for their work environment (Robinson 1994).

Through the strategic planning process, INFOLINE staff have been involved in identifying the values and goals that define the library service and in developing the procedures that guide its practice. In this way, the staff are implicitly involved in setting standards for service delivery and in creating a work environment that supports their beliefs about practice. Clients have not been directly involved in these processes.

If INFOLINE were to adopt a formal quality assurance system, it would need to find strategies for incorporating the views of its clients in developing standards, which could prove challenging for a service unit dealing with clients at a distance. Interactive communications technologies such as teleconferencing or computer conferencing, however, would provide a means by which clients and INFOLINE staff could come together in focus group discussions. These sessions would enable staff to increase their understanding of clients' needs, test assumptions about existing standards, and solicit the clients' views about service quality.

Concluding Remarks

Any organisation that focuses on service quality is likely to have put in place, implicitly, elements of a quality assurance system, as was clearly the case with

INFOLINE. The unit has spent considerable time identifying and analysing the procedures required to achieve the standards set out in its strategic plan. And although the unit has not, to date, regularly monitored all procedures to ensure that standards are being met, the solicited and unsolicited feedback it does receive suggests that, overall, users are very satisfied with the quality of service they receive from INFOLINE. The staff discussions about quality assurance systems also illustrate the unit's collective willingness to turn the process of reviewing standards and procedures into an opportunity to look critically at what they do. In a discussion about procedures, for example, they focused on a routine that they have established with academic programmes to supply additional copies of books on recommended reading lists. They rely on the programmes to bring these lists to their attention and to provide required copies and, frequently, the programmes neglect to provide the materials until students call for them. Discussion of this matter has caused the unit to reassess the procedure and to open discussions with the programmes on how to improve communications on this matter. Equally as clear, an organisation like INFOLINE could divert significant resources to the implementation of a full-blown system of quality assurance, with consequent costs and benefits. On the benefit side, a comprehensive monitoring of standards and procedures would increase communication between the unit and its clients as well as prompt regular reviews of practice and reassessment of standards. On the cost side, implementation of a quality assurance system would require a significant reorganisation of the staff's roles and responsibilities in order to incorporate monitoring tasks. Given the small number of staff and the volume of activity, they would be hard pressed to add additional monitoring tasks while maintaining their current standards of service.

References

- Brown, M., and A. Molzahn. June 1994. Survey of the Satisfaction of Bachelor's of Science (Nursing) Students with Distance Education. Victoria, British Columbia: School of Nursing, University of Victoria.
- Continuing Studies Library Services. 1995. *Strategic Plan*. Victoria, British Columbia: Division of Continuing Studies, University of Victoria.
- Cowan, J. 1994. "How can you assure quality in my support, as a distance learner?" *Open Learning*, 9 (1): 59-62.
- Croft, M. 1991. *Student Support Services: An Overview*. Report of the Roundtable on Student Support Services. Vancouver: The Commonwealth of Learning.
- Deshpande, P. M., and I. Mugridge (eds.). 1994. *Quality Assurance in Higher Education: Papers presented to a symposium on quality assurance, New Delhi*. Vancouver: The Commonwealth of Learning.
- Freeman, R. 1991. "Quality Assurance in Learning Materials Production," *Open Learning*, 6 (3): 24-31.
- INFOLINE Services. September 1995. INFOLINE. Brochure. Victoria, British Columbia: Continuing Studies Library Service, Division of Continuing Studies, University of Victoria.
- INFOLINE Services. December 1995. Staff interview. Victoria, British Columbia: Distance Education Services, Division of Continuing Studies, University of Victoria.

- Inter-University Library Survey of Off-Campus Students in Western Canada. July 1993. *Summary of Results*. Victoria, British Columbia: Continuing Studies Library Service, Division of Continuing Studies, University of Victoria.
- Lovelock, C. 1992. *Managing Services*, 2nd ed. Englewood Cliffs: NJ: Prentice Hall.
- Planning, Research, and Evaluation Branch. 1995. Report of Findings: INFOLINE Survey. Internal report. Victoria, British Columbia: Ministry of Education.
- Moran, L. 1995. "Who Sets the Agenda for Quality in Distance Education?" In D. Sewart (ed.), *One World, Many Voices: Quality in Open and Distance Learning*. Selected papers from the Seventeenth World Conference of the International Council for Distance Education, held in Birmingham, United Kingdom, June 1995, 88: 158–161. Milton Keynes: The Open University.
- Nunan, T., and J. Calvert. 1992. *Report of the Project to Investigate Quality and Standards in Distance Education*. Victoria, South Australia: University of South Australia, Deakin University.
- Robinson, B. 1994. "Assuring Quality in Open and Distance Learning". In F. Lockwood (ed.), *Materials Production in Open and Distance Learning*. London: Paul Chapman.
- Seaborne, K. 1995. A Case Study of Student Support Services for Distance-Based Professional Education. Dissertation in progress.
- Slade, A. L. 1993. "Funding Off-campus Library Services Through Alternative Sources: Expanding the Infrastructure to Include Fee-paying Clients." In *The Sixth Off-Campus Library Services Conference Proceedings*. Mount Pleasant, MI: Central Michigan University.
- Slade, A. L. 1989. "Establishing an Off-campus Library Service for Remote Educational Centers: Variables and Potentials". In B. M. Lessin (ed.), *The Off-Campus Library Services Conference Proceedings*, Reno, Nevada, October 20–21, 1988. Mount Pleasant, MI: Central Michigan University Press.
- Slade, A. L. 1987. "Library Services for Distance Education Courses". In B. M. Lessin (ed.), *The Off-Campus Library Services Conference Proceedings*, Reno, Nevada, October 20–21, 1986. Mount Pleasant, MI: Central Michigan University Press.
- Statistics Canada. 1995. *Serving Canadians: Survey of Practices in Support of Quality Services in the Federal Public Service of Canada*. Ottawa: Queens Printer.
- Warren, J., K. McManus, and R. Nnazor. 1994. "Quality Assurance and Distance Education: A Review of the Literature". In P. M. Deshpande and I. Mugridge (eds.), *Quality Assurance in Higher Education: Papers presented to a symposium on quality assurance, New Delhi*. Vancouver: The Commonwealth of Learning.

6. Practice exercise

6.1 *Discussing the case studies*

Instructions: Divide participants into four small groups. Assign one case study to each group. Ask each group to prepare a 15-minute presentation of the case study, to be made to the workshop as a whole, using the following questions as guidelines for their presentation:

- What are the primary features of the context, political, economic, sociocultural, and institutional, in which the quality assurance schemes are operating?
- How do the authors of the case study define *quality assurance*?
- What issues are the institution or institutions described in the case study having to deal with in their quality assurance schemes?

- What methods and mechanisms are they employing in their quality assurance schemes?
- Have they been successful? If so, why? If not, what problems remain to be solved?

Timeframe: Each presentation should take about 15 minutes. Participants ideally should work on this task over the duration of the workshop. Alternately you will need to provide at least one half-day for the groups to prepare their presentations.

Materials required: Flip charts or overhead transparencies and marker pens.

SELECTED BIBLIOGRAPHY

QUALITY ASSURANCE IN
OPEN AND DISTANCE LEARNING

- Atkinson, Roger, Clare McBeath and David Meacham (eds.). *Quality in distance education : ASPESA Forum 91*. Lismore Heights, NSW : Australian and South Pacific External Studies Association, 1991.
- Calder, Judith. *Programme evaluation and quality : a comprehensive guide to setting up an evaluation system*. London, UK : Kogan Page, 1994.
- Deshpande, Prakash M. and Ian Mugridge (eds.). *Quality assurance in higher education*. Vancouver, BC : The Commonwealth of Learning, 1994.
- Harman, Grant. *Quality assurance for higher education: developing an managing quality assurance for higher education systems and institutions in Asia and the Pacific*. Bangkok, Thailand : Unesco, PROAP, 1996.
- Manohar, K. Murali (ed.). *Distance education in India: studies in quality and quantitative aspects*. Warangal, India : Indian Distance Education Association, 1994.
- Rao, M. Satyanarayana (ed.). *Quality assurance in distance education*. Hyderabad : Centre for Evaluation, Dr. B.R.Ambedkar Open University, 1995.
- Regulatory frameworks for assuring academic standards in credit-based modular higher education*. London, UK : Higher Education Quality Council (HEQC), 1997.
- Sewart, D. (ed.). *One world many voices: quality in open and distance learning. Selected papers from the 17th World Conference of the International Council for Distance Education, Birmingham, United Kingdom, 26-30 June 1995*. Oslo, Norway and Milton Keynes, UK : ICDE and The Open University, UK, 1995.
- Strydom, A.H. et. al. (eds.). *Quality assurance in South African higher education : national and international perspectives*. Bloemfontein, South Africa : Unit for Research into Higher Education, University of the Orange Free State, 1996.
- Tait, Alan (ed.). *Quality assurance in higher education : selected case studies*. Vancouver, BC : The Commonwealth of Learning, 1997.

Tait, Alan (ed.). *Quality assurance in open and distance learning : European and international perspectives : an international conference on issues of quality for new models of education, 28-30 September 1993, Downing College, Cambridge, UK*. Cambridge, UK : The Open University, 1993.

Understanding academic standards in modular frameworks. London, UK : Higher Education Quality Council (HEQC), 1997.

The Commonwealth of Learning IRC

Glossary of Open and Distance Learning

Access centres: see **learning centres**.

Accountability: holding operating personnel responsible for the estimated costs in their budgets and for expenditures.

Accounts payable: the money you owe to providers of services or products.

Accounts receivable: the money owed to you for services rendered or products sold.

Action verbs: in writing learning objectives, verbs that state expectations of learner behaviour as an action to be performed, which learners and teachers can evaluate as having been performed.

Activities approach: a way of designing learning materials that provides a series of activities to help learners master content, on the assumption that learners will only learn if they actively engage with the material presented.

Administrator: the person who carries out administrative duties on behalf of the development team, liaises with contract writers, assists with copyright clearance, compiles readings and illustrations, ensures production schedules are met, and controls the day-to-day progress of the course.

Adult education: teaching and learning that emphasises the principles of adult learning, often known as **andragogy**, as compared to **pedagogy**, or child-centred learning.

Advance organisers: paragraphs at the beginning of a unit or lesson that are intended to remind learners of what they have already learned, to connect it with what they will learn in this lesson.

Affective domain: in teaching and learning contexts, the domain field of activities relating to feelings or emotions.

Aim: in the context of teaching and learning, a broad, general statement of either what the learner might learn or what the teacher will do.

Analysis: a level of learning that involves breaking down material into its meaningful parts so that the relationship among the parts can be determined.

Analytical approach: an approach to designing a curriculum, for example, which examines the components of that curriculum — such as the learning objectives, key concepts, or the competencies that are desired as outcomes — and organises the curriculum around them.

Ancillary operations: activities that fall outside the core activities of an organisation.

Andragogy: see **adult education**.

Application: a level of learning that involves using knowledge in concrete situations.

Apportioning: the act of assigning fractions of the cost of a shared facility or service to cost centres.

Assessment: the measurement of a learner's performance in terms of knowledge, skills, and attitudes.

Asynchronous: see **networked learning**.

Audio conference: a technological arrangement in which telephones or speakerphones are connected so that people in three or more places can talk to one another.

Audiographic conference: a technological arrangement in which audio conferencing is supplemented by devices that send text or still pictures, such as computers, electronic whiteboards, graphics tablets, and light pens for writing to computer screens, tablets, and whiteboards.

Basic education: the provision of teaching and learning opportunities that enable learners to obtain primary-level skills in reading, writing, and numeracy, so that they can participate fully in society.

Behavioural objectives: learning objectives that indicate the expected changes of behaviour in learners who complete a course of instruction.

Bimodal institution: see **dual-mode institution**.

Broadcast: any transmitted radio or television programme.

Budgeting: a process consisting of a series of steps by which estimates of revenue and expenses and related statistical data are used to compile a plan for expenditure for the next financial period.

Bulletin board system: a small computer system that allows members to exchange messages, maintain discussion groups, and download software.

Cable feed: broadcast material sent via a fixed cable or a community antenna.

Capital budget: money set aside on a recurring basis to meet capital expenditure.

Capital cost: expenditure on the acquisition of fixed assets (land, buildings, machinery, equipment), in which the expenditure is intended to benefit more than one accounting period.

CD-ROM (compact disc–read only memory): a disc that can store a large amount of text, audio, video, and graphic information; a computer needs a special drive and software to display these materials.

Cloze test: a test of reading and comprehension skill that involves the insertion or deletion of appropriate words in a text.

Co-production: the joint production of a course or courses by two or more institutions.

Cognitive domain: in the context of teaching and learning, the domain of learning activities that relate to perceiving the world and knowing about it or understanding it; this domain contains six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation.

Comprehension: a level of learning that involves grasping the meaning of material or restating previously learned material in one's own words.

Computer-assisted learning (CAL): a learning method that uses a computer system to present individualised instructional material.

Computer-based learning (CBL): a generic term for the various kinds of stand-alone (that is, non-networked) learning applications that involve computer software.

Computer conferencing: the use of a central computer to receive, hold, and distribute messages among participants' computers.

Computer-marked assignments: assignments that are scored by computer using optical scanners.

Computer-mediated communication (CMC): in the context of teaching and learning, the use of electronic mail, computer conferencing, and the World Wide Web to deliver learning material and provide learners and teachers with opportunities for interaction; learning via CMC is also called '**networked learning**'.

Condition statements: parts of a learning objective that describe the conditions under which the performance required is to take place, such as 'without supervision' or 'using a calculator'.

Consortium: an arrangement involving a number of organisations in formal partnership, with joint allocation of resources and sometimes an independent managing agent; for example, open and distance learning institutions that set up formal agreements may involve co-production of elements of a course, complete joint course production, joint learner enrolments, or cross accreditation and credit transfer.

Constructivist: frameworks for learning in which learners and teachers work together to construct meanings, rather than having these meanings pre-determined or prescribed in advance for the learner by the teacher.

Continuing education: education that is usually not for credit, but which can be delivered on campus or at a distance.

Copyright: a set of rights granted to an author under the national law on copyright.

Correspondence education: education that relies on print-based, self-study materials with communication through postal services.

Cost: the amount of actual or notional expenditure of money incurred on, or attributed to, a specific object or activity.

Cost-benefit analysis: a systematic comparison of the cost of carrying out the project, with the value of the resulting service, resource, information, or product to any of a possible range of beneficiaries.

Cost centres: the locations, functions, items of equipment, or departments to which costs are attributed; for example, a particular degree programme may be identified as a cost centre within an institution.

Cost unit: a measured amount of a product or service used for the expression of the costs of that product or service.

Counselling: the provision of personal and emotional support to learners.

Course blueprint: a course planning document, containing details of the content, components, and costing of a course that is proposed for development.

Course transfer: the sale, lease, or gift to one institution of a course produced by another institution.

Course writer: the person on the course team who possesses both expertise in the subject matter of the course and the ability to write in a way that communicates effectively with learners at a distance.

Criterion-referenced assessment: the evaluation of a learner's performance in relation to a given standard rather than in relation to the performance of a reference group.

Curriculum: the total structure of knowledge and skills and educational experiences that make up any one educational system or its component parts.

Curriculum planning: the global term applied to any systematic process intended to develop the structure of a **curriculum**.

Database: a collection of data fundamental to an operation, organised in some pre-defined structure; typically held on computer.

Deep learning: an intention on the part of the learner to develop his or her understanding and to challenge ideas; contrast **surface learning**.

Desktop publishing (DTP): the production of printed text using a 'desktop' or personal computer system.

Developmental testing: trying out materials with learners in the hope of developing or improving those materials for the benefit of other or future learners.

Digital: information stored in the form of 0s and 1s; digital information may include video, audio, graphics, and text.

Direct cost: a cost that can be identified with a particular product or service and not with others; these normally comprise the cost of materials, labour, and of expenses directly incurred on the product or service.

Discounted cash flow: the return desired at some time in the future for a payment made now.

Dispatcher: the person who bears responsibility for dispatching materials to the learner in a timely fashion, maintaining inventory and warehousing, and keeping records.

Distance teaching: a term that emphasises the teacher's role in the distance education system.

Distributed learning: a term that emphasises learning rather than the technology used or the separation between teacher and learner; distributed learning makes learning possible beyond the classroom and, when combined with classroom modes, becomes **flexible learning**.

Dual-mode institution: also called **bimodal**; an institution that offers learning opportunities in two modes: one using traditional classroom-based methods, the other using distance methods; the same courses may be offered in both modes, with common examinations, but the two types of learner — on-campus and external — are regarded as distinct.

Editor: the person on the course team who bears responsibility for the clarity and accuracy of the language and the textual presentation of the materials, much as in a traditional publishing house.

Effectiveness: the ability to achieve the objectives set for a project or programme.

Electronic mail (e-mail): the exchange of information from one computer to another using software that is designed to store and forward messages received or sent.

Evaluation: a level of learning that involves judging the value of the material with reference to a specific set of criteria.

External studies: instruction that takes place somewhere other than a central campus, such as a classroom remote from campus, and that includes a variety of delivery options, including home-study and telecommunications.

Feedback: in the context of teaching and learning, the response to or comment on a learner's performance that the learner can use to understand more clearly and improve his or her performance.

Field trials: also called **pilots**; a method of developmental testing learning materials that uses relatively large numbers of learners (20 to 30) in circumstances as similar as possible to those in which eventual learners will work.

Financial year: the year over which costs are measured.

Fixed costs: operating costs that are unaffected by variations in volumes of output; this does not mean that they do not vary over time in response to other cost factors (for example, price increases).

Flexible learning: a term that emphasises the creation of environments for learning that have the following characteristics: convergence of open and distance learning methods, media, and classroom strategies; learner-centred philosophy; recognition of diversity in learning styles and in learners' needs; recognition of the importance of equity in curriculum and pedagogy; use of a variety of learning resources and media; fostering of lifelong learning habits and skills in learners and staff.

Fog index: an index of readability based on a formula that involves the average number of words in a sentence and the average number of syllables per word; basically, the longer the words and the sentences, the 'foggier' or less readable the text.

Formal assessment: the evaluation of learning that is carried out using scheduled assignments or examinations, on which the learner's performance is graded.

Formative assessment: the evaluation of learning that is carried out as the learning activities progress; contrast **summative assessment**, which takes place upon completion of the activities.

Formative evaluation: the assessment of learning that occurs as a project or course is in progress, with the aim of identifying problems and addressing them immediately; contrast **summative evaluation**.

Free-standing institution: see **single-mode institution**.

Full absorption costing: a method of costing used for some purposes — for example, to support pricing decisions and to derive performance measures — but not required for other purposes, as when one is looking at the effect of changes in the volume of output; ask the question, ‘Am I looking at costs as they are now (full absorption costing) or am I seeking to examine the effect on costs of profitability of a change in volume costs (marginal costing)’?

Graphic devices: items in a text design that are used to emphasise a point, direct the reader’s attention, highlight the relationship between ideas, or provide learners with cues as to the activity in which they should be engaged; for example, tables, charts, symbols, shading, borders, textures, and different fonts.

Handbooks: the part of the learning materials package that provides information to learners about other materials (for example, video cassettes) that have been purchased or leased from another institution but that need some explanatory notes so that they fit into the context of the user institution.

Home study: a mode of learning that does not require the learner to leave home in order to study.

House style: a set of guidelines to writers, editors, and visual designers that specify the typefaces to be used; type size; length of lines; size of margins; use of bold, italic, and other variants of the typefaces; treatment of headings, subheadings, footnotes, and so on; position of illustrations and captions in relation to the text; and editing and reference style.

Hypertext mark-up language (HTML): the protocol used to create documents for publication and distribution on the World Wide Web; HTML consists of tags, added to text documents, which format and create links to other WWW resources.

Icon: a visual symbol that resembles the thing it represents, used in learning materials as a signpost or indication to learners that they are to undertake a particular activity; for example, a stylised pencil might be used to indicate to learners that they are to write the answer to a question, or a stylised book might indicate they are to turn to the reading indicated.

Incremental cost: the additional cost arising from an increase in more than one unit of output.

Independent study: a mode of learning in which learners work through their study materials independently of other learners.

Indirect cost: a cost that cannot be identified with any particular product or service, but must be shared over a number of products or services because it is common to or jointly incurred by them.

Informal assessment: assessment of learning that is carried out using discussion with tutors or peers, self-tests, and so on, in which the learner’s performance may be noted but not formally graded.

Information highway: a term developed as a way of describing the joining together of once-separate telephone and television technologies and computing systems into a single global network of networks.

Instructional design: see **instructional development**.

Instructional designer: the person on the course team who understands research in open and distance learning and adult pedagogy, is the collector of wisdom and successful techniques in open and distance learning, and is able to apply this knowledge to the course in question without clashing with the course writer or writers.

Instructional development: also known as **instructional design**; a process of designing instruction in a way that enables learners to learn effectively.

Interaction: two-way communication between tutor and learner, between learners, and between learners and the learning materials.

Interactive radio instruction (IRI): a system of educational radio broadcasts, intended for reinforcing learning in classroom settings, which contain instructions to teachers and learners to engage in some activity related to the broadcast and to actively respond to what they are hearing.

Interactive television: television broadcasts that are combined with some form of telecommunications link to enable viewers to respond to what they are watching.

Interactive textbooks: course books that are created anew, from the ground up, using a dialogue approach that incorporates a great many activities in which the learner may engage.

Interactivity: the ability for the learner to respond in some way to the learning material and obtain feedback on the response; there are two kinds of interactivity: (1) *learning material interactivity*, involving the learners' interaction with the medium, the level, and the immediacy of feedback the medium itself provides, and the extent to which the medium will accommodate learners' own input and direction; and (2) *social interactivity*, the extent to which learners interact with teachers and with each other via a given medium.

Internet: the worldwide collection of computer networks that use a common communications protocol and addressing scheme to share resources with one another; owned by no one, it is maintained collectively by the individual national, regional, commercial, and institutional networks that make up the Internet; it is a learning, information, and business tool.

Intuitive approach: a way of designing curriculum, for example, which relies on one's own experience of and feelings toward the subject, and hence is relatively informal, unstructured, and non-systematic.

Inventory: the stock kept on hand.

ISDN cable: Integrated Services Digital Network cable, allows linkage for video conferencing.

Knowledge: a level of learning activities that involves recalling previously learned material.

Learner-centred education: an educational philosophy in which the integrity and freedom of the individual is primary; therefore, the teaching and learning process provides flexible sequences of study, negotiated objectives and content, negotiated learning methods, negotiated methods of assessment, and a choice of support mechanisms.

Learning centres: sometimes called **access centres** or **regional centres**; offices or buildings maintained by open and distance learning programmes in order to provide localised delivery of learning materials and support to learners.

Lifelong learning: a philosophical concept in which learning is viewed as a long-term process beginning at birth and lasting throughout life; a conceptual framework within which the learning needs of people of all ages and educational and occupational levels may be met, regardless of their circumstances.

Listserv: an e-mail system that automatically sends messages to all subscribers on specific mailing lists, especially interest groups.

Marginal cost: the additional cost of an increase of one unit of output (for example, one additional open and distance learning centre).

Marginal costing: see **full absorption costing**.

Market elasticity: the extent to which the price of a product can be increased without reducing the market for the product.

Media designer: sometimes called the **visual designer**; the person on the course team who bears responsibility for the illustrations, page layout, formatting, and integration of print with other media.

Mediated education: see **technology-based education**.

Merger: the creation of a new entity out of previously independent entities.

Mixed mode institution: an institution that offers learners a wide choice of modes of study, including independent, group-based, face-to-face, mediated, or some combination; mixed mode institutions maximise the flexibility of place and pace of study, and are the result of the convergence of face-to-face and distance modes of study.

Multimedia: learning technologies that involve the whole range of audio, visual, text, and graphics media available, integrated into a package that has been effectively designed from an instructional point of view.

Needs analysis: a process for identifying the learning and training needs of a particular group or population.

Networked learning: a type of learning in which learners and instructors use computers to exchange messages, engage in dialogue, and access resources; the interaction can occur in real-time (**synchronously**) when learners and instructors are communicating at the same time from different places, or in delayed-time (**asynchronously**) when they are not linked at the same time.

Networking: the process of creating, expanding, and maintaining relationships with other agencies.

Non-formal education: education that takes place outside the formal education system on either a regular or an intermittent basis.

Non-recurrent costs: see **one-time costs**.

Norm-referenced assessment: assessment of learning that is based on the learner's performance in a given area in relation to that of some norm or reference group.

Objective: in the context of teaching and learning, a specific statement about what the learner will be able to do when a learning activity is complete, the conditions under which learners will demonstrate their competency, and the way in which this competency will be measured.

Objective assessment: evaluation that is designed as far as possible to exclude the learner's subjectivity; grading is done by presenting a number of factual questions to be answered by one word or a check mark instead of using verbal expression and the organisation of material, requiring a minimum of judgment on the part of the marker.

One-time costs: also called **non-recurrent** costs; costs that do not recur year after year; for example, equipment purchases.

Open access: a way of providing learning opportunities that implies a lack of formal entry requirements, prerequisite credentials, or an entrance examination.

Open and distance learning: a way of providing learning opportunities that is characterised by the separation of teacher and learner in time or place, or both time and place; learning that is certified in some way by an institution or agency; the use of a variety of media, including print and electronic; two-way communications that allow learners and tutors to interact; the possibility of occasional face-to-face meetings; and a specialised division of labour in the production and delivery of courses.

Open learning: an educational philosophy that also emphasises giving learners choices about media, place of study, pace of study, support mechanisms, and entry and exit points.

Operating cost: see **revenue cost**.

Opportunity costs: the notional costs, difficult to quantify, of undertaking one activity rather than another; for example, the project team and other staff involved, as well as materials and equipment, could all have been used in different ways to benefit the institution during the project period.

Overhead cost: the sum of all the indirect costs of a cost centre or cost unit; for example, the cost of a shared telephone exchange, central computer, and utilities.

Pay-back period of return: the length of time it will take to pay back the original investment of staff salaries and other costs.

Pedagogy: child-centred learning.

Peer assessment: a type of assessment of one learner's performance carried on by other learners.

Performance: the part of a learning objective that states what the learner should be able to do as an outcome of a learning process.

Performance indicators: measures for assessing the quantitative performance of a system.

Period of account: the period of time over which costs are measured.

Pilots: see **field trials**.

Post-tests: tests given to learners after they complete a lesson, module, or course, to assess what they have learned; contrast **pre-test**.

Pre-tests: tests given to learners before they begin a lesson, module, or course; they serve two purposes: to check that the learner has the necessary prior knowledge, skills, and perhaps attitudes to undertake the course; and to compare the results obtained with those obtained in subsequent post-tests to establish how much the learner has learned; contrast **post-test**.

Printer: the person who oversees the physical reproduction of learning materials, including collating, binding, and packaging.

Printing: the actual manufacture of printed distance learning materials; the industrial process or processes required to put the production manager's requirements into their final physical form.

Process costing: a method of costing by which expenditures are accumulated into costs of production and allocated to units of the product.

Production: the overall process of taking a manuscript and managing it through to printed, finished copies.

Project costing: a method of costing used when the manufacturing process is not continuous, but is a series of large, special-order contracts.

Psychomotor domain: in the context of teaching and learning, the domain of learning activities that deal with learning physical skills; normally associated with vocational training.

Quality: the fitness for purpose of a product or service according to a set of required standards.

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

Quantitative analysis: the process of identifying the discrete components of some phenomenon and the relationships that obtain between them, emphasising entities that can be counted or measured.

Rate of return: the percentage return on the investment.

Recurrent costs: costs that recur year after year (or period of account after period of account).

Regional centres: see **learning centres**.

Relevant range: the range of activities within which fixed operating costs are set.

Revenue cost: also called an **operating cost**; expenditure that is expected to benefit only the current period.

Satellite feed: broadcast material sent via a satellite that is orbiting the earth.

Self-assessment: a type of assessment carried on by the learner him or herself.

Self-contained: a course that contains all the subject material as well as the features of self-instructional courses; to produce a self-contained course one writes everything that would be included in a textbook as well as all the activities and so on that would turn it into a tutorial in print.

Self-instruction: a process in which materials take learners step-by-step through an instructional process; self-assessment exercises are a central feature, and instruction can be paper-based or computer-based.

Single-mode institution: an institution that has been set up solely to offer programmes of study at a distance.

Stakeholders: groups or sometimes individuals who have a significant interest in the successful outcome of some initiative or activity; in the case of an educational institution, stakeholders can include funding agencies, employers of those who eventually graduate, the staff of the institution, and existing and potential learners.

Standards: the parts of a learning objective that describe how well the learner will be expected to perform, expressed in terms of accuracy, speed, or quality.

Stepped fixed cost: a cost that varies with the level of activity, but only has a number of possible values, each of which applies over a relevant range.

Study guides: the part of learning materials that are used in conjunction with collections of articles, textbooks, audio cassettes, video cassettes, and broadcast programmes; they are more substantial than handbooks but less labour intensive than interactive textbooks; they are probably the most commonly produced print materials for course packages.

Subjective assessment: evaluation designed to take into account the learner's own thoughts, feelings, and experiences and ability to express them, rather than factual knowledge alone.

Summative assessment: evaluation of learning that takes place on completion of the learning activity or activities.

Summative evaluation: assessment that occurs at the completion of a course or project, which provides a summary account of its effectiveness and the extent to which it met its goals and objectives; contrast **formative evaluation**.

Surface learning: an intention on the part of the learner to memorise information and to follow instructions rather than to understand and challenge; contrast **deep learning**.

Synchronous: see **networked learning**.

Synthesis: a level of learning activities that involves combining parts to form a new whole.

Systems approach: an approach to organising the tasks required to accomplish one's goals, which sets the conditions for proceeding in an orderly way; a systems approach recognises that all the components of the system are interrelated, so that a change in one component will bring about changes in the others.

Task analysis: the process that identifies the skills and knowledge a competent person needs to complete a task to ensure that they are included in the learning process.

Technical or vocational training: training that is designed to prepare technicians, middle management, and other skilled personnel for one or a group of occupations, trades, or jobs.

Technology-based education: in the context of teaching and learning, a system in which a media other than print has a major role.

Telephone tutoring: the use of the telephone for providing academic help to learners, either one-on-one or in groups (see **audio conference**).

Tendering: the process of calling for bids on a project or supply of products or services.

Total cost: the sum of all the costs attributed to some specific object or activity.

Tutor-marked assignments: assignments marked by the learner's tutor.

Tutorial tryouts: a method of developmental testing that involves testing the materials with one learner or a small group of learners.

Tutoring: the provision of academic assistance to learners in two major forms: (1) stand-alone (for example, computer-assisted learning (CAL), and computer-managed learning (CML)) and (2) conferenced (video, audio, or computer).

Two-way instructional radio: radio broadcasts for educational purposes that are combined with some form of telecommunications or that use two-way radio links to enable learners to interact with teachers and other learners.

Variable costs: costs that vary with volume of output.

Variiances: measures of financial performance derived by comparing actual expenses to original budget plans.

Video conference: a technological arrangement in which television monitors, cameras, and microphones are linked so that people in three or more sites can all see, hear, and speak to one another.

Video disc: a disc on which video and audio signals are recorded for television use; a video disc requires a video player compatible with the video disc.

Visual designer: see **media designer**.

World Wide Web (www): a communication protocol of the Internet that deals with text, audio, video, animation, graphics, and colour — anything that a computer programme can produce.

Deakin University

Prepared by:

Jocelyn Calvert

Brief description of the programme

Located in the State of Victoria, Australia, Deakin University is a multi-campus institution with a major commitment to flexible learning delivered through the use of educational and communications technologies. Headquartered in Geelong, the university operates three campuses in Melbourne, two in Geelong, and one in Warrnambool.

Deakin enrolled 30,191 students in its regular programmes in 1996. A further 30,000 students were enrolled through its commercial arm, Deakin Australia, for a total in excess of 60,000 students. Of the regular students, 13,088 or 43 percent were enrolled off-campus. All Deakin Australia students were off-campus students, making Deakin, with a total of more than 43,000 off-campus students, the largest university off-campus provider in Australia.

Problems encountered

Planning and managing distance education

- The major planning and management issue facing the university over the past six years has been how to integrate the academic programmes and approaches to teaching and learning of the three formerly independent degree granting institutions that merged in the period 1990 to 1992 to form the present Deakin University. Two of these institutions had major pre-merger distance education programmes.

Implementing quality assurance

- The university is committed to the principles of quality management and continuous improvement. Implementing these principles involves both the regular evaluation of teaching materials and the assessment of teaching of academic staff, both of which involve seeking student reactions to their course experience. It has proved difficult to distinguish between student reactions to learning materials and to the performance of teaching staff. The distinction is important because the corrective actions that are needed are very different in each case.

Using and integrating media in distance learning

- The development of the World Wide Web allows Deakin to deliver off-campus programmes in new ways. Used well, the Web provides an easy-to-use, cost-effective, flexible, and powerful medium for the delivery of higher education. Its ease of use, however, presents the university with a serious issue. Academic staff

can quickly learn to ‘mount’ Web courses. They are not always, however, well equipped to take best educational advantage of what the Web offers. The issue facing the university is how, on the one hand, to ensure that all Deakin-based Web offerings reflect university standards and policies, while, on the other hand, allowing academic staff to creatively explore the Web for educational purposes.

- Similarly, a broader issue facing the university is how to develop the skills of teaching staff so that they are able to make the best educational use of new educational media. The increasing reliance of the university on resource-based learning methods has fundamentally changed the nature of academic work in the university with considerable implications for the nature of professional development activities.

Instructional design and production for distance learning

A major issue facing the university is how to cost-effectively maintain an up-to-date archive of all its course materials. Over the last two years, staff have been involved in the development of an ‘electronic warehouse’ of materials. The concept is that all materials will be stored digitally, allowing for both easy revision and reproduction in whichever medium is required.

Another important issue is how to allocate scarce educational development resources for maximum benefit. Should the university allocate significant resources to ‘lighthouse’ projects designed to illuminate and illustrate the art of the possible? Or would it be better to allocate resources more widely to projects that make use of mainstream approaches? This issue is unresolved.

Learner support systems

An important challenge is how to foster the effective use of electronic media for teaching and learning. Many staff and students are new to the educational use of e-mail, bulletin boards, and computer conferencing. Their effective use requires the development of new skills and a willingness, in the case of students, to participate.

Part of the process of higher education is the integration of students into a broader, often discipline-based, academic community of students and scholars. The development of such a community is problematic in distance education programmes such as those at Deakin University, which often do not require students to engage in on-campus or face-to-face activities. Deakin’s response has been to use communication technologies to create electronic communities. The members of this community — academic staff, students, academic support staff, and administrative staff — are linked through an integrated, interactive, electronic communication environment known as the *Deakin Interchange*. The Interchange provides users with access to e-mail, computer conferencing, library and administrative databases and services, and Web services through the use of a consistent, menu-driven, ‘point and click’ user interface. Creating a reliable system that is easy to install, use, and upgrade has been a difficult task. The Interchange, however, as its technological manifestations evolve, will increasingly become the mechanism for the creation of virtual communities of the sort that develop spontaneously in campus settings.

The most important issue: Planning and managing a multi-campus, flexible mode university

At the beginning of 1992, Deakin University, with campuses in the regional communities of Geelong and Warrnambool, merged with three campuses of Victoria College in metropolitan Melbourne. Deakin had a strong tradition of distance education while Victoria College was almost exclusively campus-based. The challenge was to bring together the distinct cultures of the two institutions to create a new Deakin University with a common vision that would be in a position to operate effectively in the new national and international environment of higher education. From the distance education perspective, it was important that, at Geelong and Warrnambool, distance education and on-campus education were integrated in a dual mode model, with more than half the students and 38 percent of equivalent full-time load studying at a distance.

The new university determined early that distance education was one of its strengths and should be spread across its campuses. Several strategic decisions were critical to developments: structural integration; course rationalisation; resource-based learning and technology integration; and industry-based and professional programmes.

Structural integration

Deakin University did not adopt a federated model in which the regional and metropolitan campuses would operate with some degree of independence and duplicated services; instead, it opted for full structural integration. In academic terms, seventeen faculties were reduced to five, each with from two to five schools (or departments). While a small number of schools are based predominantly on one campus, the majority of schools and all faculties have staff spread across different campuses. This means that academic decisions pertaining to distance education, at the faculty and school level and in terms of university policy, engage the entire university rather than a traditional interest group. Administrative and academic service divisions of the university are similarly integrated. In some cases, a particular type of operation is based on one campus; for example, the off-campus library service operates from one of the Geelong campuses but draws on the resources of all campus libraries. In other cases, services of a division or branch are available on a number of campuses; for example, Learning Resources Services, which is responsible for the physical development and production of learning materials, has distributed staff and facilities.

Course rationalisation

Flexible learning options for students required an integrated curriculum with common cross-campus courses (programmes of study) and course units. Academic staff in a particular field or discipline, who may have been based on a number of different campuses, were required to review areas of overlap and develop single course structures; for example, several Bachelor of Business and Bachelor of Commerce degree courses became one Bachelor of Commerce taught on three campuses and off-campus. In fields that typically have fewer required units and more options (for example, history) academic staff were encouraged to review the units of the predecessor institutions and create a coherent selection that would be offered across the university.

Resource-based learning and technology integration

Flexible learning, including cross-campus delivery as well as distance education, could best be served by the development of learning resources for use by all students. This approach had its origins in the Deakin University of the late 1970s when the open campus, with on-campus students using off-campus materials, was conceived as transforming teaching and learning for all students and academic staff. Following the mergers, the university's distance education infrastructure, including educational developers and Learning Resources Services, were deployed in developments and redevelopments across the university. At the same time, the university set a policy of technology integration with particular emphasis on information technology and computer communication. In 1995, Deakin was named Australian University of the Year on the basis of its integration of technology into teaching and learning.

Industry-based and professional programmes

Both predecessor institutions had innovative programmes for students outside the regular government funding structures. Victoria College's Technology Management Programme saw students in major industries use laptop computers to access technical (Technical And Further Education) and university courses year round in a self-paced system. Deakin Geelong's Centre for Management Services provided development and delivery services for professional associations on a contract basis, enabling the associations to offer continuing education at a distance. These activities were merged in Deakin Australia, which continues a successful record of providing distance education services to the professions and industry. Some programmes offered through Deakin Australia are accredited by the university. In one case of co-operation, Deakin University and the Association of Professional Engineers, Scientists, and Managers of Australia offer a joint MBA degree in Australia and internationally using Deakin Australia facilities and services.

Summary

The result is a new type of university that is unrecognisable in the terms of its predecessor institutions. The transformation, of course, is not complete, and never will be in this environment of continuous change in higher education. We believe that Deakin University is in a better position than it would have been without such radical restructuring. In our view, essential ingredients for success in such an endeavour are:

- strong leadership, including appropriate rhetoric about the mission of the university;
- a programme of change management that allows all parts of the institution to understand and accept their new roles; and
- serious commitment to professional development to address the changing nature of academic and administrative work.

External Studies at Murdoch University

Prepared by:

Patrick Guiton

Brief description of the programme

Murdoch is a dual mode university where external study is a viable alternative mode of study that is available to all students rather than a substitute mode of study to accommodate the disadvantaged needs of those who cannot get the 'real thing'. Because more than 70 percent of the university's credit offerings are available for study either on- or off-campus, students exercise their choice of mode on a unit-by-unit basis and many study concurrently in both modes.

Problems encountered

Planning and managing distance education

- Maintaining university commitment to a Centre for Off-campus (External) Studies in the face of policies favouring devolution of managerial and financial responsibility to individual schools of study.
- Allocating systematic workload release time for academic staff engaged in the development of a second (distance education) mode of learning resource materials.

Implementing quality assurance

- Involving academic staff in dual mode teaching to adopt the view that assuring a common curriculum regardless of study mode demands flexibility not identity in delivery method or style.
- Establishing a consistent house style across a large range (250 units per annum) of courses despite a relatively small enrolment (average 30 units).
- Gaining acceptance by staff of quality assurance as a standard course design improvement procedure not as a punitive measure.

Using and integrating media in distance education

- Deciding the point at which it may be assumed that a technological innovation (audio or video cassette; personal computer; and e-mail) has become sufficiently widely diffused to justify its use as a compulsory component of course materials.
- Getting to the point at which academic staff involved in dual mode teaching recognise the value to themselves of modifying their face-to-face teaching by integrating the use of guided independent learning resources into the classroom mode.

- Addressing staff development needs associated with integrating new communication technologies into course design.

Instructional design and production

- Justifying the annual update and production of print and audio resource materials for all courses as a means of ensuring parity of curriculum content both ‘on-campus’ and ‘off-campus’.
- Maintaining a course development and production pattern spread throughout the calendar year rather than bunched around the peaks and troughs of the standard academic calendar.
- Developing and disseminating new instructional design techniques for on-line publication.

Learner support systems

- Gresham’s Law of Organisational Life — ‘Work drives out avoidable work regardless of its relative importance’ — translated to the dual mode context, means getting academic staff to give equal attention to the external student’s mailed assignment or telephone call as to the internal student’s knock on the door.
- Providing realistic and consistent support for isolated students in a geographic context that regularly places a student 200 kilometres from the next student and up to 1,000 kilometres from another enrolment in the same unit of study.

The most important issue: Maintaining university commitment

In calling these issues ‘challenges’ rather than ‘problems’, I suggest that all except maintaining university commitment are, in fact, challenges that anyone setting up and running a Centre for Distance Education in a dual mode university will have to deal with if the enterprise is to succeed. Maintaining university commitment is of a different order in that it reflects the influence of broad economic rationalist thinking from beyond the arena of academic policy and university politics. For that reason, it must be the most important issue.

In dealing with all the other challenges, we argue for acceptance of the distance mode as a viable alternative and equivalent mode not as a poor substitute: in short, we claim it as part of the mainstream of university life. When times get tough and resources get short, those whom we have spent our time convincing are tempted to ‘hoist us with our own petard’. If distance education is a mainstream function, it is argued, then why does the university need to spend significant resources maintaining a specialist organisational centre to handle the distance mode and the needs of its students separate from the mainstream university structures provided by the schools and the registry?

In these hard economic times, a highly professional centre for external or off-campus studies in the dual mode system can all too easily become a victim of its own success. But it is evident enough that success in coping with all the other challenges has always depended on the vigilance, persistence, and single-mindedness of professional distance educators working from a visible and well-recognised centre. So a challenge translates into a problem.

Open Access College

Prepared by:

Marg Beagley

Brief description of the programme

The Open Access College (OAC) opened in January 1991, replacing the former South Australian Correspondence School. The college's vision is to 'recognise, value, and celebrate its uniqueness and the diversity of its people. It is an organisation whose business is teaching and learning ... and as its very title suggests, all of its operations will be founded on the core values of access and openness'.

The teaching and learning programme involves interaction with students using a range of technologies, including high-frequency radio, telephone, facsimile, and electronic classroom techniques, as well as through a visiting programme, mini-schools, camps, and school experience weeks.

The college has the responsibility of redressing the educational disadvantage for children which arises from remoteness and isolation. It provides opportunities for students in metropolitan, rural, and remote areas of South Australia to gain access to a broader curriculum.

What is the Open Access College?

The establishment of the Open Access College was a key strategy in the management and co-ordination of the increased demand for distance education in South Australia. The college is a multi-campus organisation consisting of:

- *Three Schools of Distance Education*
 - reception to year 10 (Marden site, metropolitan Adelaide),
 - senior secondary (Marden), and
 - reception to year 12 (Port Augusta site, 300 kilometres by road from the Marden site);
- *Open Access Materials Unit*
 - responsible for refinement, development, and production of open access course materials; and
- *Outreach Education Services*
 - providing educational support for a range of cultural and scientific institutions, for example, the State Zoo, Museum, Botanical Gardens.

Student profile

Students for whom services are provided by the schools of distance education come from the following groups:

- students in government schools and non-government schools;
- remote and isolated students, including some South Australians who are resident or travelling interstate or overseas;
- post-secondary age students, including prisoners, adult re-entry students, and students in full-time vocational courses; and
- special needs students, including medical-based and student behaviour management enrolments.

Problems encountered

Planning and managing distance education

- Although close liaison between course developers and teachers is needed, it is at times difficult due to different tenure of employment.
- Teaching through course packages is supplemented by telephone, radio lessons, or both; teleconferencing; and visits.
- The range of clients at any given year level is very wide, with a high turnover of students, particularly in the reception to year 10 levels. Continuity and short-term enrolments can present difficulties in the management of learning activities.

Implementing quality assurance

- Quality checks are built in at the course development level — writers are selected on merit; reference groups provide feedback at all stages of course development.
- Feedback and liaison between teachers and course developers are vital parts of the writing process.
- Quality checks are built into the materials production process.

Using and integrating media in distance education

- The use of media varies widely — audio and video are considered integral components of course development.
- The use of other media is optional where possible — videoconferencing, teleconferencing, facsimile, Electronic Classroom™, as facilities for students permit.
- Internet resources are being developed as an option for those students with access.

Instructional design and production for distance education

- Principles for course development include teaching and learning methodologies, course structure, and presentation elements.
- Course structure, design, and layout are based on 12 learning principles developed by the Open Access College.
- Course materials are developed on-site at the Open Access College in the Materials Unit; artists, keyboarders, electronic media studio, printing, and distribution facilities are utilised.

Learner support system

- Learners are provided with high-quality course materials for distance education, supported by teacher contact, and electronic learning strategies. Itinerant teachers visit primary students in remote areas.
- Counselling and resource centre services are available from the Marden site to support students in enrolment, personal concerns, and future option decisions.
- Supervisors work with school- and home-based students, particularly primary students and those in remote areas.

The most important issue: Using and integrating media in distance education

While the print medium is central to the delivery of courses through distance education from reception to year 12 levels, the use of other media is rapidly becoming an integrated part of all course development. It is expected that aural and visual media will be used in all courses so that different styles of learning can be addressed.

- Students are provided with audio and video cassettes to provide stimuli for the work that they do alone or with the assistance of a supervisor.
- Teachers and students have print material from which to work, and this is augmented by aural and oral contact with the teacher through high-frequency radio, telephone links, or both, varying from daily to weekly lessons.
- The most basic form of electronic media is the teleconference in which several students may be linked with the teacher by telephone for their weekly lesson. Interaction between students and teacher is possible, although clearly the group dynamic takes time to establish using this type of communication.
- Where students have access, videoconferencing is possible giving the visual as well as the audio contact; it is generally not available as a multi-point medium but enables closer contact between teacher and student.
- The Electronic Classroom™ allows interactive learning to occur through the use of electronic whiteboard, video, and audio. Using this medium, the teacher and the student are able to exchange work and produce diagrams, maps, and written work in much the same way as they would face to face.

Depending on the availability of student access, each of these electronic media are used daily by teachers in their delivery of lessons to isolated students.

Current developments include the use of the Internet to provide stimulus not previously possible through distance education. The Open Access College has allocated considerable time and resources to the development of its Web site and specific subject pages, enabling course writers to provide Internet options for students who have access to this technology. The range of subjects utilising this medium at present includes the arts, legal studies, social studies, biology, environmental studies, geology, and home economics, as well as languages other than English.

In particular, the languages other than English (French, German, Indonesian, and Spanish) have used this medium to great advantage. Students can be given a selection of Web sites chosen for specific research, or the teacher is able to introduce new

learning materials. For example, a student of Spanish is able to view an exhibition of etchings by Francisco Goya, produced co-operatively with the Art Gallery of South Australia. The student can also search for specific resources on aspects of culture — food, dance, and music — researched by the developer, and included in the subject page. The subject can incorporate a more holistic approach to learning for its student clients and allow them to access current, stimulating events to enhance their learning.

Information on each of the Outreach Education Services provided by the Open Access College as well as on cultural events and activities is also available through the home page.

The inclusion of the Internet resource must be an option at present as many students (particularly those in remote areas) do not have access to the Internet or even, in some case, to telephone communication. Nevertheless, it is a growing area, and one that is providing an exciting and stimulating aspect to distance education in South Australia.

Please visit our home page at http://www.saschools.edu.au/open_acc/open_acc.html

Open Learning Institute Charles Sturt University

Prepared by:

David Meacham

Brief description of the programme

The Open Learning Institute (OLI) of Charles Sturt University (CSU), a multi-campus institution, is located in several cities in inland New South Wales in Eastern Australia.

Charles Sturt University offers a wide range of degree courses, both on-campus and through distance education, using print and electronic instructional media.

The Open Learning Institute is responsible for research and development, learning materials, design, production, student liaison, and academic staff development.

The university is expanding its proportion of off-campus students, with only about 13 percent being recruited directly from high school on the basis of their learning certificate results. An increasing number of overseas students study both at a distance and on-campus. Charles Sturt University is currently the largest single university provider of distance education in Australia and is seeking to expand its market by introducing both greater choice and greater flexibility of learning for its clients, many of whom are young professionals seeking to enhance their careers.

Problems encountered

In a time of rapid social and technological change coupled with government induced destabilisation of universities, many issues are emerging relating to the future role of distance education and its efficient operation in a client focused market, where needs may have to be met with diminishing resources.

Planning and managing distance education

- In a dual mode institution, structures and practices develop primarily to serve on-campus students who are now in the minority. This focus creates problems in introducing new systems for learners who require flexibility and asynchronous teaching. Currently the university is attempting to expand resource-based learning to allow greater flexibility in study time and location, which is problematic in a conventional two-semester system with fixed entry and exit times.
- Structures in the university are based on substantive areas of study, that is, schools, faculties, and centres, and functional divisions (for example, Information Technology and Financial Services). The Open Learning Institute exists to service a particular mode of learning that has become dominant. In addition, there has been considerable devolution of organisation and financial responsibility in an environment of diminishing resources. Consequently it is extremely difficult to

develop a corporate or institutional approach to distance education when large numbers of factions with particular self-interests demand more from severely limited budgets.

- The volatile external political and economic environment makes forward planning difficult. Politically and economically it has become expedient to attempt to increase the level of student support for distance learners, while reducing expenditure. This situation has the potential to precipitate extreme management problems.

Implementing quality assurance

- The Open Learning Institute has begun a comprehensive quality assurance programme, starting with the development of a series of comprehensive procedure manuals. These manuals are proving difficult to update during a time of rapidly changing structures and priorities.
- In the university there is a large degree of scepticism about the effectiveness of industrially derived quality assurance schemes in higher education. In contrast, the political imperative is to develop sophisticated responses to government inspired quality audits that could significantly influence future funding.

Using and integrating media in open learning

- The university has enthusiastically embraced the use of non-print media in distance education. However, there is considerable increase in development costs in continuing to offer print materials with a multimedia alternative, or by using some multimedia to complement print.
- Important equity and marketing issues need to be addressed with regard to the use of integrated multimedia. The technology policy of the university will require new students to access specified personal computer hardware and software, eliminating some potential clients and attracting others, unless alternative provision exists for a while.
- The early stages of transfer to a predominantly electronic medium of distance education have led to some materials being made available that are little more than digital textbooks. More research needs to be done on the value added by various media and their suitability for specific applications.

Instructional design and production for distance education

- The integration of electronic media into distance education resources has required the recruitment of specialist instructional designers who have expertise in video, authorware, and Web design. General instructional designers, whose competence is mainly in the area of print, have become somewhat apprehensive as resources are moved to support emerging technologies.
- Electronic media are being produced by individual teaching staff with limited input from educational designers, making quality control problematical. Print materials are rigorously checked before dispatch, after a comprehensive editorial

process. New technologies are emerging at a rate that outstrips the development of systems to support and control their use.

Learner support systems

- The university has traditionally provided compulsory residential schools for many subjects, where group work and the use of specialised equipment were deemed to be necessary for appropriate understanding and competency development.
- Such provision is currently being challenged on the grounds that residential schools are costly, both for the university and for the student, who has to leave work and often travel long distances. Consequently, alternative, media-based means of support are being developed, sometimes against the views of the traditionalists, who regard face-to-face contact with students as a necessary ingredient for effective learning.

The most important issue: Finding alternatives to face-to-face contact

An important contemporary issue is the university's lack of a structured, informed approach to the offering of residential schools.

The original intention was to require distance education students to attend campus for not more than two weeks per year to obtain intensive instruction, practice in areas in which human interaction or a specialist environment was a precondition for understanding and skill development, or both. Residential schools also provided an assurance to accrediting bodies, employers, and professional associations that distance education was not inferior to conventional teaching. The issue of parity of esteem between on- and off-campus courses was of paramount importance in the early days of distance education in Australia, but has diminished with widespread acceptance of the quality of distance education graduates.

Over the years, differences emerged between the two colleges that amalgamated to form the new university. Historical factors led to one campus offering course-based residential schools on a reduced scale, while another campus offered a greater level of subject-based residential schools. The original intent of residential schools appeared to be diluted, with idiosyncratic, campus-based views dominating. At the same time, emerging technologies capable of providing group interaction and simulations were not promoted and implemented on an institutional basis as an effective substitute for the on-campus instruction residential schools provided.

The Academic Senate of the university issued regulations concerning the conduct of residential schools which were often ignored or circumvented by the substitution of 'optional' residential schools operating under different or even no rules whatsoever.

Consequently, the Senate undertook to review its policy in this area, and adherence to it.

A working party investigated the issue and concluded that decisions about the offering of residential schools should be made on a transparent and rational basis, with such decisions being the responsibility of specific staff members. It also required monitoring and accountability systems to ensure conformance.

In addition, the Open Learning Institute seconded a staff member to research media-based alternatives to face-to-face teaching.

Thus the outcomes in the near future should be:

- the restoration of pedagogic considerations as the prime determinants of the existence of residential schools;
- an improved system of accountability; and
- research upon which to base decisions about appropriate modes of teaching.

It would be presumptuous to believe that procedural change and research will achieve all these improvements. Little has been done to address entrenched attitudes, which differ on the various campuses, and had their genesis in groups working in isolation from one another and in the corporate goals of the university. Scant attention may be given to regulations and recommended practice emanating from outside these groups. For success to be achieved, the benefits of both change and conformity must be clearly conveyed to the stakeholders, unless they are to revert to their comfort zone of familiar practice.

Summary

The following lessons can be learned from this study:

- Instructional design issues can only be resolved satisfactorily in an organisational context.
- The logic of pedagogy may conflict with the requirements of the market, the institution, and individual stockholders.
- Instructional design issues involve innovation and change; therefore, they require changed management components for successful implementation.
- Responses to external pressures on universities may lead to a diminution of the importance of pedagogical considerations.
- The structure and decision making processes of universities make innovation arising from outside the school structure and central administration problematic to deliver and monitor.
- The necessity for face-to-face contact to complement distance education in this context is poorly researched and lacks objective articulation.
- The mere availability of technology does little to ensure its institutionalisation.
- Institutionalisation of changes in teaching methodology is highly problematic in multi-campus institutions with highly devolved decision making and financial process.

**Distance Education Unit
Centre for Continuing Education
University of Botswana**

Prepared by:

J. W. Kamau

Brief description of the programme

The University of Botswana, which hitherto existed as a constituent college of the University of Botswana, Lesotho, and Swaziland (UBLS), became a separate national university in 1982. The university is a dual mode institution that offers on-campus degree programmes through various academic faculties, conducts research through various institutes, and provides off-campus academic and other outreach programmes through the Centre for Continuing Education where the Distance Education Unit is based. The mandate of the Centre for Continuing Education is to provide educational opportunities to adults through distance education, evening and weekend classes, public education conferences, workshops, seminars, and radio programmes on a variety of subjects that are in high demand by the public.

The university's involvement with distance education dates back to the 1970s when radio campaigns, complemented by face-to-face contact, were used to educate the public on issues of national interest such as civic education. Geographically, Botswana is a vast country and radio broadcasts could reach many people simultaneously. Today, the main responsibility of the Distance Education Unit, which conducts its distance education programmes mainly through the print medium, is to increase the university's capacity for distance education and, in collaboration with relevant departments, to identify and develop certificate and non-certificate programmes for delivery at a distance. The Distance Education Unit plans to provide programmes at non-credit, certificate, diploma, degree, and post-graduate levels. Currently, the unit offers a certificate in adult education for people involved in literacy, adult, continuing, and community education programmes. A diploma in primary education commenced in 1998 to upgrade primary teacher's certificate holders in a bid to raise the standards and quality of education at the grassroots level. Plans to launch further programmes are also underway.

The certificate in adult education course development experience

The Distance Education Unit has, in the past, offered a certificate in adult education programme in a semi-distance education mode, with materials developed by consultants and heavy reliance being placed on residential study schools in Gaborone, where most of the teaching has taken place. This programme was reviewed in 1989 and is being revised so that it can be offered completely by distance education.

This exercise has proved to be a useful pilot project, as it has brought to light a number of problems in the area of materials development that the unit will have to address in the future. These problems relate largely to four specific areas of course development: the development of the syllabus, the recruitment of course writers, the submission of a first draft, and the actual development of the materials.

Developing the syllabus

The syllabus outline for each of the five courses was developed as a collaborative effort between the Distance Education Unit and lecturers in the Department of Adult Education who have been teaching the courses. As each course will be taught over a two-semester academic year, courses were divided into two modules, each consisting of 10 to 15 units, but no firm guidelines were set regarding the exact number of units that would comprise each module. The content of each unit was then detailed under several major topic areas. Course writers were thus armed with mutually agreed upon unit outlines to use as the basis for their writing but these were insufficiently detailed.

Recruiting course writers

In the unit's material development process, course writers are recruited mostly from the co-operating departments and colleges that run the on-campus equivalent of the programmes. In the Certificate in Adult Education programme, some of the course writers have been drawn from the Distance Education Unit because of their professional training in adult education. A decision was made that all writers, apart from unit staff, would be paid for their services and that all materials developed would be recognised as academic publications for staff appraisal purposes. Contracts were not signed as they required the approval of university authorities. Thus, course writers have proceeded with their task on the assumption that they will be paid for their efforts in due course. In each course, at least two course writers were appointed and decisions relating to a division of the writing workload was left up to the individuals concerned.

As distance education has not been a significant feature of the University of Botswana in the past, it is understandable that most writers have not had any experience of writing materials for distance learners. As a result, course writing workshops were held to train writers for this specific function. During these workshops, the writers were made aware of the nature of distance education programmes, the features that would be expected in materials, and the reasons for incorporating them. They were advised that a typical unit should be 10 to 15 typed pages in length and consist of an overview, unit objectives, several sections of content divided into subsections, interactive questions, a summary, self-assessment questions on the whole unit, and a list of additional reading materials. They then set off to start writing.

Submitting the first draft

In most cases, materials were not forthcoming as writers were preoccupied with teaching activities and could not find the time to devote to additional tasks. Many manuscripts, when submitted, did not conform to expectations, and in some cases, ignored the guidelines altogether. Consequently, the decision was made to hold a series of writing retreats during which writers were isolated in comfortable surroundings conducive to the activity of writing. Secretaries accompanied the group

to word process materials as they were submitted and there were high expectations that all units for both modules would materialise. In reality, although these retreats have produced units, less than half of the expected output has been achieved.

Once written, units were passed on to the word processors and editor for word processing, formatting, and editing. On the whole, the submission of hand-written manuscripts resulted in unnecessary confusion and delay as word processors struggled to decipher handwriting and instructions. The content was often not divided into subsections with identifiable headings and manuscripts were incomplete as they did not contain all the expected features. Many units did not follow the agreed upon syllabus outline for content and, in some cases, later units were collapsed into previous units and dealt with fleetingly as the agreed range of twelve to fifteen units per module was not met, leading to unequal workloads for students over the semester.

Actually developing the materials

A combination of inexperienced distance education writers and word processors has meant that part-time copy editors had to be employed to work on the initial word processed drafts before they were passed on to the editor. In addition, the volume of work arriving at one time meant that it has not been possible to return a first draft to course writers within a short period of time. The underlying assumption at the time was that hand-written materials would only need word processing and superficial editing and formatting by an editor. The reality has been that this is not the case and that there must be far more concentration on developmental processes if quality standards are to be met. Materials could be improved considerably by the input of instructional design, graphic art, and media staff.

Possible solutions

Identified Problem	Possible Solution
Development of syllabus outline	<ul style="list-style-type: none"> • Divide modules into a set number of units. • Develop behavioural objectives for each unit. • Identify and list major topics to be covered in each unit. • Identify and list sub-topics to be covered under major topics in each unit. • Use this detailed unit outline as a framework for writing.
Recruitment of course writers	<ul style="list-style-type: none"> • Recruit from a wider pool of potential course writers by advertisement. • Utilise a signed contract stipulating firm submission dates, allowing for

Identified Problem	Possible Solution
	<p>progressive payments and requiring the submission of a model unit for assessment of writer suitability.</p> <ul style="list-style-type: none"> • Be prepared to enforce submission deadlines in terms of the contract.
Training of course writers	<ul style="list-style-type: none"> • Provide rigid guidelines stipulating the essential features that will be expected in each unit. • Assess a model unit to determine the course writer's suitability and compliance with requirements. • Extend the training period to permit submission of at least the first two units. • Stress the significance of the team work approach to developing materials and the consequent importance of deadlines.
Submission of a first draft	<ul style="list-style-type: none"> • Stipulate and enforce minimum standards for presentation of hand-written drafts. • Accept only hand-written drafts that are complete.
Course development process	<ul style="list-style-type: none"> • Recognise the importance of developmental staff and increase their numbers accordingly. • Spread realistic submission dates for units over the whole writing period to avoid developmental congestion. • Provide professional development training for word processors. • Appoint instructional design, graphic art, and media staff to enhance and enrich materials.

Open Learning and Information Network

Prepared by:

Genevieve Gallant

Brief description of the programme

The Open Learning and Information Network (OLIN), Memorial University of Newfoundland, and the Newfoundland and Labrador Provincial College partnered to design, develop, and implement a Web-based business course for delivery through the World Wide Web. This joint initiative was funded by Human Resources Development Agreement.

The subject of organisational behaviour is included in nine different post-secondary programmes of study, with transfer credit available between the university course and the college equivalents. Consequently, a Web-based course in organisational behaviour was designed by an instructional design team over a three-month period and delivered to 10 university and 40 college students during the winter 1997 semester.

The Web-based course, delivered in an open learning, distance education format, uses a blend of conventional resources (textbook and study manual) and information and communication technology resources (Web pages of the study manual and a computer conferencing system — *Conferencing on the Web*). The computer conferencing system design allows student-to-student and student-to-instructor interaction and collaborative learning at a distance. Class assignments, both individual and group; two on-line quizzes; opportunities to ask questions of the instructor and professor; and peer interaction are supported by the computer conferencing system.

A student orientation session explaining access to and use of the Web pages and computer conferencing system was delivered via audio through multimedia computers to college students while university students received a face-to-face orientation.

Problems encountered

Planning and managing distance education

- Use of a systematic approach to planning distance education is important and must include using experts from each area of instructional design. The collaborative efforts and expertise of instructional designers, content experts, technical specialists, and administrators are necessary. The roles and timelines for each person must be clearly stated at the beginning of the project.
- The Web-based course on organisational behaviour is offered to both university and college students, and the administrative requirements of each institution are similar, yet different. Incorporation of both sets of regulations for registration,

dropping and adding courses, and examination requires communication with both administrative groups.

- Selection of a computer conferencing system to meet the design needs and learning outcomes requires that criteria be established early on in the planning stage.

Using and integrating media in distance education

- Using the Web and a computer conferencing system to deliver a course is relatively new for faculty and students. Instructor and student awareness of how to use the conferencing system to provide quality learning and the need for a different teaching style is an issue.
- An orientation for both instructor and student is necessary to familiarise them with how to use the media, its benefits for learning at a distance, and expectations for both in creating learning.
- The instructor's role changes from one of 'sage' to that of 'facilitator'.

Instructional design and production for distance education

- Using the team approach to developing and implementing a Web-based distance course is advantageous. Experts in instructional design, Web design, graphics, content, and technical operations working together will make for a quality product.
- Access to the Internet, modem connections, and telephone lines are important issues for instructional designers to consider. Slow modem connections and poor telephone lines limit the size and quality of graphics and increase the need for user-friendly, easy-to-navigate systems.
- Web-based courses have philosophical and pedagogical issues — whether to use linear, textual course design or a design that enables interaction among students and instructors. Technology gives us the ability to design distance education courses with more interactivity, thus overcoming the isolation issue in previous distance education practices.
- To ensure that learning occurs, the instructional designer must be aware of learner needs, learning styles, and the limits of the technology.
- Pacing is important. To keep students on-track and on-time, guidelines must be incorporated into the design of the Web pages and the study manual. Scheduling of course assignments and exams must be manageable. Including a printed study manual and Web pages displaying sections of the study manual are used as organisers.

Learner support systems

- Many learners are novices to the computer and the Internet and learner frustration with the new media is to be expected. To decrease frustration and maintain motivation in the course, the use of technical and human support systems is an absolute. An orientation to the new media, telephone contact during the first two weeks for technical assistance, and instructor feedback, especially in the initial

stages, are necessary. These learner support systems must be established before the course starts.

The most important issue: Instructional design and production for distance education

Our experience in dealing with the issue of using ‘teams of experts’ was positive and beneficial. So many times one or two people are responsible for all the design, production, and delivery of a course. However, using new media to deliver a course requires people with expertise in these areas as not everyone has all the expertise needed for design and delivery of Web-based courses.

The Web-based ‘Organisational Behaviour’ course used an instructional design model. Both the university and college offer courses in organisational behaviour; however, the objectives, some content areas, evaluations, and textbooks differ. To have one course that could be used simultaneously by university and college students required an articulation process. The content experts were a university professor with many years of experience teaching in a face-to-face setting and also in the traditional distance education format, and a college instructor with many years of experience delivering this subject in a classroom setting using a self-directed, competency-based learning approach. The instructional designer worked with both to develop course objectives, content, evaluations, and a study manual.

Graphic and Web designers, the next team, working with the instructional designer, were responsible for determining how much text and content should go on the Web pages. They were also responsible for creating the look and feel of the pages so that they are easy to read, visually effective, user-friendly, and can be downloaded in a short time. Designing the entrance areas to the conferencing system to be visually attractive yet self-explanatory was also completed by this team.

The conferencing system was designed by the instructional designer. Attention was paid to the learner needs, different learning styles, and course requirements, as decided by the content experts, and use of collaborative learning techniques.

Technical support was provided by the systems administrator and a technical specialist. The systems administrator was responsible for mounting the computer conferencing system on the server. The technical specialist was involved in the conferencing system selection and the audio capabilities through the computer for students’ orientation session.

Lessons learned

It is important for all members of the instructional team to be part of the process from the beginning. The technical part of the system is as important as the instructional design. The systems administrator must be allowed enough time to mount the conferencing system on the server to give other members of the team the opportunity to become familiar with how it works, make necessary changes, and work out any anomalies.

Determining computer conferencing criteria that makes using the system easy, accessible, and user-friendly is important. For example, the use of word-wrap for posting and replying to discussions is a must. The ability to attach a file from any

word processing software makes for less Internet time, and allows for spelling correction, editing of text, and reflection on a topic.

Using the audio capability of a multimedia computer provides benefits of talking with learners any time, anywhere. It was used to deliver the orientation session but there were problems in hearing the session because of differences in modem rates, bandwidth, and telephone connections. More time must be allowed (two to three days depending on the number of sites) for technical specialists to tune the audio with the different sites to make the multimedia computer usable and achieve its objective.

**Institute for Educational Development and Extension,
The University College of Education of Winneba
Post-Diploma Bachelor of Education (In-Service)
Distance Education Programme**

Prepared by:

S.A. Kadingdi

Brief description of the programme

Until 1992, diploma teachers who wanted to further their education by upgrading themselves to the degree level had to pursue the same four-year courses planned for sixth-formers at the University of Cape Coast. The University College of Education of Winneba (UCEW) was established in 1993 through the amalgamation of seven diploma-awarding teacher training institutions to serve such diploma teachers. The college was therefore established with the overriding purposes of both preparing teachers and other professionals for service to the nation and improving upon the basic education needs of Ghana by concentrating on the training of teachers at both the Diploma and Bachelor of Education degree levels. UCEW therefore carries out its mission by designing and implementing pre-service education programmes for the preparation of teachers and other personnel. Even though the college was set up to recruit more teachers to pursue higher courses, the limited accommodation facilities available militated against the achievement of this noble objective.

To complement the efforts of the university college in meeting the ever-increasing demand for access to its programmes, the Institute for Educational Development and Extension (IEDE) was established as one of seven academic divisions of UCEW to co-ordinate the offering of some of the courses at a distance. The distance education unit, which is by far the largest of the five units of IEDE, is therefore charged to run the Bachelor of Education (In-Service) degree programme for teachers and teacher trainers holding diploma certificates who expect to study part-time without undue disruption of their work schedules. The programme will run alongside the internal two-year post-diploma Bachelor of Education programme and will offer a degree of equivalent status. Like most distance education programmes in developing countries that have been heavily influenced by donor countries, the IEDE received some funding at least in the beginning from the Department for International Development (DFID), formerly known as the Overseas Development Administration (ODA). DFID invested in the initial survey of the learner profile of prospective students to enrol in the Bachelor of Education programme and also helped to address the training of writers of participating departments through consultancies involving workshops that were run jointly by external experts, the DFID subject advisers, and local counterparts (co-ordinators) of the IEDE. Even though IEDE co-ordinates the course material writing of the departments, the participating departments are responsible for the content of the

distance education programme. UCEW is therefore a dual mode distance education institution using departmental course teams and editors. Co-ordinators at IEDE serve in varying roles from simple proof-reading and assisting with artists' briefs and layout to offering advice for the restructuring of study material.

Problems encountered

Planning and managing distance learning

- Academic staff of the participating departments are not provided release time for the writing and review of their course material. This has caused delays in the submission of course material since lecturers have many functions such as lecturing, organising tutorials, and marking their examinations as well as supervising their on-campus students on teaching practice.

Implementing quality assurance

- Lecturers in the participating departments were initially sceptical about the credibility of the programme, taking into consideration the user-friendly language proposed for the writing of distance education course material. However, this scepticism can be explained in light of some lecturers' inexperience with the delivery systems involved in distance education programmes. It should, however, be emphasised here that external assessors have been engaged to read and comment on the course materials and provide supportive feedback to the course writers. Each course has its own editorial team of two or three members who review the materials initially and provide feedback to the authors.

Using and integrating media in distance education

- The use and integration of media in the distance education programme of UCEW leave much to be desired, since the departments engaged in course writing do not have the basic skills or the necessary equipment to enable them to use any medium other than print.

Instructional design and production for distance education

- Instructional design is the sole responsibility of the departments although co-ordinators at IEDE monitor their work and give advice. The production of course materials is facilitated at IEDE with the help of support staff using the equipment purchased by the DFID.

Learner support systems

- Even though the programme has not yet taken off, the institutional response to student enquiries needs improvement. The preparation of course material by the academic staff needs speeding up to avoid the situation in which students enrolled in the programme have to wait long periods for study materials to be delivered and are consequently frustrated and demotivated. Four regional study centres have been established to provide student support through tutorials and library facilities, with the help of tutors and other supporting staff.

The most important issue: Instructional design and production for distance education

The literature on the Open University of the United Kingdom and many other institutions on distance education indicate that for a course to be implemented, an institution requires about 18 months (some even a lot longer, say three years) from the initiation of the writing process to the implementation of the programme. Although the writing of the distance education material at UCEW began in April 1995, only four courses out of a total of twenty-four first-year courses are on the shelves at present. The heavy teaching workloads of the course writers impedes their ability to deliver the study material as planned.

Staff who have found it difficult to prepare their teaching in the distance mode are given close support from the IEDE co-ordinators, who have been trained in distance education. To this end, therefore, the IEDE co-ordinators have always tried to treat writers with respect and courtesy by sharing with them their concerns and encouraging them to pick up from where they left off. In this way, the co-ordinators provide not only guidance in content, style, and format but also give moral support while urging them to make time to write — despite their heavy teaching workloads. The IEDE co-ordinators also ensure that writers are provided with regular feedback on the progress of writing to the respective course teams. Course writers are encouraged to meet regularly with the co-ordinators to discuss their units.

Realising that a good team can exert pressure to achieve deadlines and equally ensure quality output, the IEDE co-ordinating team instituted departmental academic editorial boards of committed and dedicated writers trained in the editing of distance education material to help more specifically with the content editing of materials. During the editorial training, emphasis was laid on the basic principles of distance education material writing procedures.

This step has to some extent speeded up the writing process even though much is still left to be done. At one time it became clear that one reason writers could not deliver the materials on time was that they managed their time poorly. A workshop on time management was organised to enable writers to make the optimum use of their time.

Future plans

To facilitate the production of the course materials on time, it is important that the UCEW establish realistic workloads and, if possible, set up staff support networks to maintain the writers' morale. There is also the need to consider involving a wider development team by contracting external writers and staff from other institutions. Plans are afoot for a series of short one- to three-day writers' workshops to encourage faster planning, drafting, and reviewing of course materials. A 'writers' surgery' session will likely evolve to give writers the opportunity to bring and share their difficulties with their more experienced and successful colleagues.

University of Guyana Institute of Distance and Continuing Education

Prepared by:

Lynette Anderson

Fitzroy Marcus

Elaine Thomas

Brief description of the programme

The Institute of Distance and Continuing Education (IDCE) began in 1976 as the Extramural Department of the University of Guyana's Faculty of Education. Its objective was to take quality education to adults throughout the 10 regions of Guyana. By 1982, the department had increased the scope and reach of its activities so significantly that it was reconstituted as the Institute of Adult and Continuing Education and assigned a status equivalent to that of a faculty. The newly formed institute was mandated to use distance education modalities to extend its reach to remote and deep riverine areas in order to make educational opportunities accessible to the thousands of Guyanese resident in those areas, who previously were denied such opportunities because of the dual constraints of distance and population spread.

In 1992, the institute launched a pre-university distance education programme aimed at increasing the number of learners qualified to enter the university. A concomitant thrust was the consolidation of IDCE's efforts at raising public awareness about distance education, assisting decision makers to see distance education as a viable option for making education accessible to learners in remote areas, and developing a pool of resource persons. The outcomes include a student body of 1,029 learners drawn from the 10 regions of Guyana, various forms of participation by the institute in the development of all other distance education programmes that have been introduced by other agencies, and IDCE's representation on the National Committee for Distance Education. Out of the institution's involvement in distance education has developed not only a commitment by its administration to making distance education an integral part of its activities, but also a commitment by the administration of the University of Guyana to employing dual mode strategies to offer university level programmes to learners who cannot attend classes at its Turkeyen Campus. A corollary has been the current nomenclature of the institute. The renamed institute has the responsibility of facilitating the introduction of the university's distance education activities.

Problems encountered

Planning and managing distance education

- A participatory approach is one of the characteristics of planning and managing distance education at IDCE. This is evident in the strategies employed in conducting needs analyses and in designing, developing, and implementing the programme.
- Another characteristic is flexibility, since support provision is influenced by the human and physical resources available in the student's region. This support operates on the principle of 'equality of concern' rather than 'equality of provision'.

Implementing quality assurance

- IDCE's distance education programme represents a shift from conventional practice to new approaches to learning. The institute therefore views the implementation of quality assurance strategies as essential since a natural resistance to change must be met with the assurance that standards will be maintained if not surpassed. The challenge lies in ensuring that all involved in the provision of distance education, including academic and non-academic staff, recognise this fact and be sufficiently motivated to strive for excellence at all times.

Using and integrating media in distance education

- The institute's integration of media in the course package is based on the principle that in distance education there is a need to serve various learning styles, to help to reinforce learning, to motivate learners, and to minimise their feelings of isolation.
- Print is the basic medium of instruction. Teleconferencing and audio cassettes are meant to provide valuable support. Despite generous assistance from The Commonwealth of Learning during the period 1992 to 1996, problems were encountered. They included:
 - a poor or non-existent communication infrastructure, including an unreliable electricity supply in remote areas;
 - a lack of telephone links; and
 - a shortage of resource persons adequately trained to prepare and produce the audio material.

Instructional design and production for distance education

- When distance education institutions attempt to produce materials without providing adequate finances, difficulties must arise. In the absence of a central budget for materials production, remuneration for course-writing teams, tutor-markers, and other support staff has been inadequate. Furthermore, an inadequate desktop publishing system has added to the challenges.

Learner support systems

- The distance education programme the institute offers is learner-centred. All its components, whether print-based, classroom-based, or audio-based, are oriented toward the provision of learner support. The challenge lies in the management of the programme. Strategies to meet Guyana's unique geographical, cultural, economic, and educational situation must be developed and implemented.
- Support staff accustomed to the conventional system must be trained and retrained for their task of ensuring that students receive the necessary support. This is essential if learners are to complete their courses successfully.

The most important issue: Supporting learners in remote areas

Supporting learners in the remote areas of Guyana presents a significant challenge to IDCE's distance education system. Overseeing the tutorial system and generally providing learner support services are activities dependent on the deployment of competent and highly motivated staff, as well as a good communication infrastructure. Learners are scattered over vast forested areas, some accessible only by aircraft, where few qualified tutors may reside. Sharing of expertise is difficult even in cases in which only a few miles may have to be covered. An underdeveloped communications infrastructure restricts the use of telephones or teleconferencing. Some access to radio links exists but that, however, does not guarantee quality interaction.

The limited finances available to the university contribute to inadequate funding. Some of the energy of staff is devoted to seeking funds from various local and international sources. The presence of the distance education system is largely due to the range of support (advisory and training) extended by the Commonwealth of Learning. The Organisation of American States (OAS) has also contributed directly to the costs of managing our remote support activities.

Despite the constraints, a mobile team is used to provide tutorial support for learners, matching to some extent the pattern of air services provided to these communities. Most flights to remote areas must originate in the capital, making it difficult for staff from our interior locations to service neighbouring locations. Staff based in the coastal areas, however, can and do make direct flights in, at intervals, to give support to students at specific locations. It is also possible to include competent staff from interior locations to be part of the mobile team providing learner support in areas outside their own locations.

Lessons learned

The provision of learning materials and visits by mobile teams to interior areas needs to be further supported by mentoring, which will prove beneficial in enhancing the learner's ability to study through distance strategies. A further benefit inheres in the fact that interaction between learners and a mentor who understands the environs and cultural practices is highly motivating.

There is also a need to sensitise planners, policy makers, and regional officials as a first step to introducing courses in remote areas. This method has resulted in a collaborative approach to the identification of needs and resource persons.

Indira Gandhi National Open University Electronic Media Production Centre

Prepared by:

Jai Chandiram

Brief description of the programme

The Electronic Media Production Centre (EMPC), located in the new Sanchar Kendra at the Maidan Garhi campus of Indira Gandhi National Open University (IGNOU), has a budget of 700,000,000 rupees to produce educational media materials. The distinguishing feature of IGNOU's distance education programme is the extensive and systematic use of educational media in its courses.

Today the EMPC is an advanced centre for the application of media technologies for distance education and training at the national and international level. The primary functions are: programme production; media education; and research.

Programme production

The tasks involved in programme production include:

- producing audio-visual course materials;
- developing and applying communication technology strategies in distance education;
- developing approaches to integrate communication technologies into existing training programmes;
- undertaking pilot projects in the application of new technologies to improve education, training, and the quality of delivery;
- consulting in education communication systems and technologies;
- expanding the infrastructure for training and delivery in distance education;
- developing high quality course materials for media studies;
- providing an audio-visual library and resource centre; and
- marketing and selling EMPC-IGNOU products and facilities.

Media education

At present, the EMPC offers a one-year Post-Graduate Diploma in Journalism and Mass Communication.

The following additional programmes are under development:

- Diploma in Audio-Video Technology;
- Certificate in Audio Programme Production;

- Certificate in Videography; and
- Certificate in Video Editing.

The following short-term or weekend courses have been planned as an open school:

- ‘Art of Video Presentation’;
- ‘Interview Techniques for Television’;
- ‘TV Studio Lighting Techniques’; and
- ‘Evaluation of Educational Television Programmes’.

Research

The EMPC conducts the following research tasks:

- regular feedback studies on programme use; and
- specially designed studies to assess quality, content, and impact are undertaken from time to time.

Facilities

The facilities available at EMPC include:

- Two large video studios equipped with multi-camera set-ups, ENG beta SP camcorders, edit suites, Quantel Paint Box, audio studios with digital audio cassette format equipped with eight-track recording facility, audio dubbing suite, audio edit suites with multi-format editing facility, duplication facilities, including format transfers and high speed audio cassette duplication, audio-visual library with more than 564 video and 646 audio cassettes of curriculum-based programmes.
- The Training and Development Communication Channel, which is a teleconferencing facility comprising a studio with teaching end and up-linking for two-way audio and one-way video through INSAT-2A on the Extended C band being offered jointly with the Indian Space Research Organisation. Presently 23 receiver terminals located all over the county are linked to the teaching-end studio. Another 135 locations have been identified. This facility is being used for counselling and teaching students as well as providing orientation to regional centre personnel.

The system configuration of the Training and Development Communication Channel is as follows: the teaching-end studio (195 square metres and located in the Sanchar Kendra complex) is equipped with two cameras on tripods and a third camera set up as a caption scanner. Audio and video signals from the control room are fed to the Transportable Remote Area Communications Terminal for up-linking to the INSAT-2A satellite. Direct reception sets are located at state open universities, resource centres, and a few remote study centres, as well as at other user institutions. The return communication is through telephone lines and fax.

Services

The services EMPC offers include:

- producing audiovisuals;
- broadcasting and telecasting through national channels;
- teleconferencing;
- conducting research in educational media;
- providing training in media production, research, and technical operations; and
- offering short-term courses and workshops in script writing, presentation techniques, videography, and technical operations.

Output

So far, EMPC's output includes:

- a total of 606 videos and 659 audios to date;
- about 80 to 100 days of live teleconferences, conducted per year by various schools of as well as other users through the Training and Development Communication Channel; and
- regular feedback reports on data gathered pertaining to the utilisation of the teleconferencing.

Problems encountered

Planning and managing distance education

- During the preparation of audio-visual materials, EMPC works with academics in developing audio-visual productions. The academics concentrate predominantly on the print materials and consequently the audio-visual component is often only a supplementary input of the course materials. The strengths of audio-visual media are yet to be fully explored.
- Greater integration of audio-visuals into print materials in the course materials is being attempted in programmes.
- Greater interaction with counsellors and facilitating their utilisation of audio-visual materials, encouraging students and counsellors to use them as part of the learning system.

Implementing quality assurance

The quality of EMPC programmes is assured through:

- training of technical and programme staff
- preview sessions; and
- increasing interaction at the concept development stage.

Using and integrating media in distance education

- Teleconferencing through the Training and Development Communication Channel. The response of students at weekends is more than weekdays when students are not usually available at the study centres. Certain courses have more active responses (for example, those in the School of Nursing and the MBA programme).

Instructional design and production for distance education

- Instructional design essentially comprises of ‘talking heads’ with few print graphics and is more easily accepted by experts. They are yet to experiment with other flexible interactive formats. The cassette mode of audio-visual materials production is yet to evolve.

Learner support systems

- Access to modes of delivery such as lending library system needs to be strengthened.
- Quicker production and timely delivery system are necessary.

The most important issue: Using and integrating media in distance education through the Training and Development Communication Channel

IGNOU has adopted the multimedia approach to reaching out to its student population. A variety of modes, including print, audio and video, face-to-face counselling, as well as mass media are being adapted. The EMPC produces the curricula-based audio-visual programmes that are distributed to more than 256 study centres located all over the country. In addition, they are broadcast or telecast over the national network three times a week in regularly allotted time slots.

Yet a need for greater interactivity is always felt. The Training and Development Communication Channel at IGNOU has added a new dimension, striving to enhance learning by serving as a critical communication bridge. It helps create a ‘virtual classroom’ environment conducive to real-time interaction, lateral learning, immediacy in communications, and participatory decision-making.

The Training and Development Communication Channel has been in operation since 1993. It is a two-way audio, one-way video teleconferencing facility through INSAT-2A on the Extended C-Band offered jointly with the Indian Space Research Organisation. The teaching end is at EMPC-IGNOU, while about 23 receiver ‘nodes’ are located at all state open universities, regional centres, and a few remote study centres. Efforts are underway to set up at least another 135 nodes in the near future. Other ‘user’ institutions such as the All India Management Association, State Bank of India, and National Dairy Development Board have set up 200 receiver nodes of their own. Other major institutional users include the National Open School, National Centre for Education Research and Training (NCERT) the state governments of Karnataka and Gujarat, the Department of Women and Children, the Department of Electronics, and the Confederation of Indian Industry.

Training functions

IGNOU regularly uses the Training and Development Communication Channel for telecounselling and extended counselling with student groups, and for training resource and study centre counsellors and co-ordinators. Different schools at IGNOU are evolving their own strategies in utilising this facility based on the volume of enrolment in their academic programme, duration of the course, profile of the student groups, and availability of experts.

Other user institutions have put the facility to a variety of uses; for example, the All India Management Association conducts regular classes, and the National Open School and the National Centre for Education Research and Training conduct training sessions for their regional functionaries. The Department of Women and Children launched a popular social welfare programme 'Indira Mahila Yojana', to enable all concerned at the state, district, and village levels to interact with the minister in Delhi.

Response

Regular feedback from the Training and Development Communication Channel's receiver nodes is being sought and available data shows that there have been extremely good responses in some of IGNOU's academic programmes in Management, Nursing, Journalism and Mass Communication, Panchayati Raj, and Tourism, and in most sessions held by other institutions such as those in the Department of Women and Child and the NCERT], wherein a lot of participatory processes were planned into the sessions and sufficient advance notice given. Most students of IGNOU seem to prefer after-office hours and weekend sessions. A feedback research study to assess the utilisation of the teleconferencing system by the student sessions is being undertaken and will be completed by year-end.

Other aspects need study, including the policy, technical, co-ordination, and administrative components, as well as the academic, research, and production components that in one way or the other influence the success of the sessions. Better co-ordination at the headquarters, school, EMPC, Indian Space Research Organisation, and resource and study centre levels are being fine tuned. With resources becoming an additional but critical criteria, efforts are underway to balance in-house use with external use, to make it an economically viable activity. However, there is great scope for improvement in the utilisation of the facility.

Strengths

Technical: The Training and Development Communication Channel is a unique facility using modern satellite-based communication technology. It is eminently suited for mass training simultaneously and cost effective.

Learner content: The Training and Development Communication Channel can improve the quality of training as top level experts could be involved. The asynchronous mode of communication is also possible through recording sessions at the teaching and learning ends and using them in other teaching and learning situations.

Shortcomings

Technical: Due to the poor condition of the telecommunication network in the country, the desired quality and level of interaction is affected. The receiver network is still in the process of expansion.

Learner content: From an academic viewpoint, the audio-visual component, including the Training and Development Communication Channel, is not a mandatory part of the students' learning package. The optional and supplementary status accorded for various reasons results in it being given lower priority by the schools and students. They are yet to adapt fully to utilising the technology-aided visual medium with adequate graphic support. They also lack sufficient advance planning of content. The high rate of technology obsolescence is also adding to the problem. A lack of adequate co-ordination among the various departments involved delayed information flow, affecting attendance at the sessions.

Students are faced with mainly logistic problems in attending the sessions as most are working or live at long distances from the venue.

National Open School: The School that Made a Difference

Prepared by:

Professor Mohan B. Menon

Brief description of the programme

The National Open School (NOS) was set up in 1989 as an autonomous institution under the Ministry of Human Resource Development, Government of India. Its objective is to provide continuing and developmental education through distance and open learning to all those outside the formal education system. With a multimedia package of self-instructional print materials, audio-visual support, and face-to-face teaching, NOS has a strong and effective network of about 800 academic, vocational, and special (for disabled and disadvantaged target groups) study centres all over India and the Middle East. The study centres perform a variety of functions, including admitting students, supplying learning materials to learners, providing and evaluating assignments, conducting personal contact classes, and organising laboratory, workshop, and other practical experiences. The special features of open learning in NOS include freedom to choose subjects according to one's needs, interests, and abilities; no upper age limit; course credit accumulation over a period of five years; academic and vocational courses offered separately and in combination; transfer of credits from other national boards; and use modern communication and information technologies.

The academic courses NOS offers include the following:

- the 'Foundation Course', equivalent to grade 8, which serves as a bridge course for joining the secondary level programme;
- the 'Secondary Education Course', leading to the Secondary School Certificate (O level);
- the 'Senior Secondary Education Course', leading to the Senior Secondary School Certificate (A level);
- open vocational education at basic, elementary, secondary, and senior secondary levels;
- life enrichment and continuing education courses, addressed to the general public and those in various area of work;
- the open basic education programme, aimed at providing continuing education to neo-literates 14 years and older; and
- open elementary education, for the benefit of school-age children who are not attending school.

NOS has a diverse student profile, with learners ranging in age from 14 to 89 years, distributed throughout the country. About 94,000 students were enrolled in 1996–97, which increased to an annual enrolment of more than 110,000 students in 1997–98. Most of the students are young adults between the age of 18 and 24 years.

NOS is also an apex institution at the national level, and has the mandate to provide professional and technical support to state (and provincial) governments to set up and maintain quality in the state open schools.

Problems encountered

Planning and managing distance education

- Managing flexibility without affecting the quality of instructional organisation has been a major problem considering the variety of target groups and wide geographical distribution.
- Managing the instructional experiences provided in 800 study centres, which are formal institutions accredited by NOS, is another major issue.

Implementing quality assurance

- While it has been reasonably possible to maintain quality in instructional inputs, it is difficult to ensure that quality is maintained in contact sessions and practical classes.
- As a large number of part-time tutors (more than 8,000) are involved in organising learning support to students, developing the necessary competencies required for the personal contact programme and counselling in them has been difficult.

Using and integrating media in distance education

- NOS does not have production facilities and hence all audio-visual production is done on contract by production and post-production staff, resulting in quantitative and qualitative improvement in media production.
- NOS uses interactive technologies mainly through one-way video and two-way audio conferencing for orienting and training study centre staff. However, the use of interactive technologies for learning support has not been possible due to a lack of infrastructure at the receiving end.
- Audio and video programmes are used as supplementary input to the self-instructional print materials. They have not been integrated into the self-instructional print materials mainly because all learners may not have an access to them.

Instructional design and production for distance education

- Vocational courses vary considerably and are from various sectors of the economy. Developing curriculum and designing instructional strategies for vocational courses has not been easy.
- Flexible instructional designs for different categories of target groups is necessary in the Indian context. Learners with various types of disabilities and social disadvantages require modification in instructional design and learning materials.

Learner support systems

- The use of suitable pedagogy in the personal contact programmes has not been easy, mainly because teachers are from formal schools and are unacquainted with distance education methodology.

The most important issue: Using and integrating media in distance education

NOS caters to the educational needs of a large number of clientele groups who have been out of the formal schools for one reason or another: social, economic, or geographical disadvantages, or physical and mental disabilities. In order to provide quality education to all these groups in a large country like India, the integration of media is extremely important. However, due to many problems, the major component of the instructional system has been self-instructional print materials distributed to students supported by contact classes and practical work arranged at study centres. Use of media in the system has been marginal for many reasons:

- NOS, which was established in 1989, emphasised three main aspects of the print materials. The Media Unit under the Academic Department was visualised only to co-ordinate production of audio-visual programmes using outside contract producers and post-production staff. The media unit developed no further during the eight years NOS has been in existence. At the moment, NOS is looking for funding from international agencies to set up a temporary production facility as internal funding for production infrastructure will not be forthcoming.
- NOS has been using facilities available with Indira Gandhi National Open University (IGNOU) for one-way video and two-way audio conferencing using the Indian communication satellites INSAT-2A and INSAT-2C. The receiving facilities available in the IGNOU regional centres are also hired by NOS. The use has been mainly to orient and train co-ordinators and tutors in the 800 study centres of NOS. This has been extremely successful; however, the facility has not always been available as many institutions are making use of it. NOS is planning to provide about 10 receiving facilities in Delhi and surrounding areas very soon. NOS has about 120 study centres in this region and enrolls about 35,000 students annually. It plans to start academic counselling and tutoring using the up-link facility and the proposed receiving facilities.
- NOS produces about 60 audio-visual programmes for its secondary (O level) and senior secondary (A level) courses. These programmes are all supplementary and not integrated into the self-instructional print materials. During the instructional design of NOS courses it was assumed that not all students would have access to audio-visual programmes and hence the self-instructional print materials were planned to be developed as complete and self-contained from the learning point of view. Such an approach to design can be changed only after ensuring that all students can either watch or listen to video and audio programmes in the study centres or that these are widely broadcast.
- NOS has approached Doordarshan (Indian National Television) for broadcast time, but unsuccessfully. Alternatively, the ministries of Human Resource Development and Information and Broadcasting are planning to launch a dedicated educational television channel, initially through a cable network and subsequently through

terrestrial transmission], using Doordarshan's low-power transmitters. It is expected that NOS, as well as other educational institutions in the country, will get broadcast time for its programmes. However, if this broadcast channel is available only through a cable network its access will be considerably limited. Most of the villages and small towns in India do not have a cable network facility and even in urban areas it is limited to only well-to-do families. Nevertheless, NOS is increasing production, contracting individual producers and institutions so that a substantial number of video programmes are available.

- NOS is also initiating an Indian Open Schooling Network using the Internet. This network will be linked with The Commonwealth of Learning's Commonwealth Electronic Network for School Education. The Indian Open Schooling Network will provide access to the Internet for all schools and students, who register for a nominal fee and take advantage of information updates in school subjects, career information, and, subsequently, on-line NOS courses.

University of Nairobi

Distance Education Teachers' Programme

Prepared by:

J. O. Odumbe

Brief description of the programme

The College of Education and External Studies distance education teachers' programmes started in 1967 with primary teachers' certificate courses and later, in 1986, a Bachelor of Education (B.Ed.) degree programme was introduced, which eventually replaced the certificate programmes. In 1996, the Post-Graduate Diploma in Education (PGDE) was introduced. Currently the college operates a dual mode programme. The admission to the bachelor's programme is by qualification in the national examinations, while admission to the diploma programme is on the basis of a recognised first degree with at least two teaching subjects. The bachelor's programme takes a minimum of six years, while the diploma programme takes two years. Both programmes are offered by the Department of Educational Studies in the Faculty of External Studies.

The learning system uses specially developed print materials as the main medium of instruction, supported by audio cassettes, audio teleconferencing, and limited face-to-face tutorials of up to two weeks' duration, conducted three times in each academic year. The assessment in these programmes is continual through home written and timed tests as well as end-of-year examinations.

Problems encountered

Planning and managing distance education

- Justifying regulations that provide for flexibility to students.
- Justifying payments for the services rendered by the staff from the internal departments to the Department of Education Studies.

Implementing quality assurance

- Allowing sufficient time to field test materials before production for students.
- Budgeting for the cost of transporting university staff for face-to-face tuition to remote study centres instead of using local staff, who are not well received by students.

Using and integrating media in distance education

- Training students to use each medium appropriately for the purpose it is intended.
- Allowing increased costs to the students and the institution.

Instructional design and production

- Overriding the initial reluctance of writers to accept and see the need for developing materials in the distance education format of presentation, which they felt was too much ‘spoon feeding’.
- Providing resources and time to develop all the materials within the workshop setting, especially for undergraduate and post-graduate materials that need more reference and consultation of sources.
- Encouraging writers to work within the deadlines, especially when there is no lead time.

Learner support systems

- Identifying and developing staff with the right skills, approaches, and attitudes to provide adequate counselling and tutorial services at the study centres.
- Standardising the distribution of infrastructure and learning resources, variations of which create disparity and difficulty to students.
- Providing time and opportunity for adequate individual attention.

The most important issue: Providing guidance and face-to-face tutorial services

These learner support issues are closely connected to quality assurance issues. Apart from helping in the learning process, learner support services also reduce isolation, and sustain or create motivation and confidence to students.

To provide the decentralised tutorial services that play a major role in learner support, the faculty identified tutors from the teacher colleges and universities and organised training for them on tutoring in the distance education system. Enough tutors in each subject were found for all 10 study centres in Kenya. Out of two one-week training sessions conducted for the tutors, a tutors’ handbook was developed and made available to all the tutors. It became a useful guide for briefing new tutors who joined later to replace drop-outs.

When the actual tutoring started, some students were tutored by the university’s course lecturers while others were tutored by college tutors. In some subjects the students felt that those being tutored by course lecturers were advantaged. The feeling became so strong that eventually course lecturers and writers were taken around to each study centre in turn, but this approach became too expensive for the institution and too demanding for individual lecturers.

The regional tutorials were discontinued and instead the residential schools were intensified. Regional tutorials were always presented by course lecturers and have been acceptable to students, who often travel long distances to attend and expect a satisfactory learning opportunity.

For general counselling, the faculty uses resident lecturers who are stationed at six extramural centres in the country. However, these centres do not serve low population density and remote parts of the country; plans are underway to increase the distribution of extramural centres to cover most of the country.

A second move which has been undertaken to provide constant support is by installing audio teleconferencing with eight receiving stations. This technology enables the use of course lecturers throughout the country without strain on their time. This arrangement was made possible by assistance from The Commonwealth of Learning (COL), but budgetary arrangements have been inadequate to sustain it.

The third move has been to prepare students for effective tutorials by encouraging them to read the study materials and identify issues they would like the tutor or course lecturer to explain. As well, at the beginning of a residential school, each student is given a briefing sheet that outlines the objectives and strategies to be used during each specific residential session. This advance information tends to make the students more active participants who do not expect lectures but focus on identified issues.

Last, the part-time tutorial staff and the core staff have been encouraged to allow time for personal attention to students outside class.

University of Nairobi

Prepared by:

Judith W. Kamau

Brief description of the programme

The External Degree Programme of the University of Nairobi is conducted in the Faculty of External Studies, College of Education and External Studies.

The establishment of the External Degree Programme of the University of Nairobi in 1986 followed two feasibility studies in 1976 and 1983, which established the need and relevance of such a programme in Kenya. The External Degree Programme was set up to upgrade both professional and academic qualifications of secondary school teachers who had trained to teach the first two classes of secondary school but who, due to a shortage of staff, found themselves teaching O level and A level classes in the secondary school curriculum. Through distance education these teachers would receive in-service training without leaving their families and as they continued to perform their duties. Of the 600 candidates who were selected and admitted to the programme from more than 3,000 applicants, 504 registered for different subjects in the External Bachelor of Education (Arts) programme.

Problems encountered

Planning and managing distance education

The university with its six colleges is a dual mode institution. The fact that the External Degree Programme operates within a dual mode system has its own inherent problems. The programme has a core of academic staff who serve full-time as subject co-ordinators and are in charge of a group of subjects. This core staff, comprised of subject experts, editor, radio and audio lecturer, and a graphic artist, identify, train, and supervise part-time staff, who are engaged to write, review, and edit instructional materials. The radio and audio lecturer, editor, graphic artist, and printer are in charge of the production and distribution of instructional materials under the supervision of the chair of the Department of External Degrees and the dean of the Faculty of External Studies. Both the chair and the dean answer to the principal of the college, the Deputy Vice-Chancellors, and the Vice-Chancellor, in that hierarchy.

The department and its core staff perform duties similar to those of a publishing house. The subject co-ordinators provide academic guidance and counselling to students during residential sessions and also by correspondence. Each subject co-ordinator handles part-time staff in a whole subject area (for example, history), which constitutes a department of its own in the conventional internal programmes of the university. In this arrangement, part-time staff are paid for their services on a piece work basis. The costs of running the programme are met from government subsidy, student fees (the programmes run on a cost recovery basis), and from the sale of

materials to other institutions such as the Open University of Tanzania; Makerere University, Uganda; and the University of Zimbabwe.

The learning system of the External Degree Programme has been mainly the print materials supported by audio and video cassettes, face-to-face tutorials, and supervised teaching practice, with students studying specially developed print materials in each subject. During the four residential sessions held at the University of Nairobi each year in August, November, January, and April, during school holidays and at the six regional study centres which are spread in six major towns, writers and subject specialists introduce course materials to students, revise course content, and mark assignments and give timed tests that form part of student assessment as provided for in the regulations.

The regional study centres are managed by resident lecturers who are core staff within the External Degree Programme.

Management challenges

The management of the External Degree Programme within a dual mode institution has presented a major challenge.

To start with, the students are external. Where choices must be made, the needs of internal students come first and those of external students come second. This problem is particularly common in the sharing of resources. If the timetable of internal programmes is slightly interrupted, for example, then the residential sessions for external students, which are held at the university where accommodation facilities and tutors are based, must be rescheduled. These interruptions sometimes mean re-scheduling supervised tests and examination schedules, causing frustration to students and part-time staff.

The distance education mode of delivery is not quite understood by senior management. The programme managers on the ground have often found it difficult to explain and justify, for example, expending tuition revenues on the production and reproduction (or reprinting and dubbing) of study materials because the term 'tuition' has a different meaning in the conventional mode.

When the programme started in 1986, students attended regional field tutorials once a month, twelve months a year, in addition to three residential sessions at the University of Nairobi. Although very popular with students, the field tutorials were discontinued in 1990 due to the high costs of paying the field tutors and the accompanying supervision constraints due to limited core staff. However, the hours from the field tutorials were recouped into the residential sessions so that students still have the same number of tutor contact hours per subject. While senior management are convinced about the value of frequent student–tutor physical contact, it is difficult to raise funds to pay for the monthly accommodation and transport bills field tutors incur.

Instructional design and production for distance education

Materials development has been another problem area. When the programme was launched in August 1986, only two units (booklets) in Education were written and ready to go to students in a 10-subject External Degree Programme. Consequently, the other materials were developed as students waited, causing frustration to many. By

the time students were ready for their first-year examinations in 1988 only 388 out of the registered 504 students sat for their exams. By 1990 the programme had only 260 regular students who went on to graduate in 1994. This high drop-out rate was partly due to a lack of study materials to maintain and sustain student motivation and progress through the programme because students lacked credibility about the sustainability of the programme. Also, materials development was delayed due to low motivation on the part of writers, reviewers, and editors, which resulted from delayed payment for work completed because of the long part-time claims scrutinisation process by the finance department. After the claims were approved for payment the amount due was subjected to super scale taxation as required by law, leaving the part-time staff dissatisfied with the very small sum of money earned from writing course materials. As a result, the External Degree Programme lost many good and trained part-time staff, thus prolonging the already protracted materials development process.

Possible solutions

Problem	Suggested Solution
External Degree Programme in a dual mode institution	<ul style="list-style-type: none"> • There is need for some degree of autonomy for the progress of the programme. • Management is often too conservative, leaning more towards the conventional mode. They should be sensitised about the needs of external students. • Measures of full-time students equivalent contact hours should be based on the distance mode requirements rather than on on-campus procedures that do not interface with a distance education programme.
Materials development	<ul style="list-style-type: none"> • There is no need for lead time to develop or acquire ready to use course materials. • A programme that starts with limited study material should wait for the materials to roll off the press before accepting students.
Processing of part-time claims	<ul style="list-style-type: none"> • To avoid delays, the External Degree Programme requires its own budget to process part-time claims and to procure printing and other materials required for the production of study materials. Of course, this budget would be subject to both internal and external audit as is

Problem	Suggested Solution
	the rest of the university.
Learner support services	<ul style="list-style-type: none"> • Support services are a vital link between students and the institution providing the programme. • Field tutorials should not be substituted with anything else as they provide the maintenance function for learners who are isolated from the providing institution, their tutors, and from fellow learners. • Logistics for implementation costs, who will bear them, and the availability of physical facilities and field tutors should be planned well in advance in order to limit drawbacks after the programme is launched. • However, the programme has now come of age and the regional centres are now available. The arrangements on the ground seem to satisfy the needs of the students and programme providers adequately.

Conclusion

The External Degree Programme has been a real eye opener. Following successful completion and graduation of the first cohort of 260 students in December 1994, a second cohort of 1,500 students enrolled in August 1995 and the drop-out rate is negligible because most of the study materials required in the Bachelor of Education (Arts) course are now readily available. Study materials from this programme have helped expand education frontiers through distance education to other countries and other institutions in Kenya. In time there has been a cost benefit accrued from the study materials as different cohorts of students use the materials, thus reducing the unit costs substantially.

Massey University Women's Studies Programme Research for Social Change: A Third Year Compulsory Course

Prepared by:

Catherine Bray

Brief description of the programme

At Massey University, the Women's Studies Programme course 'Research for Social Change', compulsory in the third year, is designed to present information about feminist research for social change in Aotearoa (New Zealand). It weaves together three strands: explanation of research skills (methods); evaluation of research methods (methodology and epistemology); and description of particular New Zealand feminist research projects. Students are required to conduct research for social change and to evaluate published research.

Problems encountered

Planning and managing distance education

- This one semester course is based on a similar course developed and delivered at Athabasca University in Canada. Therefore, the major planning consisted of translating from an open environment in which the students operate on their own timeline and are constrained only by the need to complete the project within six months, to a semestered environment in which a student cohort proceeds together and intermediate assignment deadlines are enforced. This translation resulted in changes to the instructional design, described below.

Implementing quality assurance

- Quality controls consist of normal standards of scholarship, adherence to university-wide key performance indicators, assessment by colleagues within women's studies, and student evaluations.

Using and integrating media in distance education

- Delivery methods include post, telephone, and, where available to the students, e-mail.

Instructional design and production for distance education

- The most important design element to include in an upper year skills building course such as 'Research for Social Change' is the opportunity for the students to consult with tutors and other students about their projects as they complete their research. Production is print-based, on the Massey campus, using editorial and educational consultants.

Learner support systems

- Learner support systems include tutors, the international students' office, regional advisers, chaplaincy, disabilities office, English Language Centre, student counselling service, and the Massey University library. The Extramural Students' Society facilitates communication between students by mail and the Centre for University Extramural Studies organises optional regional gatherings for students and tutors.

The most important issue: Instructional design and production

In 1993 I developed Athabasca University's course Women's Studies 444 'Feminist Research Methodology'. This course has been successfully delivered to a small number of fourth year women's studies major Bachelor of Arts students each year. As part of my work at Massey University, I am designing a similar course for the Aotearoa environment. The lessons I have learned through this process include the following.

- Some of the classic material in the field of women's studies seems applicable in 'western' countries around the world. A canon has developed in women's studies as in other fields.
- As a consequence of the need to ground the course in the New Zealand experience, about 40 percent of the teaching materials are new.
- Instructional design is affected by the following differences:
 - Students usually pay for their phone calls to tutors at Massey but not at Athabasca.
 - There are intermediate assignment deadlines at Massey but none at Athabasca.
 - There are more international students at Massey.

Therefore, the study and administration guide at Massey must include more assistance with the process of learning (for example, precise information on note taking, sample quiz answers, more explicit grading guidelines).

Massey University is a 'dual mode' institution, which delivers its courses both extramurally and internally. Because of the more rapid production and revision of courses at Massey than at Athabasca, as well as on-campus teaching, there is less time for lecturers to devote to course writing, and the study guide therefore includes less by way of commentary. Where thoroughgoing synthesis are included in Athabasca study guides, Massey study guides contain shorter questions and commentaries. However, Massey texts and study guides can be more up-to-date because of the more rapid re-development of materials.

The dual mode institution allows the testing of materials in a classroom situation, prior to delivery at a distance, allowing the refinement of commentaries to be included in the study guide. However, distinctive components for extramural delivery must still be created, in keeping with the difference learning process.

University of Papua New Guinea Institute of Distance and Continuing Education

Prepared by:

Harold Markowitz

Brief description of the programme

Distance education began at the University of Papua New Guinea in 1974, with the establishment of the Department of Extension Studies. In 1994, the Institute of Distance and Continuing Education (IDCE) replaced Extension Studies, adopting a broader mission and new funding and reporting processes. Enrolment in the distance education programme has increased continuously in recent years, with growth in all programme areas and at each of the 15 distance education centres in the provinces and on the main campus in the National Capital District. The central activities are the Matriculation Programme (upper high school), the Diploma in Commerce Programme (two-year university diploma in accounting), the Bachelor of Education In-service Programme (for upgrading elementary teachers), and the Non-credit Programme (maths and English review). In 1996 there were approximately 16,000 course enrolments throughout Papua New Guinea (up from 4,000 in 1991), and, in 1997, enrolment is expected to show continued increases.

Problems encountered

Planning and managing distance education

- A lack of planning for growth in distance education is a serious problem. The nation is growing at an annual rate that exceeds most other nations, yet the high school system has increased its intake only slightly by building new schools and the university system has not increased its intake in several years. Increasing enrolments result from the increasing demand for distance education, and increasing enrolments also result from the opening of new centres and new courses, but due to national financial limitations the institution has had repeated cuts in staff and funding.

Using and integrating media

- Courses are based entirely on the printed page and tutoring, and no media have been introduced. The tropical environment and the lack of air conditioning results in prompt growth of mold on the few audio and video cassettes that have been obtained, soon making them unusable. There are no facilities for creating audio or video cassettes, no staffing or funds to do so, and equipment for playing cassettes exists only at a few centres (and then it is typically one machine in the director's office). Most centres have a computer for administrative use, but only in one centre are computers used for education.

The most important issue: The planning environment at the university

Guidelines for IDCE planning are derived primarily from three documents: The national higher education plan, the University of Papua New Guinea's five-year plan, and the plan for the institute. Though these documents assign our mission and provide the best and most comprehensive structure for our activities, problems with each limit their usefulness.

Both the national higher education plan and the University of Papua New Guinea's five-year plan have gone unrevised for several years, well beyond the period they were intended to cover, and thus they reflect the priorities and values of several years ago. An example of an outdated value is the advocacy of goals for IDCE enrolment growth that are so conservative that they were fully achieved six years ago. Current issues and the concerns of the nation and the university have not been woven into the structure of these documents. Examples here are the failure to address the massive change in teacher education and new educational standards, and the failure to reflect major changes in educational emphasis growing out of the restructuring of our national and provincial governments.

Lacking any other guidance, the guidelines provided by the higher education plan and the University of Papua New Guinea's five-year plan have been closely reflected in the plan for the institute. Indeed, the rationale for operation as an institute is presented in the national higher education plan. The national plan also provides the framework within which growth and development of the institute is expected to occur. IDCE has continued to take the derived plan for the institute very seriously, particularly since it has been endorsed by the University Planning Committee, the Academic Board, and the University Council. This document was the basis for recurrent requests for increased staffing and financial resources in the past three years, without any results. In fact, the IDCE central office's annual budget of 140,000 kina in 1994 has been reduced to 23,000 kina in 1997, which is the equivalent of about one United States dollar per course enrolment. Over the past six years we have repeatedly proposed that a standard be adopted for staffing (most recently suggesting a ratio of 1,000 students to each academic, which if accepted would double our staff) but no action has ever been taken. It must be said that there has been no detectable support for the planning process as a basis for resource allocation in the university.

The plan for the institute contains our view of the IDCE's future, and as such it is our guideline for mission accomplishment. For example, in the years ahead our priorities for growth in certain areas and reduction in others will be as outlined in the plan. Similarly, later this year when IDCE occupies the new building constructed for it by the European Union, and when IDCE eventually expands its staff and incorporates new media, the utilisation of these resources will be as described in the plan. If and when the national higher education plan or the university five-year plan is revised in the future, the plan for the institute will then be revised to assure the compatibility and support that is required in an effective planning environment. We have elected to be true to our assigned mission of bringing increasing educational opportunity to a nation that desperately needs it. By franchising our courses to private institutions and by raising and retaining registration fees we have assured operating funds for essential IDCE activities at the main campus. Provinces usually provide budgets for university centres, but some provinces have virtually no money and most centres are in poverty.

We have begun a planned reduction in non-credit (remedial maths and English) courses, reducing non-credit enrolments to offset some of the growth in matriculation and degree programmes. Using collected fees we have recently hired two new staff members, though we may not be able to retain them as the university does not provide benefits such as housing because they are not a part of the regular establishment.

In 1997 an estimated 62 percent of all students in the university will be in the distance education programme, but IDCE has only six academics and two administrators on the main campus and a maximum of two persons at each centre. Funding, already sub-marginal, is expected to decrease by five percent each year for the next three years, disregarding inflation. Staffing has been cut, people who leave are not replaced, and it is difficult to remain confident of our future ability to grade papers much less revise courses. We are at a crossroads, with rapidly increasing demand and massive expectations, and no agreed-upon plan for achieving our assigned goals.

University of the Philippines Open University

Prepared by:

P. Eulalia

L. Saplala

Brief description of the programme

The University of the Philippines Open University (UPOU) is one of six autonomous units of the University of the Philippines system. All the other autonomous units operate in the residential mode; the UPOU alone of the six units is mandated to be the open and distance education institution of the University of the Philippines system. It has its own set of officials headed by a chancellor and it has its own budget. Unlike the other autonomous units, however, it does not have its own faculty. Recognising the rich human resources of the University of the Philippines system, the University of the Philippines Board of Regents in its resolution establishing the University of the Philippines Open University on February 23, 1995, directed the UPOU to draw from the expertise and experience of the University of the Philippines faculty in all the autonomous units.

In each of the autonomous units of the UP system, the UPOU has set up a School for Distance Education headed by a dean. The deans work very closely with the autonomous units, where they are located to develop programmes and courses to be delivered by distance mode by the UPOU. To guide the faculty in developing the course materials for the programmes, the Office of Academic Support and Instructional Services (OASIS) was established under the Office of the Vice-Chancellor for Academic Affairs.

Delivery of instruction is administered by the Office of the Vice-Chancellor for Student Support Services. The UPOU operates its distance education programmes through learning centres distributed throughout the country. These centres are located either in a UP campus or in a non-UP institution, including other state universities and colleges, high schools, or even in government offices which are willing to work with the UPOU as co-operating institutions. Each learning centre is under the charge of a local co-ordinator who works part-time for the UPOU, as do the locally hired tutors who may be members of the faculty of the co-operating institution.

While autonomous, the UPOU is not a stand-alone institution since it works very closely with the faculty of the other autonomous units, both in programme and course development and in the delivery of instruction.

The University of the Philippines plays a critical role in national development, particularly in the improvement of the quality of the country's human resources and the ability to bring about technological changes that would make for a globally competitive economy. However, the University of the Philippines' instructional output has been limited by the bounds of conventional instructional modes. The UPOU

can play a significant role in increasing this output by developing open and distance education programmes which employ modern communication technology for their delivery. These programmes are expected to overcome barriers to access to higher education brought about by geographical constraints, family and work-related responsibilities, and the rigid structures of conventional education.

Only two years old this year 1997, the UPOU now offers eight diploma programmes, six masters' programmes, and one Ph.D. programme. It is developing an undergraduate programme, an associate in arts. It operates 20 learning centres in the country and one abroad, and will set up several more this year in the Philippines, and possibly another one abroad. While employing less than 70 full-time staff, the UPOU has a wider reach in the country than any other educational institution, including the other autonomous units of the University of the Philippines system.

Academic programmes

Academic programmes of UPOU offered in collaboration with the different units of the autonomous universities are set out in the following table.

Programme	Collaborator
Diploma in Science Teaching	<i>College of Arts and Sciences, UP Los Banos</i>
Diploma in Agriculture	<i>College of Agriculture, UP Los Banos</i>
Diploma in Research and Development Management	<i>College of Economics and Management, UP Los Banos</i>
Diploma or Master of Social Work	<i>College of Social Work and Community Development, UP Diliman</i>
Diploma or Master in Language Studies Education	<i>College of Education, UP Diliman</i>
Diploma or Master in Social Studies Education	<i>College of Education, UP Diliman</i>
Diploma in Mathematics Teaching	<i>College of Arts and Sciences, UP Los Banos</i>
Diploma in Computer Science	<i>College of Arts and Sciences, UP Los Banos</i>
Master in Public Health	<i>College of Public Health, UP Manila</i>
Master of Hospital Administration	<i>College of Public Health, UP Manila</i>
Master of Arts in Nursing	<i>College of Nursing, UP Manila</i>
Ph.D. in Education	<i>College of Education, UP Diliman</i>

Problems encountered

Planning and managing distance education

- Since the UPOU does not have its own faculty, it must win the support and co-operation of the faculties in the different autonomous units. Because these faculties carry the full load of work in their own autonomous units, work for the UPOU may not be their priority.
- It is important to be able to identify the right co-operating institution where the learning centre is to be located. Since a local co-ordinator and local tutors will be hired for student support, care must be taken in choosing the right people who will work with the UPOU in meeting its objectives.

Implementing quality assurance

- UPOU designates a quality circle course writing team. Finding the best teacher who also knows how to write modules for distance education may be a problem. It is not easy to find the other members of the course writing team — such as the instructional designer, the reader, the editor, and so on — who possess both the qualifications and the time to devote to the development of course materials.
- The other aspect of quality assurance is in the delivery of instruction. Our students go to the learning centres about once a month or about four times in a term to attend study sessions, submit assignments, and sit for examinations. The success of these study sessions depends upon the competence of the tutors. When they are hired, they undergo training in the art of facilitating study sessions and in the content of the course that they will facilitate. While tutors are hired on the strength of their background in the area in which they will serve as tutors, there is no guarantee that they will live up to expectations.

Using and integrating media in distance education

- Print is the major medium in the UPOU's distance education courses. However, the university has begun to develop courses for on-line offering using the Internet, and video lessons for broadcast (having obtained a time slot in a major television channel), or for learning centres. The cost in terms of staffing requirements, equipment, and other production aspects is very high. Video conferencing, for example, is very expensive. High costs will continue to be a limiting factor in the use of technology.
- The plus factor in the use of technology is that, as in the case of television, its audience reach is very wide. The UPOU would be serving not only its own students, it would be helping to bring educational programmes into the homes of many Filipinos.

Instructional design and production for distance education

- The training of the faculty in course development is a continuing programme of the UPOU, but it has a limited number of people competent enough to handle the training programmes and to shepherd the faculty through the difficult task of writing course materials. As it is, development and production is still on a very

small scale, but when the number of students and the number of programmes increase, as they increase every year, the UPOU, with its limited funds, will have to find ways of coping with the volume of work.

Learning support systems

- The lack of a communication system linking the learning centres with the UPOU offices hampers the efficient delivery of student support. An audio conferencing system will soon be installed but it will not yet cover all the learning centres. A telephone network to include Internet use is being designed in co-operation with a private service provider.
- There is an acute need for library resources. Orders for foreign publications take weeks, maybe even months to arrive. Of course funding is a problem because UPOU must provide library resources not to one or two centres but to 20 or later 30 or perhaps even 50 centres.
- With the lack of communication facilities, faculty or tutors are not within easy reach of the students. To meet a tutor, students must go to the learning centre, which may not be close to home and will require the student to travel some distance. While counselling services are available, they are on a very limited scale. Aside from the lack of communication facilities, the tutors and even the learning centre co-ordinator serve only on a part-time basis and have a limited time to serve the students.

The most important issue: Planning and managing distance education

Because of its unique structure in the University of the Philippines system, the UPOU is autonomous but at the same time must work very closely with each of the other autonomous units. Administratively, this situation may give rise to rather complex procedures. Papers must be routed not only through one set of officials within an autonomous unit but as well through the other autonomous unit whose faculty are involved in distance education programmes. The UPOU finds itself therefore involved with five other sets of officials in addition to its own officials, which can become very complicated. Programmes must be approved in the autonomous unit from which they originate, and then go through the UPOU machinery. The same is true of appointments of course writers, appointments to course teams, and appointments as faculty-in-charge of courses offered by the UPOU; even the offering of courses must be synchronised with the autonomous unit colleges since faculty credit load must be cleared with their deans.

Undoubtedly, the UPOU has increased the workload of the faculty in the residential colleges by adding distance education responsibilities. Conflict therefore may arise in terms of which takes priority: work for the mother unit (the residential college), or work for the UPOU. While the faculty may be willing to put in their time for UPOU responsibilities, their administrators may believe otherwise and require that the mother units have first priority. When this happens, the UPOU of course finds itself in a difficult situation accomplishing the task to be done.

Solutions

Several approaches have been initiated to address the situation.

- To remove the issue of ownership of programmes and therefore of who can or should initiate any action with regard to programmes, the UPOU is embarking on using a different approach to programme and course development. UPOU will take a proactive stance and take the lead within and outside of the University of the Philippines system, and will seek to include those who have retired from active service in the university to help develop the programmes and instructional materials.
- Since serving in the programmes of the UPOU increases the load of the faculty in the other units, the UPOU must help the colleges of these units with funds to allow them to hire additional faculty for better distribution of workload.
- UPOU will start to hire its own faculty to serve as a core faculty for each programme. It will then have full-time academics to run its programme.

Open University of Sri Lanka

Prepared by:

B. Weerasinghe

Brief description of the programme

The Open University of Sri Lanka (OUSL) was established in 1980 to provide greater access to higher learning for the employed and adults. Today it has an enrolment of nearly 20,000 students spread across three faculties of study: Engineering Technology, Humanities and Social Studies, and Natural Science. The programmes offered vary from one-year certificates and two-year diplomas, to three- and four-year degree programmes. Students can extend the duration of study at their convenience. OUSL also offers reading for post-graduate diplomas and degrees.

The distance education strategy involves the distribution to learners of study material in print, supplemented occasionally with audio cassettes. Limited video material is available for viewing at regional centres and study centres.

Regional centres are larger resource bases than study centres in terms of physical space, facilities, and staff availability. Currently four regional centres and 16 study centres are spread across the country. Day schools offer limited face-to-face interaction between staff and students at these centres. Laboratory facilities are more concentrated at the Colombo regional centre with limited access at other regional centres.

Student performance is assessed through continuous assessments and a final exam.

Problems encountered

Planning and managing distance education

- The study programmes and their conduct are planned by individual faculties and implemented with the approval of the university Senate. Management of activities related to the conduct of programmes are done according to a master plan by the director of operations. The OUSL is currently formulating a three-year corporate plan to enhance planning and management.

Implementing quality assurance

- There has been no quality assurance system in place until recently. OUSL has now developed its own house style. The British Overseas Development Administration (ODA) Project to improve distance education at the OUSL (1996 to 1999) has both a material production and a desktop publishing component which, by its completion, would have quality assurance systems in place for study material in print. Quality assurance for audio-visual material is yet to be formulated. The Senate has approved recently a scheme to award merit points for audio-visual productions to teachers involved in their production, which would develop into a

quality assurance system. Currently, research surveys are being conducted to assess the quality of delivery mechanisms.

Using and integrating media in distance education

- Yet to achieve a satisfactory level, the use of media in distance education is limited to regular workshops conducted for academic staff, which focus on the need to enhance print material with other media components and the need for integration. One drawback seems to be the availability of staff time for the exercise.

Instructional design and production for distance education

- OUSL has developed a manual called *Distance Writing: Bridging the Gap*, which guides lesson writers in important aspects of distance writing. However, the consensus is that OUSL material could improve both in instructional design and enhancement with media. The material production component of the ODA project may, within the next three years, contribute extensively to the transformation of existing material.

Learner support systems

- A guidebook distributed to students at registration now helps to induct students to the system of distance education at the OUSL. Further activities to orient students are being planned, including a video programme for student viewing at registration. Such orientation is crucial for success, especially for younger students. Student counselling is available easily for those who desire such help. The Regional Education Service (RES), functioning under a director, looks after the student support activities in the network of regional and study centres. RES provides facilities and staff to support student registration; issue course material; facilitate day schools, laboratory work, and continuous assessments and examinations; and provide library services and dormitory facilities for overnight stays at regional centres. Currently, a conscious effort is being made to improve student support at every level of operation. However, budgetary constraints and overload of the human network imposes certain restrictions in resolving issues as they surface.
- Activities related to the printing and dispatch of material are looked after by the director of operations. A new building complex for the university press and storage of material was nearing completion in 1997. Consequently, an upgrading of services in this area should result.

The most important issue: Using and integrating media in distance education

In the beginning, the majority of teachers at OUSL came from the conventional university system, their experiences rich in the use of print and face-to-face teaching. To most, use of other media components as well as distance writing itself has been an alien experience. The initial pressure to gather together course material to launch programmes in the early phase of development, within specified deadlines, had resulted in a first cycle of course material in need of much improvement to suit the distance mode. Adopting an appropriate 'media mix' had also suffered drawbacks for

the same reasons. Instructional design and media integration were at a low ebb. This scenario is apparently not unique to OUSL. Other institutions in the region and elsewhere have undergone similar experiences during their formative years.

With nearly 15 years of experience, in 1997 the OUSL has paused and is looking back with a hope of consolidating its future. In 1993, the government of Japan donated a US\$8.5 million project to establish a state-of-the-art audio-visual production centre. Since then the OUSL has been training academic staff in the use of audio-visuals to enhance study material. Nearly 100 academic staff have now been trained at several in-house workshops of one month's duration in which project work demands the completion of a print-related audio and a video programme. A long term Japanese International Cupertino Agency (JICA) expert has been helping the training for the last four years. However, the completion rate has been affected by the heavy workloads of academic staff who after their return from the workshop mostly fail to find time for media inputs. The OUSL at present has no staff positions comparable to 'producers' and depends on input by academic staff and a competent team of technical staff to carry out productions.

The university Senate has recently approved a merit point scheme to award merit points for audio-visual productions that would be considered as career promotion exercises for academic staff. This strategy to motivate staff participation in audio-visual productions is pending University Grants Commission approval at present. Its effectiveness in overcoming the constraints mentioned earlier is yet to be proven.

A positive outcome of all these activities is the awareness and consensus among academics that media components are very desirable to enhance learning. It is a personal belief that achieving this end in itself has been extremely important.

This is only a beginning. A longer journey waits to reach the goal of an adequate level of media component production to enhance all study material at OUSL.

Open University of Sri Lanka

Post-Graduate Diploma in Education Programme

Prepared by:

G. D. Lekamge

Brief description of the programme

The OUSL started the two-year Post-Graduate Diploma in Education Programme (PGDE) in 1980 in collaboration with the Ministry of Education of Sri Lanka. The main objective of the programme is to provide professional training for graduate teachers employed in government schools, pirtvenas (community schools) private schools, and teachers' colleges. A few years ago selection to the programme was based on teachers' seniority and the marks obtained in the qualifying test. Now it is open to all graduates of recognised universities.

The curriculum of the programme consists of nine components: eight theory subjects and one practical component. Students complete four theory subjects in each academic year as shown in the following table. Teaching practice, which is the only practical component of the programme, is arranged under the supervision of master teachers and carried out for eight to 10 weeks at the end of the second academic year.

The main medium of imparting instruction is print material. They are supported by occasional day schools, tutorials and a few audio and video programmes. In 1995–96, 3,200 students were enrolled in both Parts I and II of the programme. Several studies have been carried out by OUSL academics with the view of improving the quality of material and instruction, minimising drop-out rates, and increasing the effectiveness of the programme.

PGDE Programme — Part I Courses	PGDE Programme — Part II Courses
ESP 1305 — 'Principles of Education'	ESP 2305 — 'Teaching Practice'
ESP 1306 — 'Educational Psychology'	ESP 2306 — 'Techniques of Teaching'
ESP 1307 — 'Evaluation of Educational Outcomes'	ESP 2207 — 'Curriculum, School and Society'
ESP 1308 — 'Student Adjustment and Counselling'	ESP 2208 — 'Comparative Education and Educational Problems'
	ESP 2209 — 'Educational Administration and Management'

Problems encountered

Planning and managing distance education

- Monitoring and co-ordination of master teachers activities is difficult because of the large numbers involved (250 master teachers) and their placement in dispersed locations.
- Meeting schedules is difficult: even though the PGDE is a two-year programme, academic activities last for six months in each year. Therefore marking assignments and giving eligibility have always been delayed.

Implementing quality assurance

- Because of the involvement of large numbers and pressure put on meeting eligibility schedules, it is difficult to maintain quality in marking assignments. Discrepancies among marking examiners are noted.
- Updating material is not economical.

Using and integrating media in distance education

- Audio-visual programmes are not popular among teacher trainees. They prefer face-to-face instructors to audio-visual programmes.
- Academic staff is heavily burdened with other activities (planning, management, writing, marking, and conducting day schools), so it is very difficult to find time to produce good quality audio-visual material.

Instructional design and production for distance education

- It is difficult to simplify material while maintaining the quality of teacher training.
- Academics who have worked in the conventional university system have little faith in distance methods.

Learner support systems

- Participation in day schools and tutorials has been limited due to personal difficulties and geographical barriers.
- Decentralisation of academic and other support is difficult due to lack of facilities.

The most important issue: Monitoring and co-ordinating teaching practice

The OUSL recruits nearly 250 master teachers from all over the country to conduct teaching practice during the second year of the programme. They are full-time employees of other institutions like government schools, teachers' colleges, training colleges, or technical colleges. Therefore they tend to maintain their own schedule of involvement in the distance education programme so that it will not affect their day-to-day activities. Due to the enrolment of large numbers and geographical barriers, proper monitoring and co-ordination procedures cannot be maintained. This situation has led to the following problems:

- variability in guidance;
- difficulty in meeting deadlines;
- poor quality of supervision and guidance;
- practical difficulties faced by the students; and
- negligence of the supervisory role (they tend to act as evaluators but not as supervisors).

Solutions

On the basis of recent research findings and the experience of academic staff of the Department of Education, the following procedures were launched as solutions to the above problems:

- conduct workshops and seminars for master teachers;
- conduct demonstration lessons for student teachers in small groups; and
- the significance accorded master teachers' evaluation was reduced from 50 percent to 30 percent and a decision was made to consider it a continuous assessment of teaching practice.

Suggestions were also made to allocate 10 to 15 master teachers to each academic member of the Department of Education to monitor their activities. However, many problems remain unsettled.

University of Tanzania

Prepared by:

Dr. Eginu M. Chale

Brief description of the programme

University status

The Open University of Tanzania (OUT) is a pioneering tertiary level distance education institution. It is the third public university in Tanzania, but with a difference.

The Open University of Tanzania was set up after a history of more than half a century following the adoption of open and distance education as a strategy of increasing access to education in Tanzania. It is against this experienced context that the university came to be established by Act of Parliament No. 17 of 1992. The Act became effective on March 1, 1993, and the activities of the university were inaugurated in January 1994 when the first Chancellor was installed.

The university is a forerunner not so much in adopting the multimedia distance education approach, for even conventional universities are increasingly becoming dual mode, but in having been set up constitutionally as a single mode university. Apart from being independent, it is meant to be innovative, comprehensive in its programmes, as well as exclusive in its use of distance education, as certified by the Higher Education Accreditation Council of Tanzania (1996).

Location, boundaries, and mission

The three public universities in Tanzania to date are meant to serve the whole of the United Republic of Tanzania with a total population of about 30 million (1988) spread within 245,000 square kilometres.

While efforts have been in progress to grant the Open University of Tanzania a permanent home, for expediency, it began in temporary offices let by another institution. Finding those offices eminently suitable, the university has scheduled them to become their permanent home. They are located in Msasani township in Kinondoni, which is about seven and one-half kilometres from the Dar es Salaam city centre.

Despite being headquartered in Dar es Salaam, the university's campus in practical terms needs to be conceived as the whole of Tanzania and beyond on account of its out-reach delivery provisions of distance education, namely, print, broadcast, and occasional face-to-face contact at study centres. Thus, in order to be accessed, the complete address of both the head office and the out-reach regional and study centres need to be known.

The university's objectives and functions as provided for in the Act are two pronged. On the one hand it must offer the opportunity for formal courses to youth and adults leading to pre-degree, degree, and post-graduate awards, and on the other hand, it must provide continuing (non-formal) education programmes which do not necessarily lead to awards or qualifications. It is thus open to all students 18 years and older and from all walks of life. The university serves mostly working adults with or without full-time employment where and when they wish and at a pace that suits individual needs.

Organisational structure, decision-making machinery, and academic processes

Although at face value the university's organisational structure is elusively similar to a campus-based university, in practical terms the Open University of Tanzania's organisational structure provided for a considerable administrative flexibility inherent in multimedia distance education. The organisational structure takes into account the central responsibility of providing high quality education through such processes as the development and production of course materials, technology, integration in teaching, their distribution and storage, and the delivery of back-up services. It thus has a dual structure: it is partly centralised and partly, if not largely decentralised through the establishment of regional and study centres. While this duality defines power relations between the headquarters and periphery, it also defines delivery processes: specifically, course development, media technology integration, publishing and production, pedagogy and teaching, and student services. All these processes need to be conceived as integral components. Two separate charts are provided to illustrate structural relations and processes.

Chart I

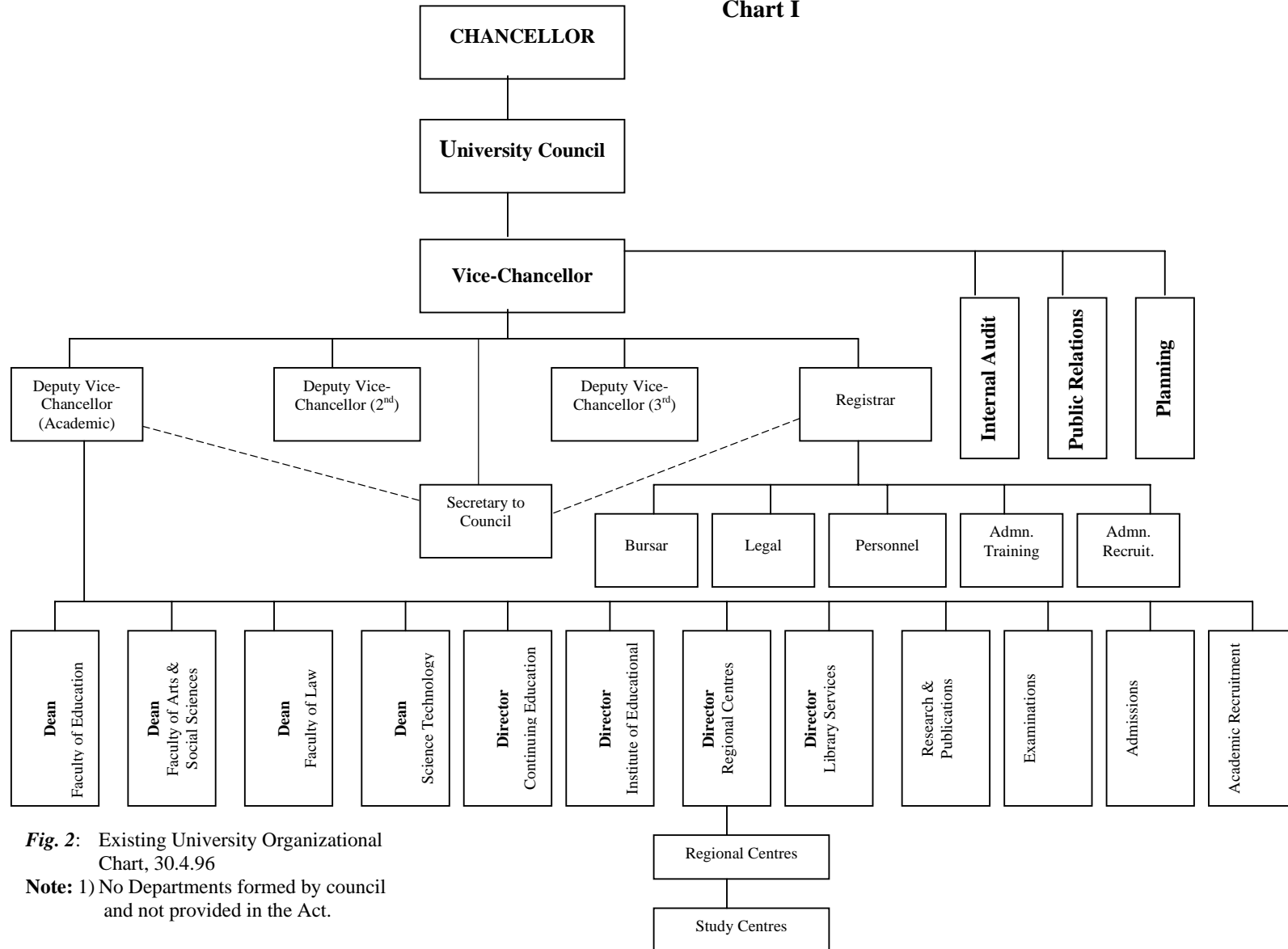


Fig. 2: Existing University Organizational Chart, 30.4.96

Note: 1) No Departments formed by council and not provided in the Act.

Chart II

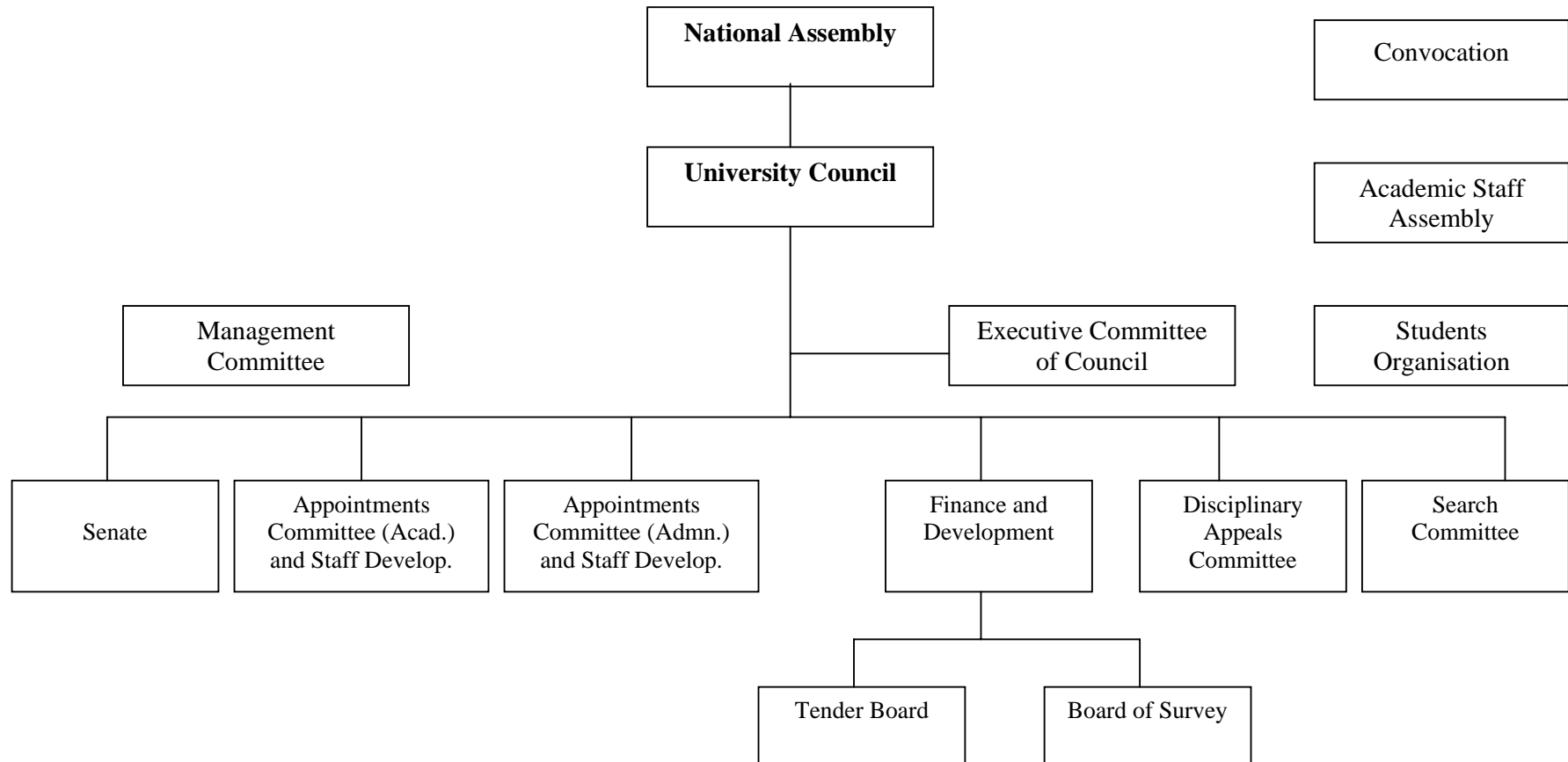


Figure 1: Existing University Decision Making Machinery April 30, 1996.

- NOTES:
- (1) No Departmental meetings are provided for in the Act now approved by Council.
 - (2) No Workers Council has been established or provided for in the Act by the Council.

The conically defined structure at the head office with the Chancellor on the apex as the head is the university administrative expediency designed to take into account of the national policies applicable to public institutions. The next in line is the Vice-Chancellor. He or she is the chief executive answerable to the Chancellor through the University Council, which is the supreme statutory institutional authority. Parallel to Council but in the academic arena, the top-most authority is the Senate. It is responsible for all academic matters. Below the dual authorities are both statutory and non-statutory organs, including the committees of the council, faculties, institutes, and boards. The Vice-Chancellor is assisted by three Deputy Vice-Chancellors and the Registrar (Finance and Administration). All of these four officers are responsible and accountable to the Vice-Chancellor.

The Open University of Tanzania's decentralised structure facilitates access to open and distance education for dispersed students who may on occasion be convened at regional or study centres. The regional centres are thus designed to co-ordinate and supervise the Open University of Tanzania's activities for students, tutors, and the public.

Staffing

With the priority given academic administration, the university is designed to operate with a proportionately small core of full-time officers (35 to date) and a large number of part-time staff (95). To accomplish its mission, objectives are made feasible through the rational use of contracted expertise and facilities of other public institutions. Currently there are five categories of full-time officers: executive, academic, administrative and management, technical, and operational or ancillary. Part-time staff, on the other hand, are of a wide range, both academic and non-academic. They are formally co-opted or contracted on a piece work basis as the need arises to perform behind-the-scene functions such as to writing study materials; reviewing them; setting assignments, tests, and examinations; and handling the production and distribution of learning materials. Thus the terms and conditions of service of the two principal categories of officers — full-time and part-time — are different in statutory terms. On the whole the qualifications prescribed by campus-based university for their staff are enforced here too.

Programmes, mode of study, and academic calendar

On its commencement in 1994 the Open University of Tanzania started with four degree programmes. The following year, three similar programmes were added and, in 1996, one more programme was brought up. Thus the Open University of Tanzania has a total of eight programmes on completion of its first three-year cycle: the Foundation Programme, Bachelor of Arts, Bachelor of Arts with Education, Bachelor of Science, Bachelor of Science with Education, Bachelor of Commerce, Bachelor of Commerce with Education, and the Bachelor of Laws. This array may appear to be quite ambitious but it is believed the range of under-graduate programmes reflect the great need for higher education in Tanzania.

For the mode of study, the degree programme is arranged in three parts, with each part corresponding to one academic year at a residential full-time university. All candidates for the Open University of Tanzania degree programme are meant to take

their courses by distance study methods. The main medium of instruction is through print materials. The main study materials for each of the subjects are called ‘units’, with each unit covering content materials equivalent to 35 one-hour lecture materials. Students are expected to spend a minimum of 70 hours studying each unit, spread over 10 weeks. Student support services are provided in the form of face-to-face teaching, audio cassettes, library services, and other learning media, laboratory exercises for science subjects organised at designated institutions, and teaching practice or field work for others as the disciplines may dictate. Theoretically, the pace of learning for Open University of Tanzania students (who are considered part-time learners) is designed at half the pace of the full-time candidates in the same course taught at the conventional universities.

To qualify for the award of the degree a candidate is supposed to have successfully completed study for the degree extending over a period of not less than six academic years. A study may take a maximum of two years on any one part provided that he or she does not exceed eight years in total. Earlier completion is possible for students who can set aside more time for their studies and whose progress from year to year is satisfactory.

In summary, the Open University of Tanzania as a national university is established to offer academic programmes to students throughout Tanzania. Its distance education method allows students all over the country to pursue higher education whenever and wherever convenient without interfering with their other personal, occupational, and vocational obligations. The institution attempts to offer an intricate and integrated distance education system that combines expertly formulated study materials and text books, 35 full-time staff and 95 part-time staff, a growing number of study centres throughout Tanzania, an exacting range of tutors as well as self-marked assignments, exams, and a multimedia programme of educational supplements. The flexible method of study effectively surmounts the obstacles of distance and time, making academic studies available to additional youth and adults hitherto prevented from studies by technical difficulties.

Problems encountered

Implementing quality assurance

The university has adopted and adapted various processes that enhance quality assurance. Alongside the development of its own study materials the university has made use of transferred materials produced by other open universities. On the other hand the development of its own materials has been accompanied by training workshops, completed either individually or by course teams. Completed draft learning materials are expediently taken to external course reviewers in place of subjecting them to trials by students.

The production of such materials also counts in one’s academic advancement as well as promotion. The university also liaises with all tertiary institutions in the country in order to benefit from their human and material resources. It has also established links with local business organisations, external universities, The Commonwealth of Learning (COL), the Association of Commonwealth Universities (ACU), Association of African Universities (AAU) and Association of Eastern and Southern African

Universities (AESAU). The Open University of Tanzania is thus keen in fostering close collaboration with relevant institutions, organisations, and agencies at regional, sub-regional, and international levels. It has built into its programmes formative and summative evaluation so that regularly the performance of the institution itself, its working tools and its products (students) are systemically determined through external examining. Thus, despite flexible entry qualifications, the university enforces vigorous quality assurance mechanisms and tight control over the standards.

Using and integrating media in distance education

Adoption of a multimedia approach is statutorily provided for in the university. Print has hitherto been the ‘master medium’ for teaching. It is supported by radio, audio cassettes, field work, and face-to-face sessions. Plans are underway to make use of television on completion of the establishment of a national network in the country. Interim plans in the regular use of the national radio broadcasting services initially thought to be free of charge has suffered a setback after its being transformed into a self-financing agency. Study centres are meant to be the focal point for student-to-student interactive learning and common listening and viewing of audio taped and video taped educational materials.

Instructional design and production for distance education

The didactic design of the university materials, in keeping with the central theory and practice of distance education, is marked with provisions of two-way communication. Their instructional design, unlike textbooks that smack of one-way instruction, reflect the dialogue and interaction processes of both teaching and learning.

Arising out of the instructional design is the convergence of two types of tutors: the course writer and the provider of student support services (that is, the course tutor). The two terms: ‘course writer’ and ‘tutor’ as used by people in higher echelons of distance education are but conceptual constructs that are mutually related. Regrettably, however, research to date in a number of distance education institutions seems to suggest that the training of the distance tutor is not given as much prominence as that of the course developer and producer.

The materials’ design and development are actuated through both individual and team approaches all the way through the planning, writing, reviewing, testing, typesetting, and editing. Their final production is done by appointed printing agencies. By and large this task is handled by both core and part-time members of the university.

Learner support systems

Provision of learner support services is embedded in the centralised and decentralised organisation of the university and staffing levels. It is designed to have a small but highly competent cadre of permanent academic, administrative, and technical staff at the headquarters and at the regional centres. Some decision-making processes should devolve to the periphery, where regional centres are used for such activities as face-to-face sessions, laboratory and field work, time-tests, and for final examinations. As discussed earlier, the centres are designed to be pivotal in the learners’ interactive activities. They constitute learning communities.

Up to the Open University of Tanzania's fourth year (1997), about 4,000 adult learners have seized the opportunity to benefit from its wide range of professional, business, and other courses at pre-degree and degree levels designed to meet the challenges of tomorrow. Post-graduate programmes are in the offing. By the end of 1998 about 1,000 students are expected to receive their degrees. Their spread is set out in the following table, which shows student distribution by: programme; year; and gender.

Programme	1994		1995		1996		1997		1998		Sub-total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
B.A.	173	15	47	4	54	7	45	5	50	5	369	36	405
B.A. Ed.	318	41	104	23	167	25	115	18	112	24	816	131	947
B.Com.	184	11	90	5	149	12	92	13	79	8	594	49	643
B.Com. Ed.	24	0	17	0	32	7	16	2	20	3	9109	12	131
LL.B.	-	-	329	26	445	36	300	33	260	35	1334	130	1464
B.Sc.	-	-	30	2	67	7	63	7	77	10	237	26	263
B.Sc. Ed.	-	-	51	10	85	8	38	8	50	13	224	39	263
Found.	-	-	-	-	194	34	182	41	189	60	565	135	700
TOTAL	699	67	668	70	1193	136	851	127	837	158	4248	558	4806

The most important issue: Learner support systems

Institutionalisation of student support systems at the university, as has been the case in a number of the Commonwealth member countries (The Open University of Tanzania (November 1993) *OUT Financial Regulations*, The Open University of Tanzania, Dar es Salaam, p. 1) has been threatened with relegation. This seems to have arisen out of an uncalled for traditional dichotomy between academic and administrative roles of such institutions. While course development, media incorporation, and the setting of assessments are taken as core academic activities, traditional student concerns such as admissions, registrations, study assistance, and the provision of learning materials and equipment as well as marking of assignments and provision of feedback tend to be probably inadvertently dismissed as of lower or less academic importance.

Instead of driving a wedge between integrated academic processes, institutions should strive to be held accountable for the whole of the academic administration. One of the most recent challenges the university has had to cope with is a daunting student:staff ratio on the average of 1:200, with correspondingly large submissions of assignments, tests, and examinations. This rise in student:staff ratio followed the government's adoption of a retrenchment policy (The Open University of Tanzania (1995) *OUT Staff Regulation*, The Open University of Tanzania, Dar es Salaam, p. 96) and a temporary freeze on employment that irrationally affected the nascent university. Faced with this challenge the Open University of Tanzania's officers put aside the accepted

dichotomy and addressed the problem related to the student record and management system with the view to improve and track the students while enrolled at the university to forestall drop-outs, withdrawals, and pushouts. In keeping with the university's commitment to excellence in teaching, scholarship, and public service, the student record management system project demonstrates the Open University of Tanzania's dedication to developing and supporting sustainable high quality courses and programmes.

Southern Africa Extension Unit

Prepared by:

M. J. Mntangi

Brief description of the programme

The Southern Africa Extension Unit (SAEU) is a distance education institution. Initiated as a project during the 1983 Commonwealth Heads of Government Meeting, the unit was set up in Dar es Salaam, Tanzania, in November 1984, to serve the educational and training needs of South African youths and adults living in exile in Eastern and Southern Africa. SAEU courses for the exiles focused on the foundation and secondary levels of education.

The SAEU took the following three transformational steps between 1990 and 1994 to cope with the repatriation of its traditional target group:

- introduced vocational courses to the students;
- extended the courses to the returnees in South Africa; and
- reviewed the future role of the target group to other refugees and non-refugees. The Local Government Councillors' Distance Training Programme is one radical outcome of the SAEU's transformation process.

The Local Government Councillors' Distance Training Programme targeted 3,700 local councillors scattered throughout mainland Tanzania. The main aim of the training was to enable the councillors to carry out their functions effectively under the newly introduced political system of multi-party democracy. The decision to appoint the SAEU to implement a distance education programme in the area of local government was prompted by the track record and the potentials of the unit in running other programmes that demanded the following features of innovative distance education institutions:

- ability to extend services to a large target group which is also widely heterogeneous and scattered across a wide area of territory;
- ability to deliver a quality-conscious course relatively quickly and at minimal costs; and
- flexibility of the institution and its training packages in building a resource base for adopting the skills and course materials developed for training other groups.

Problems encountered

Planning and managing distance education

- How to organise the training so that it could promptly reach a target group that was large, showed diverse characteristics, and was scattered over a large area of territory (four times as large as Ghana).

- How to produce course materials that could be accepted by councillors from several political parties using an unfamiliar teaching approach.
- How to get and maintain constant support for the main stakeholders of local government (that is, the central government, the local councils, individual councillors, professionals in the field of local government, and funding agencies); for example, how to solicit their co-operation by reviewing the project schedule against other divergent schedules and, in the light of long bureaucratic procedures observed, by some of the stakeholders.
- How to organise a huge training project with limited financial resources.
- How to design and make operable a learner support system making use of existing government structures.
- How to cope with difficulties of communication in the process of co-ordination and monitoring of course progress.

Implementing quality assurance

All the challenges encountered while planning and managing distance education can be considered to re-occur under the theme of implementing quality assurance. Others include:

- How to ensure that there will be maximum enrolment and minimal drop-outs.
- How to organise effective learner support services.

Using and integrating media in distance learning

- How to reconcile the inevitable bias on the print media and difficulties that would face councillors who are barely literate and those who cannot be easily reached by other simple media.
- How to get optimal benefits from face-to-face tutorials without causing excessive costs to the project.
- How the radio programmes could be utilised effectively to assist councillors; in situations in which reception was poor along the borders remote from Dar es Salaam, councillors' initial and subsequent training could not be paced.

Instructional design and production for distance education

- How to cope with the extreme range of educational levels of the target group (some councillors possess post-graduate level qualifications while others have barely completed primary education), as well as their wide age groups.
- How to make the course materials adequately interesting, resourceful, and acceptable to such a diverse target group.
- How to distribute large quantities of course materials over long distances with a relatively poor network of communication.

Learner support systems

- How to take advantage of the benefits of face-to-face tutorials but minimise unit costs in the light of the high costs of organising councillors' meetings.
- How to locate study centres for face-to-face tutorials in rural councils where some wards are several hundred kilometres apart or separated by difficult physical barriers.
- How to ensure standardised scales for assessing councillors' assignments whereby the number of part-time tutors is large (more than 300) and their professional backgrounds differ significantly.

The two most important issues

Experiences dealing with challenges in planning and managing distance education

- Two basic strategies were set up in order to deal effectively with the process of operation of the project and ensuring a smooth flow of information among the stakeholders. The first was the setting up of a Project Consultative and Advisory Committee and the other was to decentralise the management and training functions to the regional and district and council level.
- All the major activities of the project planned and carried out by the implementing agency (the SAEU), including course design, identification of course writers and editors, course pilot and review, support services and funding were presented to the Project Consultative and Advisory Committee for input and final approval. The members of the committee were drawn as follows:
 - Prime Minister's Office, as the Ministry responsible for local government and regional administration;
 - Association of Local Authorities of Tanzania (ALAT);
 - Local Government Service Commission (LGSC);
 - Local Government Training Institute, Hombolo;
 - Commonwealth Local Government Forum (CLGF); and
 - Southern Africa Extension Unit (SAEU).

The committee was expected to meet on a quarterly basis and whenever there was an issue requiring its decision. The committee facilitated the flow of information to the relevant authorities of the government as well as to the grassroots levels, including the target group.

- SAEU played a significant role in training the trainers and co-ordinators of the programme. Trainers for this programme were located at three levels — the SAEU head office, regional local government offices, and the district and council level.

As a result of the large number of trainers required (more than 300) at the regional local government and district and council levels and the extreme dispersion of their working stations across the territory, the training of trainers task was partly decentralised as a cost-cutting measure.

The SAEU conducted short, intensive training for the regional co-ordinators in national level workshops. The regional co-ordinators and tutors subsequently conducted training workshops for the council co-ordinators and tutors in their regions after reviewing with the SAEU the peculiarities of their councils.

- Management operations of the project were also decentralised on the basis of the national administrative blocks into 20 regions each co-ordinated by a regional local government officer, and 110 districts councils, each co-ordinated by a district executive director and course tutors. All the staff at regional and council levels worked on a part-time basis as project tutors as well as project co-ordinators at their own levels of operation. The district level was expected also to assist in the sustenance of the project by meeting part of the costs of the tutorial support services from the council sources.

Experiences dealing with challenges in implementing quality assurance

The following measures were taken to promote the quality of the services and materials rendered to the project:

- accommodating a wide range of experiences in the preparation of the course materials and in the organisation of support services;
- appreciating the special role of sensitisation and initial training in promoting enrolment, minimising drop-outs and contributing to the sustenance of the project;
- focusing on the course materials and support services sharply onto the target group — some councillors were at an advanced age, other councillors had a poor educational background;
- making optimum use of the pilot study — course materials and the network of support services were improved on the basis of experiences gained from the pilot study; and
- conducting close monitoring and evaluation of progress including maintaining constant liaison with the field staff.

The following three issues illustrate the approaches taken by the SAEU in promoting quality in the implementation of the project. The issues focus on experience sharing, pilot study, and sensitisation initial training — only two cases will be explained.

Experience sharing

- The main forum for sharing experiences in the project was during the meetings of the Consultative and Advisory Committee. Other opportunities for experience sharing were achieved during the editors and review workshops, training seminars for the regional local government officers, and training seminars for district and council level co-ordinators and tutors and the councillors.
- Experiences from outside Tanzania were accommodated by incorporating a member of staff from the Local Government Training Institute, Mombasa-Kenya, in a workshop that reviewed drafts of the course materials in September 1995.

- As a result of effective sensitisation, adequate inputs were made by the field staff during the pilot study. Inputs made during the pilot study provided important guidelines for improving the course materials and the support services.

Sensitisation

The processes of sensitisation and initial training were intended to achieve the following goals:

- make the relevant people clearly aware of the project objectives and demands expected of them;
- promote enrolment level; and
- minimise drop-out level.

Sensitisation was achieved through the following means:

- meetings of the Consultative Committee;
- meeting with the relevant authorities of the local and central government;
- presenting papers during meetings organised by the Association of Local Authorities of Tanzania (December 1995 and December 1996) and in forums discussing training in local government; and
- preparing and transmitting radio programmes.

Initial training

Initial training seminars and workshops were organised for the regional and district or council level project co-ordinators, tutors, and for the councillors in order to:

- sensitise them on the project; and
- give them adequate background about the course materials and the distance education approach.

Makerere University

Prepared by:

Juliana R. Bbuye and Jessica N. Aguti

Brief description of the programme

Makerere University is a dual mode university running two external degree programmes (Bachelor of Education and Bachelor of Commerce). These courses are run by the Department of Distance Education, which is part of the Institute of Adult and Continuing Education. These programmes are run in collaboration with the Faculty of Commerce (for the Bachelor of Commerce) and the School of Education (for the Bachelor of Education). The two faculties are responsible for the academic component, while the institute is responsible for the administrative component.

The External Degree Programme (EDP) is governed by the general regulations of the university. No special regulations were drawn to govern the External Degree Programme, an arrangement that has ensured the External Degree students receive the same quality of course content as internal students. However, without regulations that fully consider the needs of the external student, the programme has been affected by bureaucracy. As a result, the pace of various activities required for the smooth running of the programme has sometimes been slow.

The External Degree Programme study package consists of:

- print materials;
- face-to-face sessions;
- assignments and tests and quizzes;
- student study groups; and
- audio cassettes.

The External Degree Programme admits students every academic year and at present has 2,200 students.

For administrative purposes, the Department of Distance Education is divided into three units: Materials Development Unit, Tutoring Unit, and Support Services Unit. Each of these units is headed by a lecturer. The Department's major concern is the provision of External Degree Programmes but it is also in the process of developing short courses which include 'Skills for Research Assistant', 'Writing and Publishing', 'Marketing', and 'Income Generating Activities'. Written materials for these courses are being developed now.

Problems encountered

Planning and managing distance education

The planning and management of distance education programmes in Makerere University is greatly affected by a lack of clear policies on the running of distance education programmes. Neither are there clear policies on staff recruitment and development, student registration, or library and support services for students. Instead, all are governed by the general university regulations, disregarding the special needs of distanced education programmes and students.

Implementing quality assurance

Makerere University is a dual mode university. The university therefore feels that to ensure quality, students in the External Degree Programme must sit the same examination as internal students at the same time. This has particularly been the case for the Bachelor of Commerce programme.

Course delivery and course assessment structure for the external students is not yet satisfactory. There is a general lack of reading materials, insufficient contact with tutors, and lack of a personal tutor scheme.

The tutors participating in the External Degree Programme are lecturers in the internal programmes. They already have full loads and see the activities of the External Degree Programme as an extra load. Consequently, the assignments and tests given tend to be easy to mark and do not encourage in-depth study and research. These assignments and tests end up examining mainly surface learning.

Using and integrating media in distance education

Integration of media in the Makerere External Degree Programme has been a problem, caused by the delay in the production of print materials. A situation has therefore arisen in which the cassettes accompanying print materials are ready but, due to delays in publishing the print materials, they cannot be used. To a large extent students still depend on print materials. Radio and computer-based learning are difficult to integrate because of a scarcity of resources.

Instructional design and production for distance education

The process of instructional design and production has been very slow. The causes of this slackness are:

- inadequate staffing;
- lecturers who are supposed to develop and review materials are busy;
- lack of sub-editors to assist the principal editor;
- delays at the publishing stage due particularly to the long process of procuring funds; and
- delays by the publishing firms.

Learner support systems

There is no clear learner support system in the External Degree Programme. The programme began with no clear system and, due to a lack of resources, is evolving very slowly. Student study centres are being started in the different regions as a response to student demands rather than as part of a clear scheme.

The two most important issues: Developing a learner support system and developing study materials

Developing a learner support system

Learner support systems in Makerere Distance Education Programmes have not yet been fully developed. At the planning stage of the programme the role of the extramural centres, for example, which were supposed to play a vital role in the support system, was not fully defined. As a result, administrators, tutors, and students of the programme have failed to utilise fully the potential offered by these centres. Support is therefore very much centralised despite the scattered nature of students, who come from all over Uganda.

The scarcity of funds has made the personal tutor arrangement difficult to implement. The radio and television services have not yet been effectively used because many of the students, especially those who live in remote areas, cannot afford the accessories. It has also been difficult to use a multimedia approach to provide student support, largely due to inadequate staff and funds. For example, counselling on the telephone is almost non-existent since it is expensive and telephone services are not available in most remote areas. Students are therefore left to study mostly on their own with little support.

Support available to students

Learner support in Makerere University is provided in a variety of ways.

- On admission, students receive information about the programme through the prospectus and the study guide. They receive two weeks of orientation, which enables them to receive more information concerning the programme, guidance on subject combinations and study skills, and to interact with each other. It is also mostly during that orientation week that they form their study groups.
- The university main library and all off-campus library branches offer library services. The department also operates a small collection of rare books.
- Study groups have also been started, are located in existing education institutions, and meet mostly on weekends.
- Other groups meet in the evenings on campus to solicit the services of tutors.
- Hand-outs and other references are provided to students.
- Occasional visits are made by members of the Department of Distance Education to some of the study centres to meet with the students and to obtain feedback on their progress. The visits assist the department in the planning of materials distribution and preparation for face-to-face sessions.

Student study groups

Mainly because of a lack of study materials and the problems associated with remoteness from the centre, students have organised themselves into strong study groups. The study groups meet mostly on weekends to review previous work and discuss difficult assignments. Ongoing research has shown that groups are mainly found in areas where there is a concentration of students, not necessarily at the extramural centres. The radius of these clusters is as great as 50 kilometres so the department is encouraging students to form groups based on these clusters. This will assist the department to provide services to the students by establishing convenient centres where materials can be kept and students can go to read. These may later be developed into resource centres.

Personal tutors

Students have expressed their need for personal tutors. The department has also realised the urgency of establishing a strong network of personal tutors who will assist students in academic and socially related problems. Centralised support services are insufficient to cater to the large number of students. The total population of students on the External Degree Programme is more than 2,000.

The personal tutor scheme, it should be noted, has not been implemented in Makerere because of a lack of funds. A cheaper scheme can possibly be designed, for example, one in which the principals of teacher training colleges and qualified staff in other institutions and banks can be involved on a part-time basis in assisting students. They would, however, need training in handling distance learners.

Developing study materials for the External Degree Programme

The External Degree Programme was launched in 1991 and at that time no study materials had been developed. Instead, through financial assistance of The Commonwealth of Learning (COL), Makerere was able to purchase written materials from Nairobi University and from the Open College UK. This acquisition of study materials was a 'stop gap measure' that enabled the programme to take off.

Purchasing materials from other institutions is good as a 'stop gap measure' but in the long run it has proven too expensive. The department has not been able to continue doing this. Also, courses can be deceptively similar on the surface, giving the impression that they are identical when there could actually be deep set differences. Where materials are purchased, there may be need for the institution buying these materials to develop supplementary materials that would ensure the students needs are fully met.

In the External Degree Programme, written materials were viewed as the core of the learning package, so to ensure that Makerere University produces its own materials COL funded the initial writers' workshops. Since then, the Department of Distance Education has run a number of other writers' workshops. As a result a total of 40 units are at different stages of development with only five published so far. Clearly, this is far below the needs of the External Degree Programme and so the shortage of study materials is still acute.

To deal with this, the department has chosen a number of options, as follows.

Handouts

In nearly all the subjects, but more especially in subjects for which no written materials have been developed, students are given handouts. These may be handouts developed by the lecturers but which are not written in the distance education mode or they may be extracts from texts. Handouts are important but should be seen as either another 'stop gap measure' or supplementary reading material. To meet the needs of the distance learner it is still imperative that materials written for the distance learner be developed.

Face-to-face sessions

Face-to-face sessions should be part of the study package but, because of inadequate study materials, a lot of time is allotted to them, which is expensive to both the students and the department. Also, there is the danger of the External Degree Programme students beginning to rely entirely on these sessions even in subjects in which study materials are available.

Student study groups

Student study groups are also part of the study package but, like the face-to-face sessions, they have taken on a different meaning, particularly in the Bachelor of Commerce programme, where the shortage of materials is worse. The students now rely so much on the student study groups that sometimes meetings are held daily as though they were a conventional evening programme.

Conclusion

In any distance education programme, there is no replacement for study materials. Ideally, they should be developed even before the programme is launched and, where this is not possible, production should be guaranteed. If materials must be purchased, then care is needed in the selection and, where necessary, supplementary materials should be developed.

University of Lincolnshire and Humberside

Prepared by:

David Lippiatt

Brief description of the programme

The University of Lincolnshire and Humberside has some 13,000 students attending full-time and part-time courses on-campus but, since 1993, the university has been franchising some courses off-campus. In order to promote assurance of quality in these courses, the university supplies comprehensive sets of materials to support lecturers in other institutions. Building on this experience in materials provision, in 1994 the university began to develop distance education materials for 'top-up' courses that would enable students with a diploma level qualification to study for an honours degree.

Following the well-researched identification of a potential market, academic design of the course was quickly followed by design of the form that such distance education provision would take. Now in 1997 the course is up and running with some 800 students using the materials through a network of approved centres both in the United Kingdom and overseas.

Problems encountered

Planning and managing distance education

- Although there is now widespread experience of matters relating to the planning and management of distance education, in fact, given the organisational structures within which we originally undertook this development, with advisors in one department and producers in another, the early stages of the project were fraught with difficulties. Part of the difficulty resided in the fact that directions were being given at an awkward distance; serious progress only began when 'management by leadership' was introduced and a managing editor was given direct responsibility for 'producing the goods'.

Implementing quality assurance

- In line with commonly understood standards and procedures, a quality assurance system had been created but to some extent this was theoretical, and experience showed the importance of drawing up such procedures in the light of local capabilities and particular market requirements. There is no point in designing idealised quality systems which in practical fact do not fit with customer requirements nor institutional capabilities.

Using and integrating media in distance education

- Given the academic design of the course in business and management, some ready-made materials were available in a variety of media, but their principal weakness was that they could only have been adapted to meet the requirements of the course at uneconomical expense. There was the requirement that ‘distant students’ should be receiving university brand materials not substitute materials however good they might be. Print-based technology was adopted because it was manageable by both the supplier and consumer with the expectation that use of further media would be adopted at a later point as the need arose and as economic returns justified its use.

Instructional design and production for distance education

- Materials were developed for each unit of the course in the form of study guides centred on published core texts. This model permitted lecturers to depend on the texts for conveying content with motivating and explanatory text of their own in the study guides. Local arrangements with a book retailer who in turn made arrangements with publishers spread the cost of assuring access to large supplies of textbooks and ensured sufficient ‘buffer’ to guarantee at least six months’ life ahead for any one unit. The book retailer got the business and the university had assurance of a safe life for its units.

Learner support systems

- The best of materials do not support themselves so that local tutorial arrangements with approved centres were, and are, vital to the success of this distance education provision. Following the development of staff in centres, the maintenance and cultivation by the university of good relations with centre staff is as important a part of the process as the direct relation they have with the student.

The most important issue: Developing learning materials

The most important issue is difficult to isolate, but time and time again the difficulties encountered in the development of materials are purely the result of rushing things at the planning stages. It is not that the problems are overlooked or unforeseen at the outset but that pressures to start delivering the goods force the course developer to keep on using up safety spaces built into the project plan. This is not so much the result of not knowing how long it is likely to take to carry out a particular task nor of making a mistake in allowing for its duration. In fact, it is ironically the case that since the originally scheduled project is working, other commitments come to be made which, in effect, overlay the first plan. Success might breed success but it also breeds the pressure to succeed even more.

From one management point of view, this is understandable because few of us are working within fixed project time scales. We are frequently working within very fluid markets where flexible responses are required — reallocating resources on an almost daily basis so that project management is about redefining projects every day. The difficulty is to keep on managing things in such a way as to maintain confidence by fulfilling commitments made at one point while constantly readjusting dates to accommodate new projects.

But there are limits beyond which quality is in danger of being compromised and so, from another management point of view, one of the most important issues is to recognise those limits and refuse to cross them.

Napier University

Prepared by:

Sally Anderson

Brief description of the programme

Napier is one of the largest universities in Scotland, with more than 11,000 students. The university is organised into five faculties: Arts and Social Science, Engineering, Health Studies, Science, and the Napier Business School. The university takes its name from John Napier, inventor of logarithms, who was born in the Tower of Merchiston in 1550. The Tower is now an integral part of the Merchiston campus.

From its early days as the Napier College of Science and Technology, which opened in 1964, Napier has grown steadily, in 1974 merging with another institution to become the Napier College of Commerce and Technology and later becoming a polytechnic. In 1992, in recognition of its achievements, the polytechnic was given consent to adopt the title Napier University.

Delivery in Mauritius

Napier University is offering a number of courses in Mauritius in areas such as Economics, Computer Studies, and Management. These courses cover a range of levels, including the higher national certificate, a full Bachelor of Arts (Honours) in Economics, and a post-graduate diploma in computer studies.

It is an important feature of all Napier's flexible learning projects that the courses are owned and delivered by the relevant academic department, rather than by a central unit. There is, however, a central support team who work with the academic department by providing advice, editorial and production assistance, project management expertise and staff development and training where required. Quality assurance procedures for distant courses follow the same route within the university as does any conventionally delivered course. The media used for delivering flexible learning in the university are varied, and are chosen with careful investigation of what is available to students. In the case of Mauritius, print-based delivery was the most accessible, with some limited computer and software usage.

For students at such a distance, with cultural and language differences from the delivery institution, support was of some concern, and a comprehensive strategy was developed.

- To establish a local base, we work with the Ministry of Education and related organisations (such as the National Computing and Information Technology Resource Centre) and for each course a local administrator acts as a liaison with Napier.

- Local tutors are recruited in accordance with requirements laid down by Napier, and they provide frequent and regular tutorials throughout the year. E-mail and fax allow local tutors and the local administrator relatively easy contact with Napier staff in Scotland.
- Napier staff travel to Mauritius at least twice per academic year. Not only do they work with students there, more importantly, they provide training and assistance to local tutors.
- All study materials are scrutinised by the project consultant, who is both a member of Napier staff and a Mauritian national, to ensure their applicability culturally and with regard to language level.

So, the course runs as follows: students attend a summer school at which they meet local tutors and Napier staff. This is an opportunity for students to explore exactly how they will study and develop some study skills appropriate for flexible learning, as well as to cover some initial content. They then study by means of flexible learning study materials prepared and supplied by Napier, with regular tutorials and opportunities to use computer facilities. A winter school with Napier staff and local tutors allows examination revision and clarification of problems. Formative assessment is done by local tutors with Napier moderating a random selection of written assignments, and final assessment is set and marked by Napier staff.

This model has proved very effective and a number of cohorts have graduated successfully.

The University of Zambia

Prepared by:

Richard Siaciwena

Brief description of the programme

The University of Zambia is a conventional university that has been operating a comparatively small scale distance education programme since it was established in 1966. Distance student enrolments vary from year to year. In the 1995–96 academic year, for example, 381 distance students (326 male and 55 female) were enrolled, constituting 9.8 percent of the total university enrolment of 3,980 (that is, full-time, part-time, and distance studies).

There are 68 first- and second-year level semester courses offered to distance students by the schools (faculties) of Education, Humanities and Social Sciences, and Natural Sciences. These lead to the award of the Bachelor of Arts, Bachelor of Arts with Education, and the Diploma in Adult Education. However, students who enrol for the Bachelor of Arts and the Bachelor of Arts with Education degree programmes must transfer to full-time study for their final two years. The Diploma in Adult Education can be completed entirely by distance education.

Problems encountered

Planning and managing distance education

- In the past the distance education programme has suffered from the lack of a clear and comprehensive policy, inadequate funding, and long bureaucratic procedures through which matters relating to distance education are referred to the university's policy- and decision-making bodies. An additional problem is that the Directorate of Distance Education does not always find it easy to establish its authority over the overworked teaching staff, who are inclined to regard requests and instructions from the directorate as carrying less weight than those given by their teaching departments relating to internal teaching.

Implementing quality assurance

- There is neither a policy nor mechanisms or strategies for implementing or assessing quality in distance education, a phenomenon that has made distance education more variable in quality than should be the case. In the past, this has been compounded by the lack of trained staff (in distance education) and the difficulty in retraining teaching staff so that they become more proficient in distance teaching.

Using and integrating media in distance education

- Print materials are the predominant medium of instruction complemented by a four-week intensive face-to-face teaching programme. The comparatively under-developed telecommunications technologies make it difficult to use and integrate other media in distance education, resulting in a weak two-way communication system.

Instructional design and production for distance education

- There is no uniform policy or practice on instructional design or course presentation and there is very little input into course design from experts and professionals in the Directorate of Distance Education. The course production capacity of the Directorate of Distance Education is very limited and, therefore, it is not capable of supporting and facilitating efficient production and speedy delivery of study materials to the learners.

Learner support systems

- Some of the support services offered by different departments and units are not fully integrated into the distance education system as a whole and the Directorate of Distance Education can exercise no sanction for any failure on the part of various providers to offer efficient support services to distance learners. Most of the support services are centralised and the comparatively under-developed telecommunications infrastructure limits the range of learner-support services and the media through which they are provided.

The most important issue: Planning and managing distance education

Some policy and organisational changes instituted in the 1990s have helped to minimise a number of problems that, over the years, have affected the planning and management of the distance education programme.

- Unlike the report on the establishment of a university in Zambia which provided broad aims, the University of Zambia's *Strategic Plan: 1994–98* offers more specific and more comprehensive policy provisions for the development of distance education.
- Distance education, once part of the Centre for Continuing Education, was transformed into an autonomous Directorate of Distance Education in 1994. Its director, like deans of schools and faculties, is accountable to the Vice-Chancellor, and is a member of the Senate and its various committees. A Senate Committee on Distance Education, chaired by the Deputy Vice-Chancellor, was established as part of the new structure of distance education. Its main functions are to consider and formulate policy on distance education and recommend to the Senate, rules and regulations governing the distance education programme.

Solutions

These changes have not only improved the decision-making process but have also enhanced the status and visibility of distance education in the university.

- Distance teaching staff are now paid allowances for: all work on study materials prepared; every hour of lectures and tutorials during the residential school; and for

each assignment and examination script marked. Although the current levels of allowances are not commensurate with the distance teaching responsibilities of the affected staff, they have had, in general, a positive effect on the running of the distance education programme.

- It has been realised that it is important and necessary for the Director of Distance Education and staff to meet regularly with distance education staff. Unlike Boards of Studies meetings (which also discuss matters relating to distance teaching) meetings with the distance teaching staff are more focused. Decisions or recommendations from these meetings can be referred direct to the Senate or to the Senate Committee on Distance Education.

Perhaps one important lesson to be learned from the experience of the University of Zambia is that, in a dual mode university, the administrative and financial autonomy as well as various incentives for teaching staff are crucially important. A lot more has yet to be done in these areas at the University of Zambia.

Characteristics of Open and Distance Learning

separation of teacher and learner

institutional accreditation

use of mixed-media courseware

two-way communication

possibility of face-to-face meetings

use of industrialised processes



Distinguishing the Types of Open and Distance Learning

correspondence
education

home study

independent study

external studies

continuing education

distance teaching

self-instruction

adult education

technology-based or
mediated education

learner-centred
education

open learning

open access

flexible learning

distributed learning



Scenarios for Open and Distance Learning

	Same Time	Different Time
Same Place	1	2
Different Place	3	4



Barriers that Open and Distance Learning Overcome



physical distance

time or scheduling problems

limited number of places available

low or dispersed enrolments

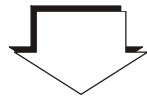
limited number of teachers available

cultural, religious and political considerations

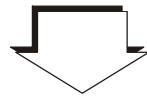


A Systems Approach to Open and Distance Learning

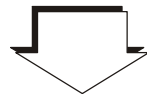
analyse



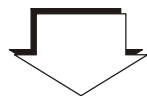
design



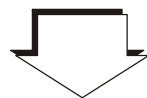
develop



implement



evaluate



revise

Functions of Open and Distance Learning

- obtaining and managing resources
- developing or acquiring programmes
- recruiting and promoting
- producing, storing and disseminating materials
- enrolling and registering
- delivering programmes and courses
- providing learner support
- examining, crediting and granting credentials
- evaluating and revising processes and programmes
- training and developing staff



Achieving Quality

Quality assurance *measures taken to
avoid faults*

Quality control *measures taken to
remove faults*



Basic Points of Total Quality Management

Focus	<i>Internal and external customers</i>
Definition	<i>Meeting customer requirements</i>
Scope	<i>Every aspect of the organisation</i>
Responsibility	<i>Everyone</i>
Standard	<i>Right the first time (fitness of purpose)</i>
Method	<i>Prevention not detection</i>
Measurement	<i>Zero defects</i>
Culture	<i>Continuous improvement</i>



The Five Why's

Q: Why did ...

A:

Q: Why?

A:

Q: Why?

A:

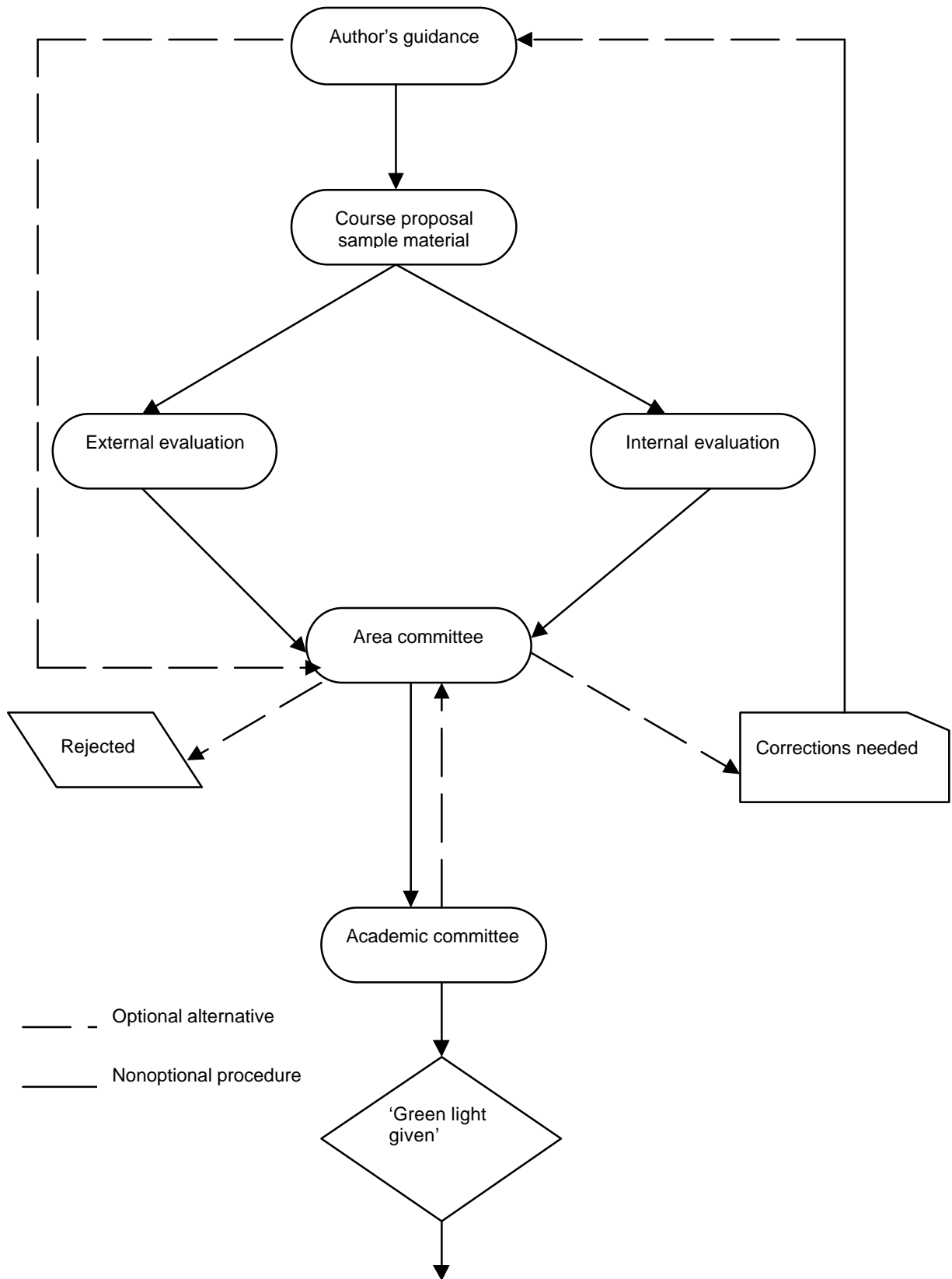
Q: Why?

A:

Q: Why?

A:

Flow Diagram



Pareto Analysis

Top Five Complaints

Frequency

50 100 150 200 250 300 350

Set text not available at
start of course



Not enough set texts available
for number of students in class



Hours of bookstore inconvenient
for students who work part-time



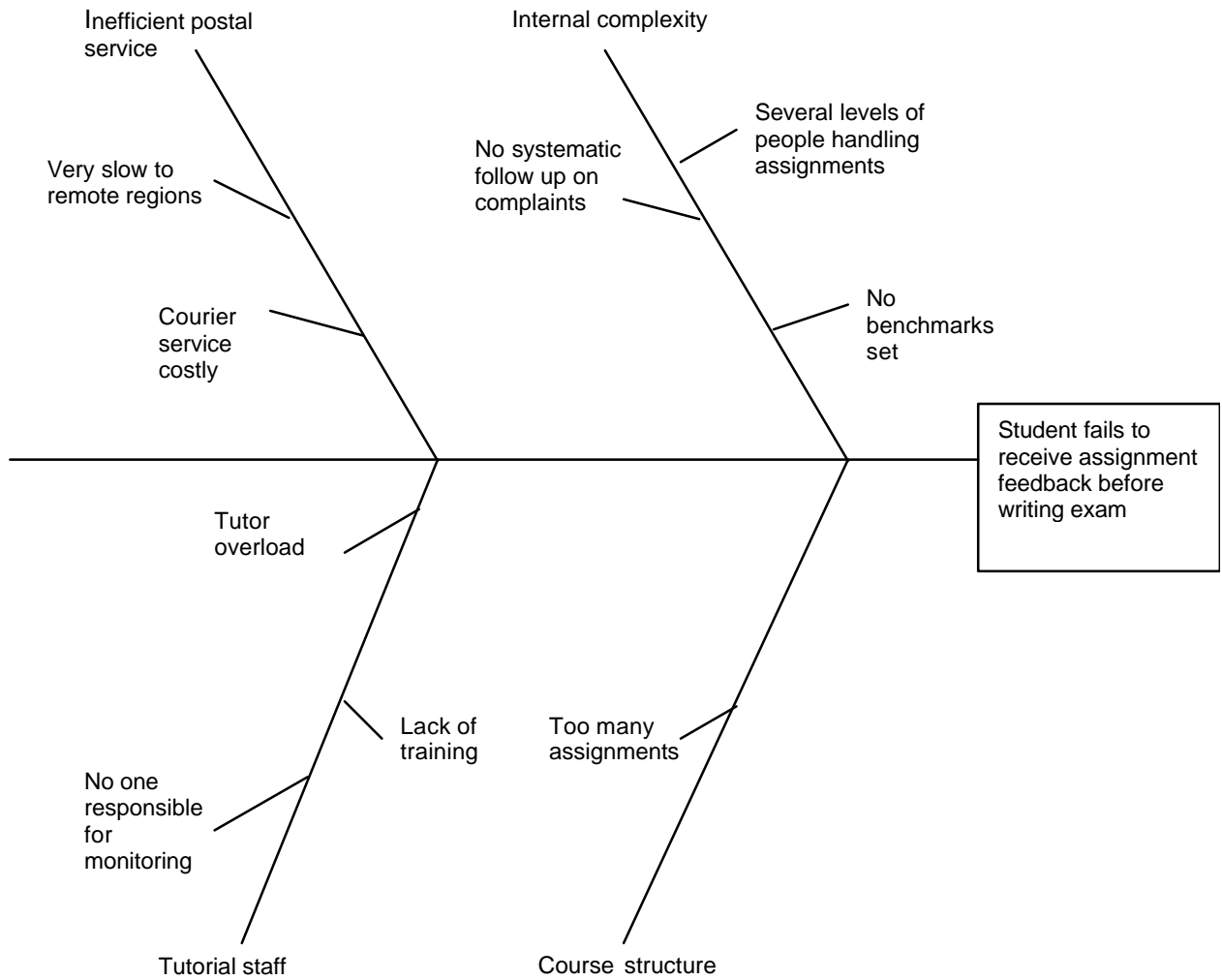
Far too many set texts prescribed
at too high a cost



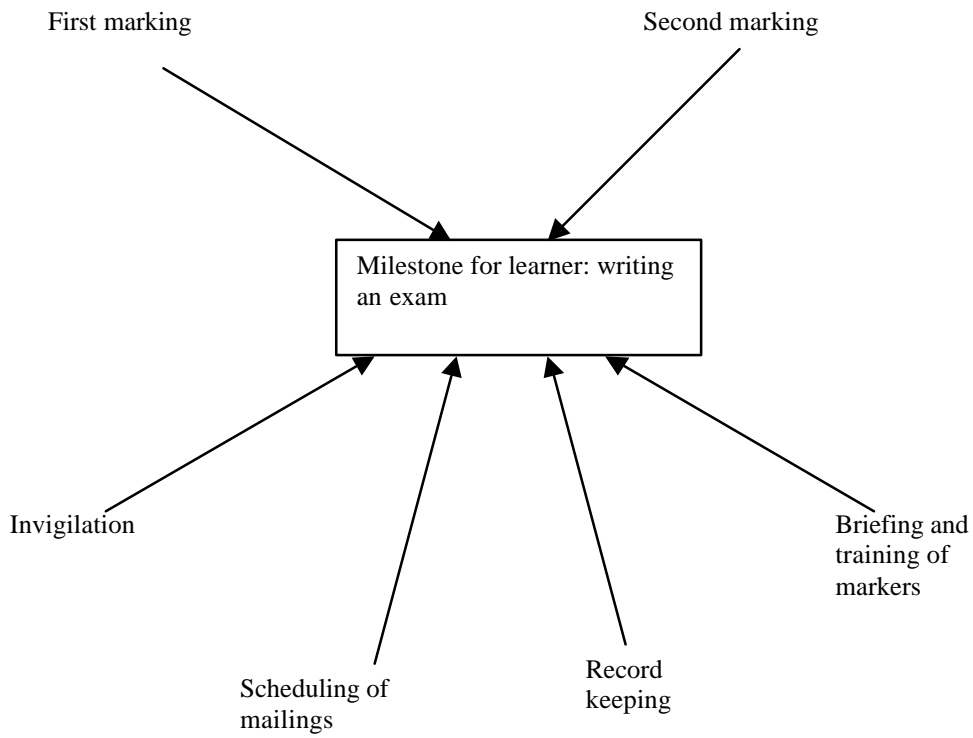
No used-book sales scheme
in place



'Fishbone' Diagram



Milestone Map



Aspects of Quality in Open and Distance Learning

PRODUCTS AND OUTPUTS

courses and materials

graduates and completers

examination pass rates



PROCESSES

learning and teaching

advising and tracking learners

record keeping

co-ordinating groups of external writers

PRODUCTION AND DELIVERY SYSTEMS

course production

print production

scheduling and progress monitoring

warehousing and stock control

dispatching materials

transmission of broadcast programmes



PHILOSOPHY OR ETHOS

policy statements

staff attitudes

management and training of staff

motto or slogan

images and messages to public

Problems Distance Learners Face

- isolation
- difficulty organising studies, study space
- difficulty finding sufficient time to study
- difficulty balancing work, study and family
- lack of motivation
- lack of resources and equipment
- poor study techniques
- difficulty receiving timely and useful feedback



Special Needs of Distance Learners

information

contact

institutional identity

advice on how to study



Types of Non-Instructional Support

admissions and registration

- marketing

- facilitating applications

- making offers

- registering learners

- matching learners with courses

counselling

- financial

- family

- motivation

- time

- balancing commitments

- physical barriers

administrative

- office hours

- name of tutor

- who to contact with problems

- deadlines

- examination dates

finance

- scholarships and loans



Steps in Curriculum Development

decisions on programme structure

formulation of aims and objectives

decisions on content

teaching strategy and methods

media choice

assessment techniques



evaluation

Decisions in Curriculum Design

- stakeholder analysis
- identifying learning and training needs
- programme structure
 - on-campus or distance?
 - content orientation?
 - adopt or adapt existing material?
- approaches to programme structure
 - pedagogical
 - key events
 - metaphorical
 - ideas



Mechanisms for Managing Staff at a Distance

- clear role descriptions, expectations and reporting lines
- thorough induction and orientation
- frequent and effective two-way communication
- opportunities for face-to-face meetings
- frequent performance monitoring and review
- accurate and efficient records systems
- continual updating on changes in policies and procedures
- opportunities for input into decisions that affect their work



Training Needs in Open and Distance Learning

- Why is training needed?
- When is training needed?
- What kinds of staff need training?
- What problems do organisations face when implementing staff training?
- How closely is training linked to the strategic goals of your organisation?
- What are the steps in implementing a training program?
- What modes of training are available?
- How is a training needs analysis conducted?
- What needs to be done to make training immediately useful on the job?
- How can training be evaluated?

