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PLANNING AND IMPLEMENTING OPEN AND  
DISTANCE LEARNING SYSTEMS:

A HANDBOOK FOR DECISION MAKERS

# THE COMMONWEALTH OF LEARNING

The Commonwealth of Learning is an international organisation established by Commonwealth governments in September 1988, following the Heads of Government Meeting held in Vancouver in 1987. It is headquartered in Vancouver and is the only Commonwealth intergovernmental organisation located outside Britain.

The purpose of The Commonwealth of Learning, as reflected in the Memorandum of Understanding, is to create and widen access to education and to improve its quality, utilising distance education techniques and associated communications technologies to meet the particular requirements of member countries. The agency's programmes and activities aim to strengthen member countries' capacities to develop the human resources required for their economic and social advancement. They are carried out in collaboration with governments, relevant agencies, universities, colleges and other educational and training establishments, among whom it also seeks to promote cooperative endeavours.

The Chairman of the Board of Governors is Mr Lewis Perinbam, OC; the Commonwealth of Learning's President and Chief Executive Officer is Dato' Professor Gajaraj Dhanarajan.

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ISBN 1-895369-91-6

Published by:

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# CONTENTS

<b>Introduction</b>	5
<b>Unit 1: THE TARGET GROUP AND THEIR NEEDS</b>	27
<b>Unit 2: STRATEGIC ODL PLANNING</b>	37
<b>Unit 3: STRATEGIC BUSINESS PLANNING IN ODL</b>	63
<b>Unit 4: DEVELOPING AND ACQUIRING MATERIALS</b>	79
<b>Unit 5: TUTORING AND SUPPORTING STUDENTS</b>	113
<b>Unit 6: RECRUITING AND ENROLLING STUDENTS</b>	149
<b>Unit 7: ASSESSING STUDENTS</b>	161
<b>Unit 8: MANAGING AND ADMINISTERING THE SYSTEM</b>	175
<b>Unit 9: EVALUATION</b>	191
<b>Bibliography</b>	203

This book is one in a developing series of handbooks for practitioners in Open and Distance Learning (ODL). The series covers the key roles and functions of ODL systems from the practitioner perspective. The purpose is to give practitioners advice and guidance about their tasks, functions and roles, and to enable practitioners to reflect on the critical issues they face. In this way, the series aims to model good ODL study materials and to provide key study materials for ODL training. In developing this series, the Commonwealth of Learning (COL) seeks to address the needs of ODL for accessible and practical training materials for professional development. Each handbook can be read in a number of ways – as an informative text; as part of the materials for a workshop or short training programme; or as part of an extended training and study programme requiring learners to undertake a practical project.

COL is interested in hearing how you have used this handbook and in any feedback you may wish to give, including how you have adapted and added to the handbook, so that we can all share from each other's experience. Please send your feedback to Helen Lentell, Educational Specialist (Training and Materials Development) (email: [hrentell@col.org](mailto:hrentell@col.org)).

COL would like to thank:

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Pilgrim Projects Limited, Cambridge, UK, for editing and production

Participants at a number of professional development workshops organized by COL and CXC (The Caribbean Examinations Council) in 2001 and 2002

Participants at the Second Pan Commonwealth Forum held in Durban in 2002, who kindly agreed to be interviewed by the author

Participants at the 'Planning and Implementing Open and Distance Learning Systems' workshop sponsored by COL, UNESCO and The World Bank in Cape Town in December 2002

Dr. Ulrich Bernath, Dr. Bob Butcher, Mr. Thomas Huelsmann and Dr. Som Naidu for their comments and feedback

Design Study Limited, Mundford, UK, for page design and layout

# INTRODUCTION

## WHY THIS HANDBOOK?

*'Education is a fundamental human right.'* (UNESCO 2000)

*'It is more than ever clear that open and distance learning will be an important element of future education and training systems.'* (Moore and Tait, 2002, p.10)

Few would dispute the first statement above, but turning it into a reality is another matter. This handbook starts from the viewpoint that making this aim a reality depends in turn on making the second statement a reality.

In the same UNESCO report on progress towards 'education for all' the authors noted that *'more than 113 million children have no access to primary education, 880 million adults are illiterate, gender discrimination continues to permeate education systems, and the quality of learning and the acquisition of human values and skills fall far short of the aspirations and needs of individuals and societies.'* Education for all is far from being achieved in any reasonable time-frame using traditional methods. As another UNESCO report has noted *'A developing country has to find new methods that will dramatically improve both its children's schooling and its continuing education system.'* (Moore and Tait, 2002, p.18)

*'There is now widespread recognition that the way forward is to make greater use of open and distance learning (ODL), whether in the form of print-based distance learning courses, interactive radio, computer-based learning or web-based learning. These methods offer more education for the same unit of resource, easier access and higher quality than can be obtained by traditional methods in countries with poorly financed education systems.'* (Moore and Tait, 2002, p.19)

If there is to be an expansion of the use of ODL methods, that expansion must be based on three developments:

- the conversion of existing face-to-face educational institutions into dual-mode institutions, i.e. providers of both face-to-face and ODL education
- the establishment of new ODL institutions
- the development of large numbers of face-to-face teachers into ODL tutors, ODL writers, and so on.

This handbook (and the others in the same series) provides a resource for senior staff who will be engaged in planning such developments.

## WHO IS THIS HANDBOOK FOR?

This handbook has been written for heads of educational institutions, their senior staff and senior staff of ministries of education who are interested in initiating or extending ODL provision.

The handbook seeks to help you (alone or with your colleagues, depending on circumstances) to make strategic policy decisions about ODL provision, enabling you to answer questions such as:

- How can we use ODL to provide better access to education?
- How can we use ODL to provide more education for the same unit of resource?
- Who will be our students?
- Should we set up a new institution or expand an existing one?
- What type of learning materials will we need?
- Who will tutor and support the students?
- What will it cost?

It is important to note that this is not a handbook for course writers or a handbook for tutors – other handbooks in this series will serve those purposes. It is strictly a handbook for policy makers.

## WHAT IS ODL?

ODL stands for open and distance learning, an amalgam of two approaches to forms of education that focus on expanding access to learning. It is characterised by two factors: its philosophy and its use of technology.

Most ODL systems have a **philosophy** that aims to:

- remove barriers to education
- allow students to study what they want, when they want, where they want.

ODL systems typically use **technology** to mediate learning; for example:

- printed workbooks
- audio cassettes
- radio
- the web.

There is no one method for providing ODL, so a wide variety of courses are described as 'open learning' or as 'distance learning'. Some typical examples are shown in Figure 1. The variety is instructive. In some cases (e.g. correspondence courses) students work almost entirely by themselves; in others (e.g. interactive radio) the work is all done in groups; whilst in

others (e.g. distance teacher training) the students might meet together at intervals. There are an equally wide variety of purposes to which ODL is put, ranging from primary education to professional updating to post-school catch-up on the secondary curriculum.

**FIGURE 1** EXAMPLES OF ODL SYSTEMS

1	Correspondence courses where students study for professional qualifications and degrees.
2	Interactive radio instruction in primary schools, where classroom-based pupils learn from studio-based teachers.
3	Open learning systems using workbooks, study centres and online conferencing to enable working adults to gain school-leaving qualifications.
4	Web-based courses used to update technical staff in the workplace.
5	Distance learning courses to upgrade classroom teachers without their having to leave their classrooms.

From this it can be seen that ODL is a wide-ranging concept, capable of providing education in many circumstances and myriad forms. It is not a panacea but it is a proven approach to expanding provision.

We shall now look at some of the evidence of the efficacy of ODL in a bit more detail.

## THE CASE FOR ODL

The case for ODL can be argued from many points of view. One of these is to look at its advantages for students, employers and providers/governments. (Moore and Tait, 2000)

### ADVANTAGES FOR STUDENTS

#### 1 Access

For many students the overriding benefit of ODL is that it gives them access to an education that they would not otherwise have. There can be many reasons why a student may not be able to access existing provision. These include:

- **living a long way from a providing institution**, e.g. on a small island there may be no tertiary college or university; in a large country there may be many people in remote rural areas who live a very long way from the nearest college or university

- **being unable to travel to a centre**, even if it is not very remote, e.g. there may be no public transport; the students may have family commitments which make it difficult to leave their homes
- **not being free to study at set hours**, e.g. shift workers or those who travel a great deal in their work
- **physical disability** making travel or classroom attendance difficult, e.g. wheelchair-bound students; students with severe hearing problems
- **overloaded provision**, e.g. very large classes, enrolments closed, long waiting lists for places
- the course that the student wants is not offered.

ODL is capable of addressing all these issues. It can do so by:

- **bringing education to the student**, e.g. workbooks, audio cassettes, contact by telephone or the web
- **enabling students to study at times that suit them**, e.g. basing the course around a workbook, a web site or even a personal project enables students to study at times when they are free
- **expanding provision**. Because (generally speaking) ODL has lower unit costs than face-to-face-teaching, more students can be taught for a given fixed budget
- **expanding capacity**. One severely limiting factor on expanding education in developing countries is teacher numbers. ODL has proved to be a very effective way of training teachers
- **expanding range**. Because ODL is usually concentrated in fairly large centres, serving large populations, it becomes economic to provide a wide range of courses.

## 2 Flexibility

A second clear benefit of ODL is that it fits better with the complexities of adult life. It offers flexibility of place and time of study, so enabling students to maintain work and family commitments whilst continuing to study.

Few adults can afford to stop work in order to study; nor can governments afford to pay living costs to adult students. So, most of the time, adults have to study and work. Since work and family commitments vary from week to week, attendance at weekly classes can be a problem for adults. The more that adults can be freed from fixed, timetabled activities, the more likely they are to participate in education.

## 3 More suited to adult learners

A third benefit is that ODL tends to be more student centred than is class-based education. In lectures and classes, students tend to be the passive recipients of large quantities of information, much or all of it being unrelated to their own personal experience. The best of

ODL takes a different approach, basing the learning around a wide range of activities, many of which either make use of the students' own experiences or encourage them to apply what they are learning to their work and family life. There is much evidence to suggest that this approach better fits adults' preferred ways of learning. (Knowles, 1990; Sutherland, 1997)

Where curricula and methods of learning are better matched to students, students are more motivated. This leads to higher levels of enrolment, higher completion rates and higher exam pass rates.

#### 4 Quality and course range

Other benefits to students include the fact that the complex design processes necessitated by ODL usually result in a higher quality of course than would be found in the classroom. In addition, ODL providers usually offer a wider range of courses than a single, local institution.

##### **Quality enhancement**

Quality is enhanced as a result of the (necessarily) rigorous process that is used to produce ODL courses. In face-to-face teaching, teachers prepare their own lessons. They have very limited time in which to do this and are restricted by their own experience and knowledge. The preparation of ODL courses tends to be a team activity, involving specialists in curricular, media, writing, design, and so on. Most draft materials are reviewed by a panel of experts and some materials are tested before use. These processes tend to produce learning materials of a very high standard. These are then used within ODL systems where tutors are trained in ODL techniques and monitored and supported by experienced staff. (Such materials may also be used in face-to-face classes, so raising the quality of traditional education.)

##### **Range extension**

The range of courses offered also tends to be greater than is possible in local colleges. Most ODL is provided by large centres serving big populations. This ensures that even provision in minority subjects becomes cost-effective.

As can be seen below, this expansion of quality and range is usually achieved at lower unit costs than for face-to-face teaching.

#### 5 Advantages for school-aged students

Some slight adjustment to these claims needs to be made in the case of ODL for school-aged students. Programmes at this level usually seek to do one of two things. First, they seek to offer access where, without ODL there would be no access – this would apply to provision for children in remote areas where it is uneconomic to build and staff schools. Second, school-age ODL programmes are sometimes aimed at children in school, with the purpose of raising the quality of provision. (Murphy et al, 2002, p.4)

## ADVANTAGES FOR PROVIDERS AND GOVERNMENTS

Providers and governments see various advantages in ODL.

## 1 Cost reduction

Whatever other claims can be made for ODL, its cost effectiveness remains the commonest reason for its use. The figures are impressive, as is shown below.

There are two basic ways of assessing the cost effectiveness of ODL: cost per student and cost per graduate; both can be compared to costs for traditional methods.

(Rumble, 1997, pp.134-5)

### **Cost per student**

In a meta-study (i.e. a review of all available research studies on a given topic) of 32 institutions reporting on 62 different ODL programmes, 51 (82%) had lower costs per student than found in traditional systems. Twenty-five (40%) reported unit costs of half or less per student than for traditional methods. (Rumble, 1997, pp.136-40)

More recent data for Africa indicates that secondary ODL programmes tend to cost between one-fifth and one-twentieth of traditional costs with teacher education programmes costing one-third to one-half of traditional costs. (Murphy, 2002, p.ix)

### **Cost per graduate**

In a separate meta-study of eight institutions reporting on 18 different ODL programmes, 17 (94%) had lower costs per graduate than found in traditional systems. Eight (44%) of these reported costs per graduate of half or less than for traditional methods. (Rumble, 1997, pp.143-4)

In other words, for a given budget, ODL can provide both more capacity (student places) and more output (qualified students).

## 2 Reach

Providers and governments also make use of ODL to reach groups who could not otherwise be reached. Such provision may not necessarily be cheaper than other methods, but may be the sole option in certain cases. The classic example of this use of ODL would be distance learning for children living hundreds of miles from the nearest town or school.

(Moore and Tait, 2000, pp.8,19-20)

However, the cost advantages of ODL mean that the same budget can provide education to more students, so reach is also increased in this way. Put simply, if a given ODL system has unit costs of 50% of traditional methods, twice as many students can be taught for the same budget.

## ADVANTAGES FOR EMPLOYERS

### 1 Integration of work and learning

Many ODL students study to improve their knowledge and skills in relation to their current employment. Perhaps the largest such group is teachers. ODL has proved to be a very effective method of upgrading teachers without their having to leave their classrooms – an

important consideration in countries where teachers are a scarce resource. However, even if taking teachers away from their classrooms were an option, the ODL approach might still be preferred: teaching skills are better learnt where they can be practised than in lecture halls and seminar rooms. (Joyce, 1999)

## 2 Cost-effective training and development

It must be admitted, though, that most employers are attracted to ODL because it costs less than traditional training and development approaches. Much of the cost saving results from employees studying in their own time at home rather than in their employer's time.

(Moore and Tait, 2000, pp.8,19–20)

## TARGET AUDIENCES

Although some ODL systems provide courses for school-age children, most systems are aimed at adult/post-school populations. (Some success has been reported with interactive radio instruction with primary school children but most secondary school-age provision is characterised by high drop-out. (Murphy et al, 2002, pp.viii–ix)

Generally, much more success is reported with post-school ODL programmes as the cost data above testifies. One group with whom ODL is extensively used is practising teachers since it enables them to upgrade their skills without leaving the classroom – a critical issue in countries where teacher numbers are low. (Moore and Tait, 2002, p.9; Murphy et al 2002, p.ix)

UNESCO's current priorities for the use of ODL are:

- **basic education for all.** In this area they particularly recommend the use of ICTs (information and communication technologies) combined with other media such as print and radio. Teacher training for basic education is seen as a key area for development via ODL
- **adult education.** Here ODL is seen as the means for increasing access to higher education
- **renewing and diversifying education systems.** In this area, ODL is recommended for 'sharing information and best practice' and diversifying conventional educational provision, particularly in technical and vocational education
- **teacher training.** ODL is suggested as an effective way of providing in-service teacher training. UNESCO also recommend that teachers should become 'proficient in the use of distance education'
- **higher education.** In higher education, ODL is recommended both as a means of increasing access and also as a means of creating 'high-quality systems of education'
- **capacity building.** The final UNESCO priority is in capacity building to create staff capable of building ODL institutions (this handbook is a contribution towards this aim).

(Moore and Tait, 2002)

## BUT . . . ODL IS NOT A QUICK FIX

The clear benefits that ODL offers can lead to unrealistic expectations of what it can achieve in the short-term. There are three strong reasons why ODL must not be implemented in a hurry and why it must not be treated as a short-term solution to long-term problems of educational provision. We discuss these three reasons below.

### TOO MUCH TOO SOON

Some governments and providers have been tempted to set up new ODL institutions with huge student number targets for the early years. Whilst the political and social pressures that underlie such an approach are all too clear, it has to be said that, when ODL is grown too fast too soon, the risk of failure is high.

Any innovatory provision faces two problems: scepticism and unforeseen problems. There is only one way to overcome scepticism and that is to ensure success. For this reason, any new ODL provision is best kept small and best confined to courses and target groups where early success is most likely to result. For example, starting a new ODL institution around teacher education is a good way of ensuring early success since teachers are invariably keen, disciplined ODL students.

The best way to handle unforeseen problems is to keep the new ODL offering as small as is feasible so that (a) problems that arise can be fixed and (b) such problems will not attract bad publicity.

### TIME TO BUILD UP COURSES

The second area in which it is easy to damage the image of ODL is to try to create too many courses too quickly. When making courses for the first time, most institutions report that the work was more time-consuming than they had imagined. Whatever the pressures to produce instant mass education, serious thought has to be given to the rate at which new courses can be realistically introduced. (Of course, if you can buy in courses, this build-up is less of a problem.)

### TIME TO DEVELOP STAFF

Third, but by no means last, there is the fact that you need to allow time for staff skills to develop. Running an ODL institution requires a much wider range of skills than running a school, college or university and, on the whole, you will not be able to recruit people with these skills. Rather, you will have to develop your own staff to the point where they have the range and depth of appropriate skills. Realistically, this takes time and it would not be exaggerating to say that a new ODL institution needs 2–5 years to build up its core staff to full operating capacity.

## HOW TO USE THIS HANDBOOK

The handbook can be used at a number of depths, according to your needs (see Figure 2). As far as possible, each unit can be used independently of the others and, to a lesser extent each topic can be used independently of the other topics. Where it is important to refer to more than one unit or topic at the same time, cross-references have been included in the text.

**FIGURE 2 DEPTHS OF USE OF THE HANDBOOK**

	Depth of use	Use
1	To get an overview of what is involved in setting up an ODL system	Read the titles of the nine units
2	To get an overview of the key issues in any one aspect of ODL	Read the introduction to the relevant unit
3	To get an overview of the key issues in any one topic	Read the <i>Issues for decision makers</i> list for that topic
4	To begin to answer the questions raised in any given <i>Issues for decision makers</i>	Read the detail for that topic. If necessary, follow up some of the references

We have addressed the handbook to 'you.' 'You' may be a university vice-chancellor, a senior official in a ministry or the head of a college. Equally, though, 'you' may be a group of senior officials who have decided (or are required) to investigate setting up some new ODL provision. Whether you are working alone or in a group, the handbook seeks to:

- inform you of the main areas for policy making – these are the nine units of the handbook
- inform you of the key policy questions that you will need to address – these are listed for each topic under the subheading *Issues for decision makers*
- provide you with some key data to inform your discussion and decisions
- provide you with some illustrative case-study material to inform your discussion and decisions.

We do not imagine that any one person will need to use all the units nor all the topics. Moreover, if you are working in a group, different members may take a lead on different units or topics. Broadly, though, we see the handbook being used to:

- make you aware of the issues that you will need to address in making ODL policy

- make you aware of what is generally regarded as good ODL practice, even though there will be times when you may need to take a more pragmatic approach, given your local constraints
- make you aware of some of the practical problems that others have experienced
- provoke discussion along the lines of ‘What would be best in our situation?’ and ‘What is practicable in our situation?’

This handbook has a brief section on costing. If you need to go into costing in more detail then you may wish to consult *A Guide to Costing in Open and Distance Learning*, which is also published by the Commonwealth of Learning. This covers drawing up a budget, methods of cost analysis, cost-effectiveness in ODL, and costing educational media. It is accompanied by 25 interactive spreadsheet exercises.

## PROJECT

This handbook can be used as background reading or as a source of reference. However, it can also be used as a means of systematically building the skills needed to plan and manage ODL systems. If this is your aim in using the handbook, then we suggest that you set yourself a project based on the handbook units. ‘You’ may be just one person or you might be a small group who are working together to set up some new ODL provision. Here is one way in which you could set up a project.

### STEP 1 DECIDE WHO WILL FORM THE PROJECT GROUP

This might be you working alone. This could be the case if you are a teacher and wish to create a DL version of one of your courses, which you will run and tutor yourself for a small group of students. There are few other circumstances in which one single person can set up an ODL course or system.

It is more likely that, to achieve what you have in mind, you will need to work with others. However, a smaller group is better than a larger one – say three to five people. If you need to involve others, you can always co-opt them for special tasks or set up sub-groups.

### STEP 2 DECIDE THE AIM OF YOUR PROJECT

The first task of the group is to decide the aim of the project. This may be huge (e.g. set up an ODL university) or much more modest (e.g. create an ODL version of our course programme X).

Once you have decided your aim, it is a good idea to set yourself some broad targets for where you wish to be in one year’s time, two years’ time and five years’ time.

### STEP 3 RESEARCH AND DECIDE THE NATURE OF THE OFFER

You are ready to find out just what your target students want from you. You should use Unit 1 of this handbook to plan some research, conduct it, analyse it and reach your conclusions. You may wish to delegate this task to one or more members of your group.

## STEP 4 REVIEW THE TYPE OF PROGRAMME YOU WILL OFFER

You need to decide just what type of programme(s) you will offer to meet the needs that you have identified. Unit 2 of the handbook will guide you through all the issues to be considered. Note that you might decide to start with a simple offer and add further services at a later date – it is better to start small and do something well than to start on a big scale and then find that it is too much to manage.

## STEP 5 WRITE A BUSINESS PLAN

Now your group need to write a business plan (see Unit 3 of the handbook). You may well want to call in some specialist help for this task, calling on accountants or experienced business managers.

Once the plan has been written, you need to set aside some time for a full review meeting – this is the point at which you have to ask yourselves:

- Is our plan feasible?

You will need to consider issues such as:

- Are we being over-optimistic about student numbers?
- Can we really produce the course material in the time that we say we can?
- What would happen if we had 10%, 20% or 30% fewer students?

Only when you have a robust business plan that you are all convinced will work should you proceed to the next stage.

## STEP 6 PLAN THE DETAIL OF THE COURSE OFFER

In this step, you need to work out in some detail the courses you will offer, the nature of the learning materials that you will use or create, the details of the student support system and the methods of assessment and credit. You may well want to set up a specialist group for this task.

One way to think of this task is to assume that you are doing two things:

- writing a prospectus for potential students, describing to them just what educational experience they will receive from you
- writing specifications for:
  - course writers
  - staff in charge of setting up the tutorial system
  - staff in charge of setting up the assessment system.

Units 4–7 of the handbook will guide you through this process.

## STEP 7 WRITE THE PROJECT PLAN

You are now ready to write the project plan. This is the plan which sets out how you get from where you are now to the day the new system starts its teaching. The plan will set out:

- the tasks to be accomplished
- when each task needs to be done
- the resources needed for each task
- who will carry out each task.

It is a good idea to ask an experienced project manager to help you in this task.

## TERMINOLOGY

Usage of terms varies both within and between countries so we have had to arbitrarily decide which terms we will use. These are as follows:

**Open and distance learning (ODL)** is the generic term that we use to cover any type of learning system that claims to teach by open or distance methods. We have avoided setting any precise criteria for deciding whether or not particular schemes are or are not 'open' or 'distance'. As will be seen later in the handbook, neither term is well defined in the literature.

**Distance learning (DL)** is used to refer to systems that regard themselves as distance learning rather than ODL.

**Student.** We use the word 'student' to refer to any person who makes use of the provision of an ODL institution. Usually they will be registered as a student but sometimes (as in the case of, say, radio groups) they may not be. Student is synonymous with **learner** in this text.

**Course.** We use 'course' to refer to any ODL study offering that a student can elect to study; for example, a course in basic book-keeping or a course in the use of fertilizers.

**Programme.** This term refers to a collection of courses that lead to a given qualification. For example, a teacher education programme may be composed of many separate courses and the students may be able to choose within the programme exactly which courses they study.

## DEFINITIONS

There have been many attempts to define both open and distance learning. A recent discussion of these terms described them as 'approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners.' (Moore and Tait, 2002, p.7) The same authors also provide a simple test to decide whether a given approach is

distance education or not, suggesting that you ask the simple question 'Where [are] the principle educational decisions made?' If the answer is 'In the classroom' then, they argue, the system is not distance education. (Ibid., p.22)

## CHANGE MANAGEMENT

To put this handbook into practice requires the management of change in your organisation. This can be near impossible if handled badly but exciting and rewarding if done well. This section suggests some steps that you can take to maximise your chances of managing change successfully.

### THE VOICE OF EXPERIENCE: THE NEED TO CONVINC STAFF

*'It is vital to have good evaluation evidence so that you can get the staff on your side. You need to have convincing evidence of the effects on students of what you are doing and you need to feed this back to the staff. The British Open University made huge use of questionnaires for this purpose.'*

Sir John Daniel

### RESISTANCE TO CHANGE IS NATURAL

Most people in most organisations are resistant to proposed changes. So, if you announce a move towards ODL, you should not be surprised if many of your staff appear less than enthusiastic. In order to overcome this resistance, it is important to first understand why staff might feel negative about a move towards ODL (or towards any other innovation that you propose). Below are some of the reasons why they might not welcome your innovation.

#### Fear of insecurity

Teachers who are used to, and confident about, classroom teaching may recognise that ODL involves things that they know little about and requires skills that they may not possess. For example, they may have heard that ODL involves writing materials, tutoring at a distance and online conferencing. If they have never practised such skills, and if they know little about them, their natural reaction may be one of panic: 'I'll never be able to do that.'

#### Fear of social loss

One of the attractions of teaching is working with students and colleagues – types of contact that are much reduced in ODL. For example, a classroom teacher who meets 100–200 students and a wide range of colleagues each week, might, in ODL, find themselves largely working alone writing ODL materials or marking and commenting on assignments. For the more socially oriented teachers, this change can lead to a sense of social loss.

### Fear of economic loss

ODL makes much greater use of part-time staff, particularly in tutoring and course writing, than is usual in face-to-face institutions. Naturally, then, when face-to-face teachers hear of a move to ODL, they may fear that their full-time jobs are at risk.

### Fear of loss of control

Generally, classroom-based teachers have a wide degree of autonomy in their work, particularly over how they teach, if not over what they teach. ODL necessarily involves a higher degree of central organisation over both what is taught and how it is taught – this is implicit in the idea of materials-based learning. Many teachers will see this shift of control as both a threat and a loss to them.

### Fear of the unknown

Anything unknown tends to be feared; people often imagine the worst about an unknown situation. So, if your staff have no knowledge or experience of ODL, they will tend to fear it.

### Fear of loss of influence

We all value our capacity to influence our colleagues and our organisation. Teachers possess both formal influence (e.g. as a head of a department) and informal (e.g. because their colleagues respect their ideas and judgement) and these forms of influence become embedded within the formal and informal systems of the organisation. Any organisational change (and ODL is one such change) threatens to remove the systems within which a teacher's influence has grown, so creating a vacuum within which new influences might develop. It is natural for teachers to fear that, within this vacuum, influences other than their own will grow.

### Fear arising from incomplete information

All organisations are full of rumours. Rumours grow when information is withheld and die when it is released. The less information that your staff have of any proposed ODL initiative, the more (incorrect) rumours will circulate, leaving fear and resentment behind them.

## OVERCOMING RESISTANCE TO CHANGE

To overcome resistance to your ODL initiative, you need to consider who the stakeholders are in your organisation and why they might resist the introduction of ODL. Then you can begin to take active steps to overcome their resistance.

### Identifying the stakeholders

Some of the main stakeholders of a typical educational institution are shown in Figure 3. A useful exercise is to first list the main stakeholders of your institution and then, against each, to write the main reasons why they might resist the introduction of ODL in your institution.

**FIGURE 3** SOME TYPICAL STAKEHOLDERS OF AN EDUCATIONAL INSTITUTION

Internal	External
Teachers	Government
Students	Employers
Senior staff	Families of students
Administrative staff	Community bodies
Technical staff	

### Acting to overcome resistance

Once you have identified who might resist and for what reason, you can then plan how to overcome those resistances. Figure 4 lists some of the main ways of heading off resistance to change. Essentially these involve applying the following key principles of change management:

- **acknowledge fears** – do not deny them
- **inform** – never withhold information
- **champion** – collect and distribute information on the benefits of the change, e.g. collect data from other ODL schemes near you to show how successful ODL can be. Share this information widely
- **consult** – always assume that your staff have something to offer, even when they appear to be negative
- **involve** – create structures that engage staff in planning and implementing the change, e.g. task groups and consultative groups
- **support** – offer support, particularly training and development
- provide opportunities for **assimilation** – offer training days, offer visits to other providers.

**FIGURE 4** METHODS FOR OVERCOMING RESISTANCE TO CHANGE

<b>Fear</b>	<b>Methods to overcome that fear</b>
Insecurity about personal competence	<ul style="list-style-type: none"> <li>• arrange for staff to visit one or more ODL providers – this will help them to see that people like them have confidence in ODL</li> <li>• offer staff development – this will help convince them that they too can master the skills of ODL</li> <li>• ensure that the changes are not introduced too quickly – allow staff enough time to learn new skills</li> </ul>
Social loss	<ul style="list-style-type: none"> <li>• try to build new structures around existing social structures where possible, e.g. ask a whole subject department to produce an ODL course</li> <li>• look for ways to maximise social contact in any new systems</li> </ul>
Economic loss	<ul style="list-style-type: none"> <li>• if changes to employment status are necessitated by your ODL plan, admit this from the start</li> <li>• start negotiations as soon as possible</li> <li>• keep unions fully informed</li> <li>• offer transitional help, e.g. retraining; help with job search</li> </ul>
Loss of control	<ul style="list-style-type: none"> <li>• involve staff in creating the new system, e.g. by creating committees, task groups and so on</li> </ul>
The unknown	<ul style="list-style-type: none"> <li>• arrange for staff to experience ODL, e.g.               <ul style="list-style-type: none"> <li>- arrange visits to another ODL provider</li> <li>- arrange for staff to take a short ODL course</li> <li>- arrange for staff to tutor a short ODL course with another institution</li> </ul> </li> <li>• collect evidence of the effectiveness of ODL – try to use evidence from institutions as geographically close to yours as possible and as similar as possible in terms of curricular</li> </ul>
Loss of influence	<ul style="list-style-type: none"> <li>• ensure that the new structures will make as much use of existing staff as possible</li> <li>• consult staff about their responsibilities in the new system</li> <li>• decide future responsibilities as far ahead as possible</li> </ul>
Incomplete information	<ul style="list-style-type: none"> <li>• provide regular information updates</li> <li>• create channels of communication between staff and the core planning group for ODL</li> </ul>

## Acting to ensure success

In addition to overcoming resistance there are certain organisational principles that help to deliver successful change management. Some of the main ones are discussed below.

### **Use change agents**

A change agent is a person whose presence and stature helps to make a particular change acceptable to others. In choosing a change agent (or agents) you need to identify those members of your staff who are most admired for their professional expertise by their colleagues. If these people are seen to lead change, others will follow. When selecting a change agent, you should look for a person who:

- is a highly respected classroom teacher
- is open to change
- has a record of trying out new ideas
- is listened to and respected by a wide range of staff
- works well with others.

Such a person might be put in charge of a task group to plan all or part of the ODL provision or they might be asked to run a pilot course.

### **Address your stakeholders' priorities**

When you create a new ODL system, you are creating a shell into which a wide variety of courses can be put. At the start, it is important to use that shell for courses and target audiences that your stakeholders rate as priorities – if you don't do this, they may lose interest in what you are doing and, perhaps, withdraw financial and other support.

It is also important to keep stakeholders well informed about progress in developing the ODL system.

### **Start small**

The larger your initial ODL programme, the harder it will be to overcome the resistances discussed above, so it is best to start on a small scale. This might mean starting with one course or with one department. It is also advisable to start with a short course so that you do not have to wait a long time to find out how well the various parts of your system are working.

Often, it helps to describe the first course as a pilot since this acknowledges that lessons are to be learnt from the course before any final decisions are made.

### **Try to avoid compulsion**

Change works best when staff opt in rather than being forced in. If you can start small, you may be able to use people who volunteer to participate, thus creating a sense that ODL is something that is a privilege to work on.

**Ensure success**

The final general principle is to make sure that your first offering (e.g. a pilot course) is a success. You need to be able to show that your ODL system works in order to overcome some of the resistances mentioned above. So, it is important to choose the subject and target audience of your first course with care. For example, it is better to start with a course for teachers (who take readily to ODL) than with a course for secondary school pupils (who are much less motivated than teachers).

**Systematic change management**

Change management is best done in a planned and systematic way. One approach to this is to use the seven-step method for change management (Table 1).

**TABLE 1** A 7-STEP CHANGE MANAGEMENT PLAN

Change step	Key questions	Comments
1 Identify the need	Why is the change needed?	
	What evidence can you present to convince others?	
	What would happen if the organisation did not change?	This may be critically important in persuading others
2 Identify sensitivities and possible resistance	Who will resist this change?	List all such groups or individuals
	Why might they resist?	Make sure you look at the issue from their point of view  Do not dismiss a point because, in your view, it is wrong or irrational
3 Consult	How will you present the issue to people?	Think of all the options, e.g. one-to-one discussions (for senior colleagues); debates; presentations; workshops; leaflets
4 Evaluate options	What realistic options are now open to the institution?	
5 Plan	Who will you involve in the planning?	Be clear when you wish to use 'top-down' planning and when you wish to use 'bottom-up'
	How will you ensure staff commitment to the plan?	Remember that people are rarely committed to plans that they did not contribute to
6 Act	How will you implement the plan?	Will you do it alone? Delegate to another? Set up a project group? Work through an existing group?
7 Review and learn	How will you – and all your staff – know whether the change is working?	What evidence will you need?  How will you collect it?
	How will you react to parts that are not working?	

## A LISTENING APPROACH TO CHANGE

*'When Michael Colenso arrived at the UK Open College in 1990, the organisation was in drastic need of a new direction. Three years of trying to implement the remit given to the college by the Government had only demonstrated that the remit was too riven with contradictions to ever work. Change was needed.*

*The staff expected a new Director to come in and tell them what was to be done. Instead, Michael Colenso spent the first week talking to every member of staff – senior staff off the premises, all other staff at their desks, not at his. He just listened.*

*Then he organised a series of change workshops with each section of the college. Again, he listened and questioned, waiting until each workshop had convinced itself of the direction in which the college had to move.*

*Within three months he had a united staff, confident of where they wanted to go. The change was made and everyone owned it.'*

Richard Freeman

## CHANGE MANAGEMENT IN ACTION

### Stage 1

The first stage involved researching government reports for political or economic indicators that supported the case for ODL; analysing the college's strategic plan which also expressed need for alternative means of increasing student numbers; and examining the enrolment data for the various courses to quantify unmet demand.

### Stage 2

The second stage involved a one-day strategic planning workshop convened to gauge the views of external and internal stakeholders (government, private sector and community representatives, college managers, staff and students). The case for, and strengths, weaknesses, opportunities and threats in such an initiative, were discussed and the SWOT analysis and other inputs were used for a draft plan which was then sent to all of the stakeholders for their feedback. This strategic plan included vision and mission statements, five objectives for ODL, the performance indicators for these and a statement on who would be accountable for every one of these tangible signs of progress.

### Stage 3

The third stage aimed to gain input from all of the college staff and students. Teaching departments provided data on courses that could be offered through ODL and the likely student numbers. Exiting students completed a questionnaire on how they would view ODL as an option, why they might opt for this mode of study, and their access to and familiarity with computers and the Internet.

### Stage 4

Four pilot ODL programmes were undertaken to provide on-the-job training for staff and gauge the staff's capacities and the time, motivation and energy needed for this work. The programmes were piloted with students to formatively evaluate the content, presentation and learning activities.

### Stage 5

A draft operational plan was now added to the strategic plan. This drew upon all of the above, the quantitative and qualitative research findings, and set out the means of implementation, costs and cost benefits of this new form of provision. This was presented to senior management and all staff for comment, amended and then put into final form for presentation to Government.

### Stage 6

The report was then presented to the Minister of Education and the Finance Minister who were primarily interested in access issues and costs and cost benefits. The report and the request for additional funding were accepted by the Government and the college's move into this area was assured for the following financial year.

### Stage 7

A final de-briefing session was organised for all of the stakeholders who had contributed to the planning and who might be future partners in this enterprise.

Colin Latchem, Samuel Jackman, Prescod Polytechnic, Barbados



# UNIT 1

## THE TARGET GROUP AND THEIR NEEDS

Planning new ODL provision should start with the potential students and their needs. This unit and its three topics introduce you to the issues and methods that arise in this area.

### IDENTIFYING THE TARGET POPULATION

Most ODL systems are established to extend provision to new groups of students. Although the providing institution may have some knowledge of the potential students, that knowledge is unlikely to be enough to plan and make new courses.

This first topic surveys the sort of information that it is useful to have in order to begin planning a new ODL system or course.

In practice, no institution ever has all this information; you need to decide how much you can afford to collect and then make do with that.

### MARKET RESEARCH IN ODL

Once you have decided what sort of data you would like to collect, you will need to select some suitable data collection methods. These will, essentially, be market research methods and this topic gives a brief survey of the options open to you.

### MAKING THE CURRICULUM ACCESSIBLE TO ALL

Wider access means a more heterogeneous population. This topic looks at the curricular issues that might arise from this.

# IDENTIFYING THE TARGET POPULATION

## INTRODUCTION

Before you can plan a new ODL course or set up a new ODL system, you need to identify the target population that your course or system will serve. Rowntree (1990, p. 40) suggests that you need to consider four main questions about your potential students: their demographics, their motivation, their 'learning factors' (which we will call study skills) and their subject background.

## ISSUES FOR DECISION MAKERS

- 1 What is your target population?
- 2 Why this population?
- 3 How will you identify the demographics of your target population?
- 4 How will you identify the motivations of your target population?
- 5 How will you identify the study skills of your target population?
- 6 What prior learning are you going to assume for your course(s)?
- 7 What are the implications of the demographic factors that you have found?
- 8 What are the implications of the motivational factors that you have found?
- 9 What are the implications of the study skills factors that you have found?
- 10 How will you make sure that the students whom you enrol have this prior learning?

## DATA YOU WILL NEED: DEMOGRAPHICS

You will need to consider such demographic factors as:

- **age range** – this might affect students' motivation and prior experience of learning
- **gender** – in some cultures this may have a significant effect on what needs to be provided
- **employment** – are your potential students employed and if so, in what type of work? This may affect the skills and knowledge that they bring to their studies, their opportunities to put any new learning into practice and their reasons for studying
- **circumstances of students' learning** – for example, whether they can study at home, have access to a telephone or electricity, and whether they are able to travel to a study centre.

## DATA YOU WILL NEED: MOTIVATION

Students' motivations for learning are important in determining both the curriculum to offer and the method of learning that will best suit them. Rowntree (1997, p. 85) identifies four types of motivation:

- **Vocational** – such students are likely to study because they want to get on in work. They might prefer a practical approach, perhaps including tasks to do at work.
- **Academic** – these students like learning for its own sake. They might prefer an academic to a practical approach.
- **Personal** – these students know why they are studying and what they wish to achieve. They tend to be well able to succeed in ODL since they are happy to take charge of their own learning.
- **Social** – these students may feel isolated in pure distance learning, so you would need to seek ways of breaking down such isolation; for example, study groups, telephone tutorials or computer conferencing.

### DATA YOU WILL NEED: STUDY SKILLS

In face-to-face teaching, students with poor study skills can do quite well through the help that the teacher can give. Teachers in ODL have much less contact with students so student progress is much more dependent on their own efforts. It follows that study skills are of particular importance in ODL.

- **Planning** – students need to be able to plan their study sessions so that they will have enough time to cover all that has to be learnt.
- **Active learning** – many students confuse learning with memorising and so fail to actively engage with their course material. (Whilst good ODL learning materials are full of activities, the extent to which students make good use of these will depend on how active they are as learners.)
- **Self-assessment** – isolated students need to be able to make sensible assessments of the progress that they are making. If they overestimate their progress, they will work less diligently than they need to. If they underestimate their progress, they may lose heart and so stop work.
- **Note taking** – taking good notes is critical to effective learning. Many ODL students are ill prepared for note taking; their sole experience is that of copying out teacher-supplied notes, which may have left them with no capacity to create their own notes.

(There are, of course, many other generic study skills, but the above four are perhaps at a premium in ODL.)

### DATA YOU WILL NEED: PRIOR LEARNING

For some courses, students' prior learning in that subject may be an important factor in designing your course. Prior knowledge is most critical in sequential subjects such as maths, sciences and languages. When planning curricular and writing courses, it is important that all assumptions about prior knowledge are written down. These assumptions can then be used in advising students prior to enrolment (see *Providing information to students*) and in devising diagnostic tests (see *Diagnostic tests*).

## COLLECTING THE INFORMATION

In practice, collecting the sort of information that we have outlined above will be constrained by two factors. First, there is the practicality of actually collecting the data. Research of this kind costs money and is dependent on the good will of respondents. Second, there is no point in collecting more data than you can make use of. When you begin writing course material (or commissioning others to write it for you), there is a limit to the number of factors about students that can be taken account of. It is important, therefore, to restrict target population research to essentials.

## MARKET RESEARCH IN ODL

### INTRODUCTION

You may need to use market research in order to get the data that you need for planning your ODL system. 'Market research' just means 'finding out what people want'. This section introduces you to some of those methods. The various methods need to be used with care and common sense since they will not always deliver totally reliable results. For example, in 1987 The Open College (UK) employed market researchers to identify the type and size of market for its proposed courses. The projections made by the market researchers over-estimated demand by a factor of well over ten.

### ISSUES FOR DECISION MAKERS

- 1 Before you can begin to plan your ODL system, which of the following do you need more information about and what sort of data do you need?
  - the size of the market
  - who the potential students are
  - what programmes and courses those potential students want
  - the form(s) in which the potential students want their courses/programmes.
- 2 Which published data might give you what you need?
- 3 Which data do you think you will need to get from your own research?
- 4 From which population do you need to collect this data? (In this question we use the word 'population' to mean the precise subset that you wish to research, e.g. young people aged 18–21.)
- 5 Which sort of data do you think you can gather using questionnaires?
- 6 For which sort of data might you need to use depth methods?
- 7 Who can you contact to give you expert guidance on questionnaire design and sampling?

## USES OF MARKET RESEARCH

You might use market research, for example, when setting up your system (or planning major changes to an existing system). This will help you to make certain system-wide decisions such as those shown in the first column of Table 1 below. These questions tend to focus on issues that will decide which students you wish to attract and how many you wish to attract. The first question (demographics) will determine the options that you have for your system. The second question (number of students) is a clear determiner of the size of system that you might need to set up. For example, if a high proportion of your potential students have full-time jobs, your system must be one that allows students considerable choice about when to study. The third question looks at what sort of courses your potential students wish to study – matching what you offer to what students want is critical in non-compulsory education. The final question looks at the type of provision that you might offer. There are many approaches to ODL, not all of which suit all student populations.

**TABLE 1** SOME SYSTEM-WIDE RESEARCH ISSUES

Issue	Typical questions
Numbers	<ul style="list-style-type: none"> <li>• how many potential students are there?</li> <li>• where do they live?</li> </ul>
What are the demographics of potential students?	<ul style="list-style-type: none"> <li>• how old are they?</li> <li>• are they employed/unemployed?</li> <li>• what is their level of education?</li> </ul>
What courses/programmes do potential students seek?	<ul style="list-style-type: none"> <li>• what levels?</li> <li>• what subjects?</li> </ul>
What type of provision do potential students want?	<ul style="list-style-type: none"> <li>• open access?</li> <li>• continuous enrolment?</li> <li>• pure DL?</li> <li>• DL plus local centres?</li> </ul>

Once you have made these system-wide decisions, you may also need data to help you make decisions about individual courses or programmes, using questions such as those in Table 2. In ODL these questions are often answered during piloting or developmental testing. We will look at these later in this handbook.

**TABLE 2** SOME COURSE-SPECIFIC QUESTIONS FOR YOUR RESEARCH

Issue	Typical questions
What is the best format for the course?	<ul style="list-style-type: none"> <li>• print?</li> <li>• print plus other media?</li> <li>• web-based?</li> </ul>
What is the best approach for the course?	<ul style="list-style-type: none"> <li>• didactic?</li> <li>• exploratory?</li> <li>• problem-based</li> </ul>
Do our draft materials work?	<ul style="list-style-type: none"> <li>• do students learn from them?</li> <li>• do they like them?</li> <li>• how long does it take students to study the materials?</li> </ul>

## THE VOICE OF EXPERIENCE

*'You need to identify and define your market opportunity. Many new institutions are set up on the assumption of some kind of market but you must look at needs and opportunities. If you do not, you run the risk of making investments in hardware and software that are not needed. The British Open University did this when it tried to enter the American market.'*

*You need to:*

- *look at the competition*
- *look at the opportunities to ally yourself with others, to share risk and to improve brand recognition.*

*All this may mean changing long-held assumptions. For example, higher education has a culture of closely guarded autonomy but, when entering ODL you may have to work with partners who you normally compete with.'*

Dr Glen Farrell

## TYPES OF MARKET RESEARCH

Market research methods use two broad categories of data: primary and secondary.

### Primary data

Primary data is data that is collected to answer a specific market research question. Such data usually belongs to the organisation that commissioned its collection, so each organisation has to collect its own primary data. In general, this is quite costly.

### Secondary data

Secondary data is data that other people have already collected, such as government yearbooks, government statistics and reports of examining bodies. Such sources of data are particularly useful for:

- population data
- demographic data
- data on communications uptake; for example, how many households have telephones
- education take-up; for example, proportion of each age group that has reached a given level of education, or proportion of each age group that is currently in a given type of education.

Such data is often free or is available at very low cost. One problem with secondary data is that it may be out of date.

## METHODS OF MARKET RESEARCH

If you find that the data you need to set up your institution is not available from secondary sources, then you will need to consider setting up your own research. Whether you do this yourself or hire specialists to do it for you, the main data collection methods that you are likely to use for setting up an ODL system are as follows.

### Questionnaires

Questionnaires (also called survey research) are one of the commonest methods of collecting data. They are popular because they are relatively cheap both to administer and to analyse. The three main ways of administering a questionnaire are:

- self-administered – the questionnaire is sent or given to the respondent who completes it themselves (or they can complete it online via the web)
- face-to-face – a trained interviewer asks the questions and records the answers in a face-to-face interview
- by telephone – a trained interviewer asks the questions and records the answers during a telephone call.

A typical questionnaire will take 10–20 minutes to administer.

Questionnaires need very careful design and testing if they are to yield useful results. If you do use interviewers, they must be trained.

### Depth interview – one-to-one

A second method is to interview people, one at a time, in depth. The interviewer uses an agenda rather than a fixed list of questions and can allow the conversation to 'drift' if they feel that this will yield valuable information.

### Depth interview – focus group

The focus group is a depth interview conducted with six to eight people. The group is carefully selected to represent certain demographic factors, such as age, type of job or previous education. As with the one-to-one interview, the interviewer follows an agenda. Discussion between members is encouraged, this often being the most revealing part of the interview.

**TABLE 3** ADVANTAGES AND DISADVANTAGES OF SOME MARKET RESEARCH METHODS

Method	Advantages	Disadvantages
Questionnaires	<ul style="list-style-type: none"> <li>• cheap</li> <li>• easy to administer</li> <li>• easy to analyse</li> <li>• can give statistically valid view of a population</li> </ul>	<ul style="list-style-type: none"> <li>• can only ask narrowly defined questions</li> <li>• cannot explore in depth</li> <li>• low returns lead to doubts as to how representative the responses are</li> </ul>
Depth interview – one-to-one	<ul style="list-style-type: none"> <li>• gives in-depth data</li> <li>• provides data on the unexpected</li> </ul>	<ul style="list-style-type: none"> <li>• expensive to administer</li> <li>• hard to analyse</li> <li>• cannot give statistically valid view of a population</li> </ul>
Depth interview – focus group	<ul style="list-style-type: none"> <li>• gives in-depth data</li> <li>• provides data on the unexpected</li> <li>• cheaper than one-to-one</li> </ul>	<ul style="list-style-type: none"> <li>• expensive to administer</li> <li>• hard to analyse</li> <li>• cannot give statistically valid view of a population</li> </ul>

## Sampling

To obtain statistically valid results from your market research, you need to take data from a valid sample of your population.

Constructing a sample and determining a minimum valid sample size requires the advice of a statistician.

## UNDERESTIMATING DEMAND

### The mad rush for seats

*'Our Regional Study Centres (Sites) are over subscribed. When I visited one at 6.30 a.m. I was shocked to see students rushing and scrambling for seats in the available classrooms. Some were even literally walking and/or climbing on the backs of others to gain access to favourable positions in advance.*

*Later on, I got to know that our student population at Tamale was almost 500, but the total seating capacities of the four available classrooms were around 320. That meant, on the average, 45 students would have to make do with standing and/or peeping through the windows of each classroom. Such a situation does not augur well for effective tutoring/tutorials/feedback sessions. The situation has arisen out of poor planning and/or underestimating the response of people eager to plunge into the cool stream of open and distance learning.'*

Dr Theo. Ossei-Anto; Director, Institute of Educational Development & Extension, University of Education, Winneba, Ghana

## WIDENING ACCESS

### INTRODUCTION

ODL often seeks to widen access. This implies a more heterogeneous student body. The wider the range of sources from which an ODL provider recruits, the more likely that some aspects of its curriculum are inaccessible to some learners. An obvious example of this is an ODL provider with no entrance requirements. Students who enrol on courses in sequential subjects such as maths, languages and the sciences may well find that even the most basic courses assume a background knowledge which they do not have.

### ISSUES FOR DECISION MAKERS

- Will you need to provide pre-courses in certain subjects for students who do not have the prerequisites for the courses?
- What steps will you need to take to ensure that your courses use a wide enough range of teaching and learning methods to meet the needs of a heterogeneous student body?

- What cultural factors might make your courses less accessible to certain student groups?
- Will language be an issue in restricting access to your courses?
- Will you need to make any special curricular provision for handicapped students?

## MAKING THE CURRICULUM ACCESSIBLE TO ALL

The word 'curriculum' is used in two senses: (a) the content of a course and (b) the totality of the components that make up the course, including admission arrangements, teaching methods and assessment. When used in this latter sense, a key issue that arises is how to make the curriculum accessible to all potential students.

The answer will always depend on circumstances, starting by considering what might be the barrier(s) to be overcome. A given curriculum might not be accessible to all potential students because it:

- starts at too high a level
- is delivered in a language that creates problems for some students
- uses teaching and learning methods that do not match with the preferred methods of some students
- is delivered at times and places that are not suitable for certain students
- contains material that is alien to the culture of some students; for example, courses imported from one country without any adaptation
- is too expensive for some students
- uses media that some students cannot access, e.g. the telephone, workbooks (not accessible to partially sighted students).

ODL does not provide an easy, complete solution to making curricula available to all, but it can be used to ease the access problems in certain ways. For example:

- pre-courses can be provided for those students who do not have all the prerequisite knowledge and skill for a particular course
- a range of teaching and learning methods can be used within any one ODL course in order to maximise the chances of each student finding learning methods that suit them. For example, an ODL course might use print, audio, projects, workshops and online discussion
- generally, ODL courses offer a good deal of choice of when and where students can study
- in certain cases, ODL courses offer alternative media for handicapped students and web sites can be designed to be accessible by blind students.

# UNIT 2

## STRATEGIC ODL PLANNING

In this unit we look at a number of decisions that will determine the nature of your ODL system, rather than its detail. We have identified seven strategic factors for you to consider.

### CHOOSING THE TYPE OF ODL SYSTEM

The first decision concerns the basic type of ODL system that you wish to create. Although there is no one universally accepted method of classification for ODL systems, we suggest that such systems can be basically categorised according to whether they are paced or not and according to where they are based: on campus, at work or with the students.

### CHOOSING BETWEEN SELF-PACED AND PROGRAM-PACED SYSTEMS

A second strategic issue is to decide whether your courses are to be paced or not, i.e. whether students will have to complete particular parts of their courses at particular times. This might not sound like a very strategic decision but since it affects computer systems, administrative systems, financial systems and terms of employment for tutors, it is a decision with profound implications for constructing your ODL system.

### OPEN ACCESS OR NOT?

A third issue is whether you intend to offer open access or not. If you do, then you must consider all the issues that arise from that, such as the heterogeneity of your student population. If you do not, you will need to decide the basis of selecting students for admission.

### SINGLE- OR DUAL-MODE INSTITUTION?

This decision only applies to certain institutions. Most ODL systems are developed as an extension of the provision of an existing college or university: these are dual-mode providers. Sometimes, though, you need to decide whether to start up a new institution for ODL or whether to extend the work of a current provider.

### TECHNOLOGICAL CAPACITY

ODL can be delivered using a wide variety of media and it can be tempting to use the latest and the best. In practice, you have to consider what will work for your situation – this section helps in making that decision.

### ATTENDANCE REQUIREMENTS

Most ODL systems have one or more events that students can attend, such as tutorials at local centres. You will need to decide whether these are optional or not for students.

## CERTIFICATION AND ACCREDITATION

The final strategic decision concerns the form of certification and accreditation you will offer. Since the requirements of certification and accreditation will be inextricably built into any learning materials that you develop, your choice has to be made with care – moving from one system to another at a later date will be costly.

## CHOOSING THE TYPE OF ODL SYSTEM

### INTRODUCTION

In this handbook we make frequent reference to ODL, i.e. to open learning and distance learning. Here, we look at some of the meanings behind these terms and at some factors that may influence the type of system you wish to set up.

### ISSUES FOR DECISION MAKERS

- 1 What are your philosophical reasons for choosing ODL? (You must be clear about these so that the system you choose meets your requirements.)
- 2 In your system, what will be the role of the items listed below and why?

Item	Role	Reasons
Self-study learning materials		
Tuition and support at a distance		
Tutorials, seminars and workshops		
Asynchronous communication		
Counselling and advice services		
Assessment and accreditation		

3. Which type of system do you want?

	Campus-based	Organisation-based	Individual-based
<b>Self-paced</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Paced</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## OPEN LEARNING

### Some definitions

Few concepts in education are less amenable to definition than 'open learning.' Here are some of the many definitions that have been attempted.

*'Open learning is a term used to describe courses flexibly designed to meet individual requirements.'*  
(Lewis and Spencer, 1986)

*'Any form of learning in which the provider ... enables individual learners to exercise choice over any one or more of a number of aspects of learning.'* (Jeffries et al, 1990)

*'... learning opportunities that [give] ... better access to knowledge and skills ... give learners the optimum degree of control over their own learning.'* (Hodgson, 1993)

*'... arrangements to enable people to learn at the time, place and pace which satisfies their circumstances and requirements.'* (MSC, 1984)

*'... an imprecise phrase to which a range of meanings can be, and is, attached ... It eludes definition.'* (MacKenzie et al, 1975)

### Open learning as a philosophy

Things become a little clearer if we look at some of the typical features of open learning systems. These include:

- attempts to widen the range of learners
- a desire to give access to education to new groups of learners
- no entrance requirements
- attempts to remove perceived barriers to learning
- encouraging learners to take charge of their own learning
- self-paced learning.

Commonly, protagonists of open learning place special emphasis on four types of learner control:

- **control over pace** – learners can study at their own pace, including taking a break when their work or family life needs priority
- **control over place** – through the use of learning materials (and, nowadays, the Internet) learners can choose where to study – at home, at college/university, at work, in a library, and so on
- **control over time** – again through the use of learning materials, learners can decide the times at which they wish to study. The use of the asynchronous communication of email and computer conferencing has recently made this control over time even more feasible
- **control over process** – learners can choose how they wish to study. Whilst this might be an aim in many systems, in practice costs usually limit the range of materials that can be supplied to learners. Control over process is more an aspiration than a reality.

## OPEN LEARNING AS A METHOD

Since open learning is a loosely defined term, there is no precise 'open learning method' uniquely associated with it. Some of the methods commonly used in open learning are shown below, although no one system would use them all.

- **Self-study learning materials** such as workbooks, audio cassettes, video cassettes, computer programs, kits and websites.
- **Tuition and support at a distance**, usually by a part-time tutor, who may also have a separate full-time job as a teacher.
- **Tutorials, seminars and workshops** – these are usually infrequent but are seen as an important factor in maintaining motivation.
- **Synchronous communication** – e.g. the use of the telephone to maintain student–tutor contact.
- **Asynchronous communication** between students and tutors, e.g. emails and computer conferencing.
- **Counselling and advice services** – these may be provided by the tutor (who is then sometimes called a tutor-counsellor) or by other people.
- **Assessment and accreditation** – this may take a particular form to match the philosophy of the system or may follow the standard assessment system for on-campus students.

Although the exact mix of methods may be unique to each system, six common types of system can be picked out, based on their location and whether they are paced or self-paced. These six types are represented in Figure 1. The campus-based types are a form of open learning for students who are already located at the providing institution's campus. It is an approach that is often taken in order to promote independence in learning. The two organisation-based approaches are mostly used for work-based training. The final two methods (individual-based) are variations of what, traditionally, have been thought of as correspondence courses.

**FIGURE 1** SOME TYPES OF OPEN LEARNING SYSTEM

	<b>Campus-based</b>	<b>Organisation-based</b>	<b>Individual-based</b>
<b>Self-paced</b>	<b>Example</b>	<b>Example</b>	<b>Example</b>
	<p>Students on a physics course at a university have the option of taking a catch-up maths course. It is self-paced. They are provided with a self-study text and details of various computer programs. They use these resources at times to suit them.</p> <p>If they want help, they can visit a drop-in maths centre on the campus.</p>	<p>A company sets up a learning centre, stocked with learning packages. Some of these packages are loaded onto the company's intranet.</p> <p>Employees can sign up for courses and can study in the centre, in their offices or at home.</p>	<p>A correspondence college provides a range of courses. For each course there is a self-study workbook. Students are provided with a distance learning tutor who marks assignments during the course.</p>
<b>Paced</b>	<b>Example</b>	<b>Example</b>	<b>Example</b>
	<p>Students are provided with a self-study workbook. There are no lectures but students must attend six seminars during the 13-week period over which the course is studied. All work outside the seminars is self-study.</p> <p>Tutor support is available at set times each week.</p>	<p>A company takes on some graduate trainee accountants. It runs an open learning programme for them. They study workbooks in their own time but must complete assignments and other tasks by set dates.</p>	<p>The British Open University's undergraduate programme is a good example of this type of course. Although open in many ways, students are not self-paced. Assignments must be submitted by set dates and courses must be completed within a set time period.</p>

(Adapted from Freeman 1997, p. 3)

## DISTANCE LEARNING

There is more agreement on what distance learning (or distance education) is – a typical definition is given below.

*'[an] education program whereby students may complete all or part of an educational program in a geographical location apart from the institution hosting the program; the final award given is equivalent in standard and content to an award program completed on campus.'*

(United States Distance Learning Association, 2003)

Most distance learning schemes include:

- the physical separation of teacher and learner
- the use of learning materials
- two-way communication between student and tutor
- little or no use of learning groups.

(Keegan, 1996)

It can be seen that distance education has similarities with open learning and Rowntree (1992, p. 30) has observed that systems that are philosophically open still tend to use distance learning as one of their methods for delivery.

## A STRATEGIC PLAN

The strategic plan of Athabasca University can be seen at:  
<http://www.athabascau.ca/html/info/sup/sup.htm#mission>

## CHOOSING BETWEEN SELF-PACED AND PROGRAM-PACED SYSTEMS

### INTRODUCTION

Some proponents of ODL interpret openness to include giving students the maximum possible choice of how, when and where they study. (See *Choosing the type of ODL system*.) Where this is the case, there may be a philosophical objection to take any steps to pace the students. In the UK, the relatively new learndirect system (a web-based self-study system) is unpaced because its founders are committed to student choice wherever possible. It remains to be seen what effect this flexibility will have on student progress.

Other open systems (e.g. the British Open University), although philosophically committed to openness, do not go so far as to permit full self-pacing.

## ISSUES FOR DECISION MAKERS

- 1 What will your system's philosophical attitude to pacing be?
- 2 If your system will be paced, what pacing devices will you use?

## PACING AND PRACTICALITIES

The main reason that many ODL institutions reject complete self-pacing is that students do better in paced systems. As Rowntree (1997, p. 91) comments:

*'Learners left completely free to decide when and how long to study – especially if the course is a lengthy one – prove only too likely to drift, lose their momentum and become drop-outs. Most learners gain heart from knowing that they are moving through a series of learning experiences and meeting targets at roughly the same rate as their peers and are not being left way behind.'*

This opinion is shared by Daniel (Daniel and Shale, 1979). Keegan (1996, p. 99), summing up Daniel's views, writes *'He [Daniel] is of the opinion that distance systems can either give students the dignity of succeeding by pacing them or the freedom to proceed towards failure without pacing.'*

## THE NEED FOR COMPROMISE

In practice, then, most ODL systems involve some compromise between full learner autonomy and rigid direction of students. (Rowntree, 1997, p. 91) One way in which this compromise is managed is by including a small number of fixed-date events within each course. For example, there might be fixed dates for:

- assignment submissions
- face-to-face sessions
- the start and end of online conferences
- telephone tutorials
- exams.

Between these events, students are free to study when, where and how they like.

## OPEN ACCESS OR NOT?

### INTRODUCTION

Access to ODL systems can be limited both intentionally and unintentionally.

### ISSUES FOR DECISION MAKERS

- 1 What prior learning will your system require or assume?
- 2 What assumptions will you make about your students' study skills?
- 3 Who might your system unintentionally exclude?
- 4 What can you do about this?

### INTENTIONAL LIMITATION

The commonest methods of intentionally limiting access are by setting prior learning requirements for entry to courses and by limiting programmes to holders of certain types of job.

Evidence that such an approach might be necessary comes from studies at the British Open University where drop-out rates on third level courses were found to be much higher for novice students than for other students. The researchers concluded that admissions policies should be reviewed. They suggested that the university might restrict entry to these courses, offer diagnostic guidance and offer bridging courses. (Tresman, 2002)

#### Limitation by prior learning

Limiting access by prior learning is common in face-to-face institutions, where formal course entry requirements are often set; for example, 18+ school-leaving qualifications as a requirement for university entrance. Such requirements are usually set because the courses on offer are taught in a way that assumes certain prior knowledge and skills. These assumptions are most obvious in sequential subjects such as maths, the sciences and languages.

However, many ODL systems have no (or very loose) entry requirements. For example, some open universities allow students to start degree programmes without holding any prior qualifications. This open access approach is usually adopted for philosophical reasons (see *Choosing the type of ODL system*) but open access brings with it a number of problems.

- **Prior knowledge in sequential subjects.** Entry-level courses in sequential subjects have to be designed so that as many students as possible will succeed. So, for example, if a course on Spanish as a second language is to be offered, the course must be accessible to students who have never studied any Spanish. On the other hand, it would be inconceivable to offer entry-level maths courses for students who had never studied any maths, i.e. those who did not even know that  $1 + 1 = 2$  or what the signs '+' and '=' meant.

In this case, 'open access' would have to imply some prior acquaintance with the subject.

- **Prior skills in learning.** Even when an institution does not formally describe the prior learning skills that its entry-level courses assume, such skills must exist. For example, the skills of reading for study (as opposed to casual reading for pleasure), of making notes, of understanding questions and being able to frame answers to them. The more open a system is, the more likely it is that entrants will arrive without these skills. If such students are to succeed, entry-level courses will need to consciously and formally help students to acquire such skills. Many institutions have addressed this problem by providing generic study skills courses. Gibbs (1981, p. vii) maintains that such courses are 'ineffective'. He quotes research by Gadzella which found 'no difference in academic performance between those who had received guidance and a carefully chosen control group' and by Reid who 'found only short-term differences of study habits'. (Gibbs, 1981, p.69) The alternative offered by Gibbs (1981) is a study skills methodology, rooted in students' own studies, that seeks to promote awareness and reflection in students rather than the passive following of study skills rules. (Gibbs, 1981, p.91)
- **Capacity for autonomous learning.** Recent evidence suggests that locus of control is a strong factor in students' completion of ODL courses. (Locus of control refers to a person's view as to the extent their fate is determined by their own actions or forces outside themselves. A high internal locus of control indicates a person who sees their fate as being under their control.) Students with a high internal locus of control are more likely to complete ODL courses than students with a low internal locus of control. Thus, in offering ODL courses to students with a low internal locus of control, one could be said to be limiting their access to success. (Parker 2003)

### Limitation by type of job

ODL systems are sometimes designed for students in a particular type of work, e.g. trainee accountants or first-line supervisors. Here there is no sense of a philosophical commitment to open access. Rather, the methods of ODL are used to create more flexible access (particularly in terms of time of study) for a group of students who would find it difficult to attend a class-based course.

Limiting access in this way creates a more homogeneous student group, so simplifying some of the course design and delivery problems. The existence of courses of this type sharply challenges those teachers who have an unwavering attachment to open access.

### UNINTENTIONAL LIMITATION

Access can also be limited unintentionally through some oversight in the way that systems or courses are designed. Courses and systems may unintentionally create barriers in relation to:

- **race and gender.** Courses may appeal to (or discourage) people of a particular gender or ethnicity. This might occur through the curriculum or through the role models and examples used in the course

- **physical handicap.** Courses and systems may create access problems to those with physical handicaps. In general, ODL systems are less likely to create problems of physical access to buildings than would be the case with face-to-face courses. However, the reliance of ODL courses on learning materials may well create barriers to access, particularly for those with partial or impaired sight
- **location.** Whilst in theory ODL courses are open to students wherever they live and work, in practice things might be more complicated. For example, students who live in remote locations may have difficulty getting access to study centres or to libraries
- **access to equipment.** ODL courses may require access to equipment such as computers, telephones or email. For some students, such access might be impossible. The two case studies below both illustrate problems of this type
- **cost.** This will be a barrier to access for many students. Few ODL courses are free and even 'free' courses may involve additional costs for books, equipment and travel to centres.

## PROBLEMS OF EQUAL ACCESS

### Open Access College

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 cases, 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.

(COL 1999)

### Makerere University

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.

(COL 1999)

## SINGLE- OR DUAL-MODE INSTITUTION?

### INTRODUCTION

A basic decision when setting up a new ODL institution is whether it will be a single- or a dual-mode institution. Keegan (1996, p. 130) uses the more cumbersome descriptions of autonomous distance teaching institutions and subsections of conventional institutions. Our single-mode/dual-mode typology matches his in all but name.

Some of the key characteristics of the two modes are set out in Table 1.

### THE VOICE OF EXPERIENCE

*'Often ODL will start in a traditional institution with one or more individuals creating their own courses. They then promote, teach and mark these but most costs are hidden. Such a system is very fragile, e.g. there are problems of holidays, sabbaticals and enthusiasts leaving the institution. When you want to expand this, some central services and institutional responsibility is needed. This then reveals the true costs and can put off the enthusiasts who do not welcome the additional structures.'*

Sir John Daniel

**TABLE 1** KEY CHARACTERISTICS OF THE TWO MODES

Type	Examples	Key characteristics
Single mode	<ul style="list-style-type: none"> <li>• private ODL institutions – e.g. correspondence colleges</li> <li>• public (but with limited access) ODL institutions – e.g. company open learning centres</li> <li>• specially created open universities</li> </ul>	<ul style="list-style-type: none"> <li>• control over their own curricular</li> <li>• a high dependency on part-time and freelance staff for both course development and tutoring (this is less true of the open universities)</li> <li>• optimised management and administrative systems (since there is no need for one system to accommodate two types of course and two types of learner)</li> <li>• an absence of any existing rules, regulations and financial systems within which the ODL system must coexist</li> </ul>
Dual mode	<ul style="list-style-type: none"> <li>• independent study divisions of face-to-face colleges and universities</li> <li>• distance learning divisions of face-to-face colleges and universities</li> <li>• the New England integrated model. In this system, lecturers are allocated both on-campus and off-campus students on the same course and endeavour to keep the course offering to each as similar as possible (Keegan 1996, p. 131)</li> </ul>	<ul style="list-style-type: none"> <li>• the curricular, examinations and regulations are usually the same as those for campus-based students</li> <li>• availability of experienced academic and administrative staff</li> <li>• academic staff will usually prepare the learning materials and tutor the students</li> <li>• learning materials for a course often produced by one teacher, who will also tutor that course</li> <li>• students may move between modes or even follow an ODL course at the same time as a class-based course</li> </ul>

### ISSUES FOR DECISION MAKERS

- 1 Do you favour a single- or dual-mode institution?
- 2 What advantages and disadvantages for ODL do you see in using your existing:
  - face-to-face curricular
  - face-to-face academic staff
  - management and administrative structures
  - financial systems?

## SINGLE OR DUAL MODE?

Before you choose which system to adopt there are some important issues to consider. These are set out in Table 2.

**TABLE 2** ISSUES IN THE SINGLE/DUAL-MODE CHOICE

Aspect	Single mode	Dual mode
Curricular	<ul style="list-style-type: none"> <li>• need to create new curricular – this could be a burden</li> </ul>	<ul style="list-style-type: none"> <li>• might be convenient to use the ready-made curricula</li> <li>• may find that the existing curricular is not suitable for your new target audience, e.g. you may be recruiting adult students but the curriculum might have been designed for 18–25-year-olds.</li> </ul>
Part-time and freelance staff	<ul style="list-style-type: none"> <li>• help keep costs down</li> <li>• allow you to respond flexibly to changing demand</li> <li>• may be hard to find</li> <li>• may lead to problems of quality control</li> </ul>	<ul style="list-style-type: none"> <li>• may not be allowed to use part-time and freelance staff</li> <li>• may have to give internal staff first refusal of all work</li> </ul>
Management and administrative structures	<ul style="list-style-type: none"> <li>• can create your own to suit your ODL model</li> <li>• no structures or expertise to rely on</li> </ul>	<ul style="list-style-type: none"> <li>• the structures may adapt easily for good support to the ODL work</li> <li>• it might be difficult to adapt the structures to meet the needs of ODL</li> </ul>
Academic regulations	<ul style="list-style-type: none"> <li>• can create your own</li> <li>• problems of quality control in a new system</li> <li>• problems of establishing the academic reputation of a new system</li> </ul>	<ul style="list-style-type: none"> <li>• ready-made regulations may be useful</li> <li>• ready-made regulations may have aspects that are awkward for ODL, e.g. attendance requirements</li> </ul>
Financial systems	<ul style="list-style-type: none"> <li>• can create your own</li> <li>• may be costly to create</li> </ul>	<ul style="list-style-type: none"> <li>• useful to have ready-made financial systems</li> <li>• financial systems may not adapt to ODL, e.g. inappropriate overhead allocations</li> </ul>
Access to academic staff	<ul style="list-style-type: none"> <li>• no access – you will have to find your own academic staff</li> </ul>	<ul style="list-style-type: none"> <li>• useful to have experienced staff available to you</li> <li>• such staff may have little interest in ODL</li> </ul>

## THE ISSUE OF SHARED STAFF

### **The University College of Education of Winneba**

*'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.'*

(COL 1999)

## TRANSFORMING BOTH MODES

### **Deakin University**

*'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.'*

*'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.'*

(COL 1999)

## TENSIONS IN A DUAL-MODE SITUATION

### **Deakin University**

*'Maintaining university commitment to a Centre for Off-campus (External) Studies [is a problem] in the face of policies favouring devolution of managerial and financial responsibility to individual schools of study.'*

### **Murdoch University**

*'[Tensions include] allocating systematic workload release time for academic staff engaged in the development of a second (distance education) mode of learning resource materials.'*

*'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.'*

**University of Nairobi**

*'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 rescheduling supervised tests and examination schedules, causing frustration to students and part-time staff.'*

**University of the Philippines Open University**

*'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.'*

**Makerere University**

*'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.'*

(COL 1999)

## TECHNOLOGICAL CAPACITY

### INTRODUCTION

ODL systems began with correspondence education, where printed lessons were sent through the post to students. In turn, students mailed handwritten assignments to their tutors, who returned the marked assignments through the mail. In other words, three simple pieces of technology were used:

- printing
- writing on paper
- the postal service.

We have more technological choices today, although printing, writing and the post still have their place. When setting up a new system, you need to decide which technology you are going to use.

Some technology choices affect the institution only. For example, whether you decide to keep manual or computer records will have little or no direct impact on the students. Other choices affect students. For example, if you decide to deliver part of a course via the Internet, then only students with Internet access will be able to benefit from that part of the course.

### ISSUES FOR DECISION MAKERS

You will need to decide the type of technology you will use for the following aspects of ODL provision.

- 1 Providing information to students and potential students.
- 2 Providing information to tutors.
- 3 Diagnosing learning needs.
- 4 Enrolment of students.
- 5 Passive delivery of learning materials.
- 6 Interactive delivery of learning materials.
- 7 Access to online resources.
- 8 One-to-one communication.
- 9 Conferencing.
- 10 Student preparation of assignments.
- 11 Preparation of learning materials.
- 12 Delivery of learning materials.
- 13 Administration.

## THE VOICE OF EXPERIENCE: BE PRAGMATIC ABOUT TECHNOLOGY

- *'Pick the areas you will innovate in – do not innovate on all fronts.*
- *Choosing to innovate in technology is a very high-risk strategy. It is very hard to restore things if it goes wrong since it tends to go wrong in a big way.*
- *Take a pragmatic approach and identify your criteria for selection, e.g.*
  - *easily available (whether buy, pervasive or arrange)*
  - *cost-effective – for students and for the organization*
  - *check the lifetime cost and lifetime value*
  - *must be pedagogically superior to any other means (e.g. to face-to-face).*
- *Most technologies have high operational and high management costs.*
- *Books (including ODL texts) and tutorials are hard to beat. These are still students' top two choices.*
- *Keep an eye out for what is pervasive, e.g. the OU failed to spot the pervasiveness of fax so never took advantage of it.*
- *It is hard for education to be leading edge since it is not big enough to lead technology – work with what is available.'*

Professor Geoff Peters

## THE WIDE CHOICE

For every activity that your system might need to undertake, there will be a choice of technologies. Some of the main choices are set out in Table 3. Take, for example, the provision of information to students. You might use leaflets, the Internet, or face-to-face sessions. Or, to take another example, you might enrol students using paper forms sent through the mail, online forms, or at a centre.

**TABLE 3** SOME TECHNOLOGY OPTIONS IN ODL

Type of activity	Some technology options for the institution	Technology required by students and/or tutor
<b>Information to potential students</b> e.g. advertising courses, course information	Leaflets	None
	Advertisements in newspapers, etc.	None
	Broadcast advertisements	Radio/TV
	Internet	Computer + Internet access
<b>Information to students</b> e.g. course information, administrative information	Leaflets	None
	Internet	Computer + Internet access
	Face-to-face	None (although there may be transport implications)
Information to tutors e.g. course information, administrative information, professional information	Leaflets	None
	Internet	Computer + Internet access
	Face-to-face	None (although there may be transport implications)
	Telephone (if numbers of tutors are very small)	Telephone
Diagnosis of learning need e.g. tests to help students decide which course to take	Print, self-assessed tests or tests returned for marking	None
	Computer-based tests	Computer
	Online tests	Computer + Internet access
	Centre-based tests	None (although there may be transport implications)
Enrolment	Paper forms	None
	Online forms	Computer + Internet access
	At a centre	None (although there may be transport implications)

<b>Passive delivery of learning materials</b> e.g. books, workbooks, audio cassettes	Mail	None
	Online	Computer + Internet access
	Pick up at a centre	None (although there may be transport implications)
<b>Interactive delivery of learning materials</b> e.g. computer programs, interactive web pages	CD-ROM	Computer
	Online	Computer + Internet access
	Online at a centre	None (although there may be transport implications)
<b>Access to online resources</b> e.g. web sites other than those of the ODL institution	Online	Computer + Internet access
	Online at a centre	None (although there may be transport implications)
<b>One-to-one communication</b> e.g. tutor support of student, student-to-student chat	Letter	None
	Telephone conversation	Telephone
	Email	Computer + Internet access
<b>Conferencing</b> e.g. tutorials	Telephone conference call	Telephone
	Computer conferencing	Computer + Internet access
<b>Student preparation of assignments</b>	Handwritten submission	None
	Typed submission	Typewriter
	Word-processed submission – sent by post	Computer + printer
	Word-processed submission – sent attached to an email	Computer + Internet access

<b>Printed learning materials</b> e.g. workbooks	Word processors for manuscript preparation Printing equipment	None
<b>Internet-delivered print learning materials</b> e.g. downloadable Word file	Word processors for manuscript preparation Internet server to hold the files	Computer + Internet access + printer
<b>Internet-based learning materials</b> e.g. tutorial delivered as series of web pages	Computer with website creation software Internet server to hold the files	Computer + Internet access
<b>Audio cassette learning materials</b>	Production company to create the master tape Tape copying facilities	Audio cassette player
<b>Video cassette learning materials</b>	Production company to create the master tape Tape copying facilities	Video cassette player
<b>Broadcasting</b>	Studio facilities Broadcasting facilities	Radio and/or television
<b>Assessment</b>	Paper-based	None
	Computer-based	Access to computer in a secure environment
<b>Administration</b> e.g. record keeping, finance	Paper-based	None
	Computer-based	None

## FACTORS AFFECTING YOUR TECHNOLOGY CHOICE

Writers on technology for teaching and learning tend to support its use enthusiastically whenever possible and to assume that the latest technology is the best. In practice, most studies comparing one technology with another come to the conclusion that they are all about equally effective. Bates (1995, pp.16–17), though, is of the opinion that each media has its strengths and weaknesses. He provides ratings for 12 media against access, costs (small- and large-scale use), teaching, interactivity, organisation and speed. This leads him, for example, to rate print as poor for 'social' but good for 'access', whilst he rates audio conferencing as good for 'social' but poor for 'presentation.' Laurillard (2002) supports the views of Bates and presents a deep analysis of the characteristics of a wide range of media, downgrading the potential of most of them. However, the empirical basis for her assertions seems weak and the successes of a wide range of institutions with a wide range of media (see the introduction to this handbook) suggest that media choice is not as critical an issue as Bates or Laurillard have argued.

We will look in more detail at these aspects of media choice later in this handbook. This section concentrates on technological capacity and you will now look at some of the issues that might influence your choice of technology for the activities listed in Table 3.

### Institutional capacity

For each technology that you are considering using within your institution, there are some questions that you need to ask.

- Will staff have the skills to use this technology?
- If not, will we be able to train them to use it?
- How difficult will it be to maintain this technology, e.g. spares, repairs?
- What will it cost to purchase? To maintain? To update?
- What sources of help can we access if we have problems with the technology?
- How proven is the technology? (If you buy leading-edge technology you may find that it does not work quite as you expected.)

### Student capacity

Similarly, questions need to be asked about the implications of your technological choices from the students' viewpoint.

- Will students have access to the technology that you intend them to use? (If not, then how else will such students access your courses?)
- What will it cost them to purchase the technology?
- What will it cost them to use the technology, e.g. telephone bills?
- Will students have the skills to use the technology?
- If not, will you be able to help them to acquire those skills?

## TECHNOLOGY THAT IS INACCESSIBLE TO LEARNERS

### **Murdoch University**

Course planning includes *'Deciding the point at which it may be assumed that a technological innovation (audio or video cassette, personal computer, email) has become sufficiently widely diffused to justify its use as a compulsory component of course materials.'*

### **Charles Sturt University**

*'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.'*

(COL 1999)

## ENSURING ACCESSIBILITY OF TECHNOLOGY

### **National Open School**

*'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.'*

### **University of Guyana Institute of Distance and Continuing Education**

*'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*
- *lack of telephone links*
- *shortage of resource persons adequately trained to prepare and produce the audio material.'*

### **The University of Zambia**

*'Print materials are the predominant medium of instruction complemented by a four-week intensive face-to-face teaching programme. The comparatively underdeveloped telecommunications technologies make it difficult to use and integrate other media in distance education, resulting in a weak two-way communication system.'*

(COL 1999)

## ATTENDANCE REQUIREMENTS

### INTRODUCTION

Attendance is often still used as a measure of successful completion of a face-to-face course, although other measures are beginning to be used. Sometimes the requirements to gain a certificate are to pass an exam and to have attended at least 75% of the teaching sessions. The increasing emphasis on learning outcomes, competences and portfolios is making attendance requirements less meaningful. The Internet is also putting pressure on attendance requirements as some universities replace lectures with web-based teaching.

In 'traditional' ODL, there were no attendance requirements since the programs came into existence to cater for students who were unable to attend face-to-face courses. However, as ODL courses have diversified to include tutorials, seminars and summer schools, attendance has become an issue. Also, the presence of campus-based ODL courses once again raises the question of attendance.

### ISSUES FOR DECISION MAKERS

- 1 What is your philosophical attitude to attendance requirements?
- 2 For what sort of events might you require attendance?
- 3 What arguments would you put forward for making attendance at these events compulsory?
- 4 What arguments would you put forward for making attendance at these events voluntary?

### THE PHILOSOPHICAL VIEW

Those who hold the view that ODL is about maximising student choice of when, where and how they study (see *Choosing the type of open or distance system*) are likely to be opposed to attendance requirements on principle, irrespective as to whether or not an attendance requirement might improve student progress.

### THE PRAGMATIC VIEW

Those who take a more pragmatic approach might treat attendance as just another factor in course design that can be manipulated to maximise course completions and examination passes.

### ATTENDANCE AS A PACER

One function of attendance requirements is to create a pacing mechanism (see *Choosing between self-paced and program-paced systems*). Since pacing devices improve course completion rates and student progress, some would argue that attendance requirements should be build into ODL courses wherever possible.

## ATTENDANCE AT WHAT?

The most likely events at which attendance might be required on an ODL course are:

- workshops
- practical sessions
- seminars
- tutorials
- examinations.

## ARGUMENTS AGAINST ATTENDANCE REQUIREMENTS

Apart from any philosophical objections to pacing, there are some practical reasons for avoiding attendance requirements. Many students are attracted to ODL because they have difficulty in attending on campus. For example they may not have the time or they may live too far from the campus or its study centres. If unnecessary attendance requirements are imposed on a course, potential students may simply decide not to enrol.

### **University of Tanzania**

The University wished to have face-to-face sessions but found it difficult *'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'*.

(COL 1999)

## CERTIFICATION AND ACCREDITATION

### INTRODUCTION

Receiving a piece of paper that testifies to successful completion of a course is a good motivator for students. This section looks at some of the issues involved in producing that piece of paper for ODL learners.

Certification is the process whereby students receive recognition that they have reached a given standard at the end of a course or a program of study. The certificate might state:

- what they have learnt and can now do – this is the competence/portfolio type of certification
- what mark or grade they received; for example, 70% or Merit
- their ranking; for example, 15th out of 105 students.

If a certificate is awarded by the institution responsible for running the course or programme, it may be difficult for others to decide how that certificate compares with those of other institutions. Accreditation helps with this problem.

Accreditation is the process whereby a body external to a course provider makes a statement about the value of a certificate or other award. Different countries have different accrediting systems but, in general, the systems will specify standards for different types of qualification, such as school-leaving qualifications, professional qualifications, degrees, and so on.

### ISSUES FOR DECISION MAKERS

- 1 What will be the certification needs of your students? What type of recognition of their achievements will they need and for what purposes?
- 2 Who will certify your courses?
- 3 Who will accredit your courses?
- 4 If you are in a dual-mode institution, what advantages/disadvantages do you foresee in having to use a certification/accreditation system designed for face-to-face students?

### CERTIFICATION AND ACCREDITATION IN DUAL-MODE SYSTEMS

Most ODL systems that are part of dual-mode institutions use the certification and accreditation system of the face-to-face part of the institution. So, for example, many universities that have ODL departments usually have one, common, certification/accreditation system for both parts of their work. Usually that common system is the one developed for on-campus students.

It is rare that a dual mode institution will permit its ODL section to use a certification/accreditation system other than the one used for its face-to-face students.

## CERTIFICATION AND ACCREDITATION IN SINGLE-MODE SYSTEMS

Single-mode ODL institutions need to decide which system of certification and accreditation to use. They have three choices:

- to provide their own certification but not to seek accreditation for that certification – this is rarely done, though, since such certification is unlikely to have much value
- to provide their own certification and to seek accreditation for that certification from an outside body
- to use an external assessment system that can provide both certification and accreditation.

(If the single-mode institution is a university, it will almost certainly have the powers to both certify and accredit its own ODL students.)

## SOME ISSUES FOR NEW INSTITUTIONS

Generally, new ODL systems will need to establish their reputation for quality quickly.

For dual-mode institutions, where the face-to-face system has a good, established reputation for quality, the new ODL system will adopt the face-to-face certification/accreditation system. This publicly demonstrates that the ODL provision is of the same standard as the established face-to-face provision.

For single-mode institutions, the need to establish a reputation for quality will almost always inhibit the institution from offering its own accreditation and, also perhaps, from offering its own certification. Instead, the organisation will seek the public recognition of its quality by using an external, well-established certification/accreditation system.

## PROBLEMS OF COMMON SYSTEMS OF CERTIFICATION/ACCREDITATION

Where a certification/accreditation system has been developed for face-to-face teaching and is then used for ODL, problems can arise. For example the system may:

- include attendance requirements that are unrealistic for ODL students
- include assessment methods (e.g. group assessment) that are difficult to replicate with isolated students
- the face-to-face arrangements may have been designed for 18–25-year-old students whereas the ODL students may tend to be older
- involve fixed assessments that do not fit well with the needs of the ODL learners.

# UNIT 3

## STRATEGIC BUSINESS PLANNING IN ODL

This unit is all about money. Money matters in every educational enterprise but it is more difficult to plan and manage in ODL than in face-to-face education. This is because ODL usually involves high levels of up-front investment that have to be financed before fees are received from students.

### BUSINESS PLANS

The business plan is not, as it might sound, about how to make money. Rather, it describes what you wish to achieve educationally, how you will achieve it and how you will find the money to achieve it. It is thus a critical document in a new ODL system.

### COST BEHAVIOUR IN ODL SYSTEMS

Costs in ODL systems behave very differently from costs in face-to-face education. Understanding this difference in cost behaviour is essential if you are to produce sensible plans that will deliver viable ODL systems.

### ECONOMIES OF SCALE

Most ODL systems involve the production of learning materials and this results in high up-front capital costs. Because these costs have to be met before any students are enrolled, ODL can appear expensive. However, as more and more students are enrolled, so unit costs fall. With careful planning, you can design ODL systems that utilise economies of scale to produce unit costs well below that of conventional education (see the *Introduction* to this handbook).

### MAKING DECISIONS ABOUT FEES

This topic briefly deals with the sorts of decisions that you will need to make about fees.

### TREATMENT OF INSTITUTIONAL OVERHEADS

This final topic looks at an issue peculiar to dual-mode institutions – the fair allocation of overheads between the two modes. Generally, a face-to-face institution has many overheads that are for facilities used only by face-to-face students, such as libraries, laboratories and classrooms. Consideration has to be given to what is a fair way to allocate overhead costs between the two modes.

## BUSINESS PLANS

### INTRODUCTION

We have called this section ‘business plans’ even though few ODL systems are seen as businesses. Our reason for doing this is that financial survival is essential if an ODL system is to be of any value to its target learners.

A business plan is a tool to help ensure that a new ODL system is likely to succeed at the financial level. It sets out:

- what you intend to do in a given period
- the cost of that work
- where the money will come from to pay for that work.

Typically, a business plan for a new ODL system will cover a period of 3–5 years.

### ISSUES FOR DECISION MAKERS

A business plan answers questions such as:

- 1 How much will the system cost during the period of the plan?
- 2 How much income will be received during the period of the plan?
- 3 For each month, what will be the gap between income and expenditure?
- 4 How can we ensure the system develops in line with the money we have available?
- 5 To what extent will the system be self-financing?
- 6 To what extent will the system be dependent on grants and subsidies?

### THE VOICE OF EXPERIENCE

*‘Every new institution needs to know how to write business plans.’*

*Professor Olugbemi*

*‘The business plan must look at needs and opportunities. Otherwise you run the risk of making investments in hardware and software which are not needed.’*

*‘ODL has to make bigger, more deliberate investments [than face-to-face teaching].’*

*‘Institutions make a mess of big projects because they don’t count indirect costs and don’t analyse real costs.’*

*Dr Glen Farrell*

*'The costs of running, the infrastructure and the operational systems are often much more than expected.'*

Professor Geoff Peters

*'If you are self-financing, you've got to listen to your accounts staff.'*

Dato' Professor Gajaraj Dhanarajan

## EXAMPLE CONTENTS OF AN ODL BUSINESS PLAN

### Short- and long-term objectives

- The number and types of students to be enrolled in given periods.
- The number and types of courses to be offered in given periods.
- The percentage market share to be achieved.

### Courses portfolio

- The numbers of courses to be offered at given levels.
- The length (in study hours, say) of the courses.
- Distinctive features of courses, especially those features that would distinguish your courses from those of competing institutions.
- The certification/assessment system to be used (see *Certification and accreditation*).
- The quality standards that will be applied to the curricula for the courses.

### Course development and production system

#### **Development**

- How the curricula will be planned.
- How the courses/audios/videos/computer programs will be made.
- How the courses will be edited.
- The quality standards that will be applied to learning materials development.

#### **Production**

- How multiple copies will be made.
- Where copies will be stored.

### Course delivery system

#### **Enrolment system**

- How students will be enrolled.
- Fees policy, with indicative fees for the first year or two.

**Tutorial system**

- What type (and quantity) of tutorial support will be offered to students.
- Who the tutors will be.
- The staff development system for tutors.
- The quality assurance system for tutor activity.
- How tutors will be paid.

**Materials despatch**

- When materials will be sent out (e.g. at the start of a course, or in stages).
- Methods for the despatch of materials (internal or external?).
- The delivery systems to be used (e.g. the mail, local centres).

**Local centres**

- The role of local centres and their specific tasks.
- How they will be staffed.
- The staff development system for local centre staff.
- The quality assurance system for local centre activity.
- How local centres will be financed.

**Web system and web server**

- What role the Internet will have in your system.
- What type of system you will need.

**Assessment system**

- The nature and number of assessments per year.
- How and where assessments will be carried out, e.g. at your centre, at local centres?
- How assessment will be staffed.
- Who will mark the assessments?
- What quality assurance will be applied to the assessment system?

**Marketing/sales system**

- Who you think your market is (this should be based on good research).
- The size of the market.
- The number of students you expect to enrol each year.
- The marketing methods that you will use to reach those students.

## Resources required

Figure 1 shows a summary costing of all the items listed above. Each row summarises a more detailed table that will appear in the Financial detail section.

Notice that the plan has a Year 0. This is the year (and it may be longer for some institutions) in which you plan, develop the first courses and set up systems. There are no courses in this year, no students and no fee income.

The final line 'Net cash flow' tells you how much cash you have (if you are in surplus) or how much cash you need (if you are in deficit) at the end of each year.

**FIGURE 1** A TYPICAL BUSINESS PLAN SUMMARY

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>ACTIVITY</b>						
Number of courses on offer						
Number of enrolments						
<b>INCOME</b>						
Income from fees						
Other income, e.g. graduation fees						
<b>TOTAL INCOME</b>						
<b>COSTS</b>						
Academic staff						
Support staff						
Course development costs						
Course production costs						
Enrolment costs						
Tutoring costs						
Materials despatch costs						
Local centre costs						
Hire of other venues						
Web and server costs						
Assessment costs						
Marketing costs						
Other administration costs						
Buildings, etc.						
<b>TOTAL COSTS</b>						
<b>NET CASH FLOW</b>						

## BUSINESS PLANS IN PRACTICE

Business planning at the University of Papua New Guinea Institute of Distance and Continuing Education

*'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.'*

(COL 1999)

## COST BEHAVIOUR IN ODL SYSTEMS

### INTRODUCTION

Costs in ODL systems behave very differently from those in face-to-face ones. Generally, in face-to-face teaching, the main cost is teachers' salaries and total costs rise roughly in proportion to enrolments.

In ODL, there is generally a large up-front fixed cost for the development of materials and systems. This cost can be avoided to a certain extent if the system uses ODL materials bought in from other institutions. However, only a small proportion of ODL providers take this approach, suggesting that it is rarely possible to find materials that match the needs of your students.

Once the up-front course development costs have been met, the additional cost of teaching one more student is very low, being limited to the marginal costs of tutoring. Whether this balance of costs will remain the same for online learning is not yet clear. The evidence at the moment seems to suggest that online systems will have similarly high up-front costs and, possibly, higher recurrent costs, since tutors spend more time working with online students than with traditional distance students. (Rumble, 1999)

As mentioned in the introduction to this handbook, costing is covered in more detail in the COL publication, *A Guide to Costing in Open and Distance Learning*.

## TYPES OF COSTS

Below are some of the common types of costs involved in an ODL system.

- **Fixed costs** are those that do not rise if you enrol more students. So, for example, buildings, computer systems and the course writing fees are all fixed costs.
- **Variable costs** are ones that rise every time you enrol more students. Examples of these are fees paid to tutors.
- **Maintenance costs** are a type of fixed cost that has to be incurred every so often (usually once a year) in order to continue to run a given range of courses.
- **Cash flow** is – more or less – how much money you have in the bank, which may be more or less than is available to spend. For example, if an organisation has \$100,000 in the bank but is expecting a bill of \$60,000 for some computers, then it only has \$40,000 to spend.

Examples of the main types of cost are set out in Figure 2.

**FIGURE 2** TYPICAL ODL COSTS

Cost type	Examples
Fixed costs:	<ul style="list-style-type: none"> <li>• market research</li> <li>• marketing</li> <li>• materials development</li> <li>• management and administrative staff</li> <li>• accommodation, including heat, light, insurance</li> <li>• office costs</li> </ul>
Variable costs	<ul style="list-style-type: none"> <li>• materials stock (the more students you have, the more copies you need)</li> <li>• recruitment of tutors (as student numbers go up, so more tutors are needed)</li> <li>• tuition costs (tutors are often paid per item of work done)</li> </ul>
Maintenance costs	<ul style="list-style-type: none"> <li>• writing new assignments each year</li> <li>• writing new exams each year</li> <li>• correcting errors found during the year</li> <li>• updating small parts of the course that have become out of date</li> <li>• writing supplementary material to deal with gaps or problems in the material</li> <li>• rewriting complete courses when they become out of date – experience shows that print courses might need rewriting every 3–8 years whilst online courses might need rewriting every 6–12 months</li> </ul>

## ISSUES FOR DECISION MAKERS

- 1 What will your fixed costs (i.e. overheads) be?
- 2 What will your variable costs be?
- 3 How many enrolments do you need each year to break even?
- 4 What will your maintenance costs be?

## THE VOICE OF EXPERIENCE

*'Traditional institutions often only experience change at their margins, using special funds which do not impact on their main activities. This means that they are used to a culture in which, for change projects:*

- *they don't count indirect costs*
- *projects are often very expensive*
- *they don't analyse real costs*
- *they don't cross-utilise materials.*

*With ODL you have to make bigger, more deliberate investments, so a new culture is needed.'*

Dr Glen Farrell

*'When you go online the cost structures change and the economies of scale work in different ways. This is for two main reasons:*

- *online materials have a shelf-life of perhaps six months, simply because students expect online materials to be changed and updated very frequently. So, you have higher revision costs*
- *delivery also costs because online tuition takes up more tutor time.*

*Basically, variable costs are higher.*

*We do have one saving, though. Prior to going online, the University gave students toll-free access to tutors at the University. Now they pay their own online costs. This saving helps towards our higher tutor costs.'*

Dr Dominique Abrioux, Athabasca University

## EXAMPLE CASH FLOW

We shall illustrate these cost behaviours with a simple example of a new ODL system set up in Year 0 to run just one course for five years. We will assume enrolments of:

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
No. of students enrolled	0	1000	2000	2000	2000	1000

Students will be charged a fee of \$350 for the course. The materials for one student will cost \$20 to manufacture and tutors will be paid \$200 to tutor one student. To keep this example simple, we will not show any course maintenance costs.

The cash flow for our system is shown in Figure 3.

**FIGURE 3** CASH FLOW FOR A SIMPLE ODL SYSTEM

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
No. of students enrolled	0	1000	2000	2000	2000	1000
<b>FIXED COSTS</b>	<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Academic staff	150000	150000	150000	150000	150000	150000
Support staff	50000	100000	100000	100000	100000	100000
Market research	5000					
Marketing	1000	2000	2000	2000	2000	2000
Materials development	50000					
Maintenance costs		5000	5000	5000	5000	5000
Local centres and other venues		25000	25000	25000	25000	25000
Accommodation	20000	20000	20000	20000	20000	20000
Office costs	10000	10000	10000	10000	10000	10000
<b>TOTALS</b>	<b>286000</b>	<b>312000</b>	<b>312000</b>	<b>312000</b>	<b>312000</b>	<b>312000</b>
<b>VARIABLE COSTS</b>						
Materials stock	80000					
Recruitment of tutors	10000					
Tuition costs		100000	200000	200000	200000	100000
<b>TOTAL COSTS</b>	<b>90000</b>	<b>100000</b>	<b>200000</b>	<b>200000</b>	<b>200000</b>	<b>100000</b>
<b>TOTAL COSTS</b>	<b>376000</b>	<b>412000</b>	<b>512000</b>	<b>512000</b>	<b>512000</b>	<b>412000</b>
INCOME (FEES)	0	350000	700000	700000	700000	350000
<b>ANNUAL CASH FLOW</b>	<b>-376000</b>	<b>-62000</b>	<b>188000</b>	<b>188000</b>	<b>188000</b>	<b>-62000</b>
CUMULATIVE CASH FLOW	-376000	-438000	126000	376000	376000	126000

Lines 5–13 show the fixed costs, year by year. Notice that there are costs of \$286,000 in Year 0 – a year in which there is no income. For simplicity we have produced all the materials for the five years in Year 0. In practice, they might be printed year by year.

Lines 17–19 show the variable costs – these will depend on the number of students enrolled (see above).

Line 20 is the total costs (fixed + variable).

Line 24 is the fee income.

Line 27 shows the net cash in the bank at the end of each year. Notice that this is negative from Year 0 to Year 1. This is a common feature of ODL systems because of the need for up-front capital to finance course development, stock and marketing.

You can see that by Year 5, a surplus of \$126,000 has been built up, which can be used to finance further courses. However, if student numbers prove to be 20% lower than forecast, the net cash flow will look like this:

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	-376000	-508000	-84000	96000	96000	-84000

Because ODL systems have high fixed costs they are very sensitive to student numbers and even a modest shortfall may result in a loss. A modest over-recruitment can result in a very comfortable surplus.

## ECONOMIES OF SCALE

### INTRODUCTION

Unlike face-to-face teaching, ODL offers potential economies of scale because although development costs of materials are high, teaching costs are low.

However, the economies of scale discussed here assume an organisation that is producing its own learning materials. When materials are bought in, unit costs should start low and continue to be low as numbers rise.

### ISSUES FOR DECISION MAKERS

- 1 What target unit cost will we set ourselves?
- 2 Given our costs, how many enrolments do we need to reach our target unit cost?
- 3 What are the financial consequences of under-recruiting?

### FACTORS AFFECTING COST-EFFICIENCY

ODL systems may or may not be more cost-effective than other modes of provision. Factors that help determine this outcome include:

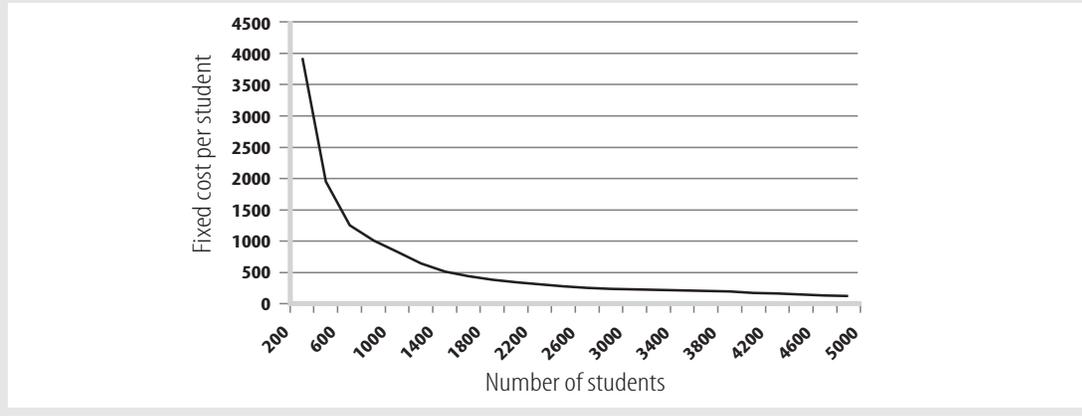
- student numbers – generally, the more students on any one course, the lower the unit cost
- number of courses offered within any one programme – generally the more courses offered, the lower the number of students per course and hence the higher the unit cost
- frequency of course revisions – frequent revisions mean higher costs
- technology used – some technologies are more expensive than others. Print, for example, tends to be cheap, whereas television is usually expensive (Bates, 1995)
- level of student support – this is often the most expensive element in ODL systems and the amount of support offered is usually constrained by cost.

(Moore and Tait, 2002, p.12)

## EXAMPLE OF ECONOMIES OF SCALE

In our example the total fixed costs over six years are \$771,000. The fixed cost per student falls rapidly as student numbers rise (Figure 4). At 200 students, the fixed cost is \$3855 per student, whereas at 1000 students it is \$771 and at 3000 is \$387.

**Figure 4 An example of economies of scale in ODL**



## THE PROBLEM OF OVER-RECRUITING

*The first batch of distance education students to graduate from a Ghanaian University was 136 post-diploma BEd students (among the other regular students) from the University of Education, Winneba (UEW) on July 27, 2002.*

*People could hardly contain their joy when it was time to present this unique batch of students, especially so when two of them came out with the highest accolade – the first-class division. Come to think of it, one of these two was a full sitting member of Ghana's National Assembly and the other a woman. To crown it all, among the dignitaries present was Ghana's Vice-President (His Excellency Alhaji Aliu Mahama) himself.*

*The standing ovation was prolonged. The occasion was being broadcast live and telecast over some bandwidths and channels. The news spread all over like wild bush fires. The popularity of the distance education programme at the University of Education (UEW) gained more currency.*

*Only a few months after this boosting of the image of distance education at UEW, we are overwhelmed by the tremendous increase in the number of prospective applicants who have purchased forms to enrol in the distance education diploma programme. Almost 3,000 application forms have been sent out, filled out and returned for processing.*

*We can foresee an upward geometric growth in the numbers of our student population in the coming years. The challenge for us at IEDE of UEW is how to cope with such numbers. We can only turn up to the rapid but smooth integration of ICTs in our distance education programmes.'*

Dr Theo. Ossei-Anto; Director, Institute of Educational Development & Extension; University of Education; Winneba; Ghana

## MAKING DECISIONS ABOUT FEES

### INTRODUCTION

A fundamental factor affecting the fees charged to students is an organisation's philosophical position on open access. If there is a strong commitment to 'being open to all' then high fees are likely to be seen as a barrier to access, especially for the disadvantaged. The higher the fee, the more likely it is that the student body will be skewed towards those who are better-off.

Where an institution has a commitment to widening access but is unable to keep fees low for all students, differential fee systems may be introduced. For example, some institutions have lower fees for the unemployed or for those not earning wages.

Another strategy that some institutions have adopted is to try to persuade governments (or other funding bodies) to fund a fixed number of places for students in defined priority groups.

### ISSUES FOR DECISION MAKERS

- 1 Will students be able or willing to pay our proposed fees?
- 2 What extras will students have to pay for and how will this affect their willingness to enrol?
- 3 Will we have a differential fee system?
- 4 Will we have a bursary system?
- 5 What government (or other) financial help will students on our ODL courses be entitled to?

### EXAMPLES OF EXTRA COSTS TO STUDENTS

Students will incur a number of extra costs when they enrol on a course:

- paper, pens, etc.
- telephone usage
- postage
- travel, e.g. to local centres
- use of or purchase of a computer
- other equipment as required for their particular course.

## TREATMENT OF INSTITUTIONAL OVERHEADS

### INTRODUCTION

This section applies to dual-mode institutions only.

To illustrate the problem of institutional overheads we shall take the case of an imaginary conventional university that decides to set up an ODL section. The university's cost structure before the existence of the ODL section is shown in Figure 5.

**FIGURE 5** INSTITUTIONAL COST STRUCTURE BEFORE THE INTRODUCTION OF ODL



If the university now adds an ODL programme, should that programme bear an overhead charge of 30%? Most ODL practitioners would say that it should not since a large part of the institutional overheads of a face-to-face institution consist of the cost of classrooms, lecture rooms, laboratories, libraries, etc. These are all facilities that are not used by ODL students so it is unfair to expect ODL students to pay towards these costs. This means that a new approach is needed in which institutional overheads can be split into:

- overheads that relate only to face-to-face teaching
- other overheads.

### ISSUES FOR DECISION MAKERS

- 1 Which overheads apply only to face-to-face students?
- 2 Which overheads apply only to ODL students?
- 3 Which overheads apply to both?
- 4 How, then, should institutional overheads be charged to our ODL activity?

### THE VOICE OF EXPERIENCE

*'It is important to have critical mass so that you can cover the overheads.'*

Dr Ros Morpeth, Director, National Extension College

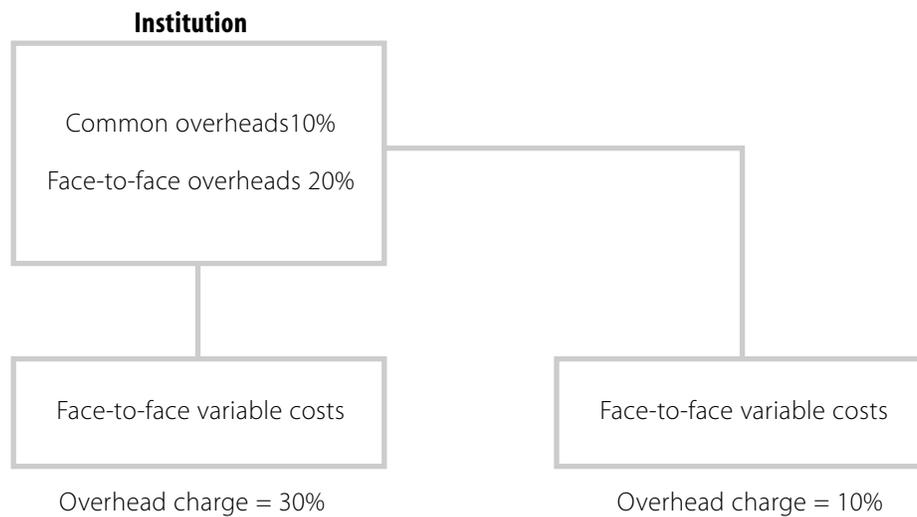
## STRAIGHT OVERHEAD CHARGE

The simplest method of handling a new ODL section is to charge institutional overheads to it at the same rate as for face-to-face courses. As we have said, this method is simple but it hardly makes sense.

## REAPPORTIONMENT OF OVERHEADS

A fairer method involves identifying the common overheads and charging these to both face-to-face and ODL activity (Figure 6). The face-to-face overheads are then born fully by the face-to-face activity.

**FIGURE 6** REAPPORTIONED INSTITUTIONAL OVERHEADS





# UNIT 4

## DEVELOPING AND ACQUIRING MATERIALS

With a few rare exceptions (such as the University Without Walls), ODL systems are based around specially prepared learning materials. This unit looks at the characteristics of such materials and how they are developed, manufactured, stored and distributed.

### CHARACTERISTICS OF GOOD ODL MATERIALS

This first topic looks at how ODL materials differ from textbooks and other common forms of educational material. It shows how much more complex ODL materials are.

### BUY, MAKE OR ADAPT?

There are three basic methods of acquiring ODL materials: buying, making and adapting. This topic explores the advantages and disadvantages of the three approaches.

### COURSE PLANNING

The topic on course planning looks at some of the major questions (such as aims, content and assessment) that must be addressed in order to create an ODL course. Whilst these are issues that also arise in face-to-face courses, the ODL situation (i.e. the need to create materials) requires that the issues be addressed in depth.

### MEDIA CHOICE AND MIX

Whilst print is the dominant media in ODL, course planning involves considering the best media to use for any given learning outcome. This topic explores the characteristics of the various media and some of the issues involved in using each.

### UNIT WRITING

In this topic we look at the complexities of writing detailed ODL materials. The topic demonstrates that this is a complex process, that requires extensive author training and good management.

### DEVELOPMENTAL TESTING

However much skill is put into preparing materials, the only way to be certain that they will do the job they are planned to do is to test them with real students. This topic looks at how that testing can be done.

## MANUFACTURING/METHODS OF DELIVERY/STORING MATERIALS

These three topics look at some of the mundane mechanical issues involved in getting materials to students.

## UPDATING MATERIALS

When materials are first made, all those involved tend to overlook the fact that, sooner or later, the materials will need to be updated. This topic looks at methods of creating a system so that updating becomes a routine process.

# CHARACTERISTICS OF GOOD ODL MATERIALS

## INTRODUCTION

Learning materials are central to ODL systems. Poorly designed materials will result in high drop-out rates and a bad reputation for the institution. It is essential, therefore, that staff working in ODL have a clear idea of what are the characteristics of good ODL materials.

## Role of learning materials

In ODL, learning materials replace the teacher, the classroom and, to a large extent, the interchange of ideas between students. This means that the materials have to do much more than, say, textbooks or handouts. They must:

- provide the content to be learnt
- structure the content into learning sessions
- help students decide which parts they need to use and when
- provide activities to help students to learn the content and to apply it
- provide feedback to learners, to help them learn from their mistakes
- motivate students
- help students develop those study skills that are essential to individual learners
- provide a means for students to assess their progress.

Notice that all the items in the list above are things that we would expect a good classroom teacher to do but not what we would expect from a traditional textbook.

## ISSUES FOR DECISION MAKERS

- 1 What will be the role of materials in your ODL system?
- 2 Which types (tell-and-test, tutorial in print and reflective action guide) of ODL material do you consider most appropriate for your system? (You may need all three types.)
- 3 What criteria will you use to assess the quality of the materials that you use?

## TYPES OF TEACHING WITH MATERIALS

Rowntree (1994, pp.14–15) identifies three distinct approaches to ODL learning materials, with the characteristics shown in Table 1. All three approaches can be implemented in various media.

**TABLE 1** TYPES OF TEACHING WITH MATERIALS

Type	Characteristics
Tell-and-test	<ul style="list-style-type: none"> <li>• reading (or listening or viewing)</li> <li>• followed by a test</li> </ul>
Tutorial	<ul style="list-style-type: none"> <li>• reading</li> <li>• frequent activities</li> <li>• feedback on the activities</li> </ul>
Reflective action guide	<ul style="list-style-type: none"> <li>• less reading</li> <li>• fewer, longer activities</li> <li>• activities may be applied to the student's own work or personal situation</li> </ul>

Each type is valid for certain purposes, so you need to decide what your purpose is, although tell-and-test is of limited application. Most courses are of the tutorial type, teaching a defined body of knowledge and skills and giving students ample practice in using them. The reflective action guide is more appropriate to higher-level learning and to broadly defined learning tasks such as projects.

## TYPICAL CONTENT OF ODL MATERIALS

When you look at ODL materials, you are likely to find a much wider range of features than you would find in a textbook or a handout. ODL materials typically contain:

- learning outcomes
- study advice
- a friendly style of writing, with the student addressed as 'you'
- lots of examples
- an open, highly structured layout with lots of headings
- lots of signposting devices
- lots of activities, with feedback
- less text than in a textbook

- structured spaces in which students write their response to the activities
- summaries and key points lists
- self-marked progress tests.

Producing materials of this complexity (and particularly when more than one media is involved) often requires a team approach, such as the one described in the University of the Philippines Open University case study below.

## FINDING WRITERS

### **University of the Philippines Open University**

*'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.'*

(COL 1999)

## BUY, MAKE OR ADAPT?

### INTRODUCTION

There are three ways to acquire ODL materials for your system: buying, making or adapting. In this section we look at the merits of each of these approaches.

### ISSUES FOR DECISION MAKERS

1. What will your policy be on buying ODL materials?
2. What will your policy be on making ODL materials?
3. What will your policy be on adapting ODL materials?
4. When and for what reasons would your ODL system create study guides?
5. What quality checklist will you apply to texts before they can be used with a study guide?

### BUYING EXISTING ODL MATERIALS

It takes a long time and a lot of money to make good ODL materials, so buying ready-made materials can be tempting. However, unlike textbooks (which tend to be written for loosely specified, generic audiences) ODL materials are usually written for quite tightly specified

student needs and circumstances. If you are thinking of buying existing materials, you will need to consider whether they:

- have the appropriate content for your students, i.e. cover the learning outcomes
- start at the right level, i.e. are their prerequisites right for your students?
- meet your quality standards, e.g. for accuracy, being up-to-date, being relevant to the local culture
- will be available to use for as long as you need them (published materials can go out of print).

Economies of scale suggest that buying materials works best when you have low student numbers on a course. If you were to make materials for small numbers, your unit costs would be high. However, if you buy them from someone else, you benefit from the lower unit cost of their larger market. (See *Cost behaviour in ODL systems*.)

## MAKING YOUR OWN ODL MATERIALS

Most ODL institutions are attracted to making their own materials. This may be because they wish to cover a very specific curricular or simply because they believe they can make better materials than are available from elsewhere.

The two main reasons for not making materials are cost and time.

### Cost

Because ODL materials are so different from typical textbooks (see *Characteristics of good ODL materials*) they are expensive to make. To offer such courses at reasonable fees, you need large numbers of students to recover your costs. Where there is a high uncertainty about student numbers, making materials can be very risky. However, the larger your market, the more economic sense it makes to create your own materials. (See *Cost behaviour in ODL systems*.)

### Time

Good materials also take a long time to make. Depending on the organisation, the length of time from beginning to plan course materials to their being available for use will typically be from one to two years. During this period you have development costs (including staff costs) but no income from student fees. Financing this gap can be a problem.

The time issue is illustrated in the University College of Education of Winneba and University of Nairobi case studies below. One approach to this problem is to have a phased introduction of courses.

Where full-time academic staff are to write distance learning materials, it is important to ensure that they are released from other duties so that they really do have the time to write. Many organisations have expected their staff to both continue all their teaching and to write

materials. Invariably this results in the materials not being available when they are needed. The University of Botswana case study below illustrates this difficulty.

## ADAPTING EXISTING MATERIALS

The problems of buying and making can be overcome by adapting existing materials. The commonest method of adapting is to write a study guide to be used alongside those materials.

### What is a study guide?

A study guide is a set of notes that guides students through one or more published sets of materials. At its simplest, a study guide course will consist of a published textbook plus a study guide specially written to help students work through that textbook.

### Why write a study guide?

Study guides tend to be written to (a) avoid the time and cost of writing a full ODL course and (b) to take advantage of a good, published text.

Kember (1991, pp.13–14) suggests various advantages and disadvantages of study guides. Under advantages he cites:

- lower cost
- you can use the best published texts
- you can give your students access to a variety of points of view.

Under disadvantages he cites:

- not being able to find exactly the text you want
- the risk that the text may go out of print
- the text may be written for a different type of audience to your students.

### Choosing the text or texts

Lewis and Paine (1986, p. 35) suggest nine criteria for selecting the text or texts around which you are going to write your study guide:

- 1 Does it cover the right content?
- 2 Is the coverage extensive enough?
- 3 Is it up-to-date enough to be of use to me?
- 4 Is the structure flexible? Can it be reordered?
- 5 Is the level of difficulty right for the learners?
- 6 Will it be accepted by learners and their tutors?
- 7 Will it continue to be available?
- 8 Is it cheap enough?
- 9 Is the presentation attractive?

## Contents of a study guide

Exactly what a study guide contains will depend on (a) the text that you are using and (b) your students' needs. However, the main function of a study guide is to make up for gaps and deficiencies in the text.

The following are the items that typically appear in study guides.

### Whole study guide features

- course/module contents
- course/module outcomes
- bibliography
- glossary
- study guidance.

### Features of specific units in a study guide

- unit outcomes
- unit contents
- activities (often based on readings from the published text) with feedback
- commentary on the published text
- additional content (e.g. local examples, missing material)
- progress tests with feedback
- summaries.

## TEACHERS ATTITUDES TO MATERIALS-BASED LEARNING

### University of Nairobi Distance Education Teachers' Programme

*'The University experienced a number of problems when first trying to create their own materials:*

- *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.'*

(COL 1999)

## TIME NEEDED TO DEVELOP MATERIALS

### **The University College of Education of Winneba**

The University found that academic staff were not able to produce the ODL material quickly enough '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'.

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.

(COL 1999)

### **University of Nairobi**

*'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 scrutiny process by the finance department.'*

(COL 1999)

## THE PROBLEMS OF TRAINING COURSE WRITERS

### **Distance Education Unit Centre for Continuing Education University of Botswana**

*'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.*

*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 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.'*

(COL 1999)

## COURSE PLANNING

### INTRODUCTION

Rowntree (1990, p. 39) suggests seven planning questions for ODL course design. We have adapted these to look at ten issues below.

### ISSUES FOR DECISION-MAKERS

- 1 How will you find out sufficient information about your learners to be able to plan a particular course?
- 2 What will the content be?
- 3 What will be the aims of the course?
- 4 What will be the learning outcomes of the course?
- 5 Are you satisfied that the content matches the learning outcomes?
- 6 Are you satisfied with the distribution of the learning outcomes over Bloom's six levels (see below)?
- 7 How will the course be assessed?
- 8 Will this assessment be consistent with the learning outcomes?
- 9 How will you sequence the material?
- 10 What quality assurance system will you use during the course planning stage?

### KEY DECISIONS IN COURSE PLANNING

#### The learners

Course planning starts with the identification of your learners. This is discussed elsewhere in this handbook (see *Identifying the target population*).

#### Aims and outcomes

Everything in the course should be directed to ensuring that the aims of the course are met and that students achieve the learning outcomes. Since these aims and outcomes are so important in course planning, particular care needs to be taken in establishing them before other work starts on the course.

Aims can be quite general statements, such as:

*'To provide a broad understanding of the purpose and nature of book-keeping; to introduce the key concepts in the subject; to achieve confidence in carrying out routine book-keeping tasks.'*

Outcomes need to be:

- smaller scale than aims
- more specific than aims
- assessable.

They should also use active, behavioural verbs such as **solve**, **construct** and **type**, as shown in the following examples.

- 'Be able to solve simple linear equations.'
- 'Be able to construct simple sentences in the present tense of regular verbs.'
- 'Be able to type a 400-word letter with no more than two errors.'

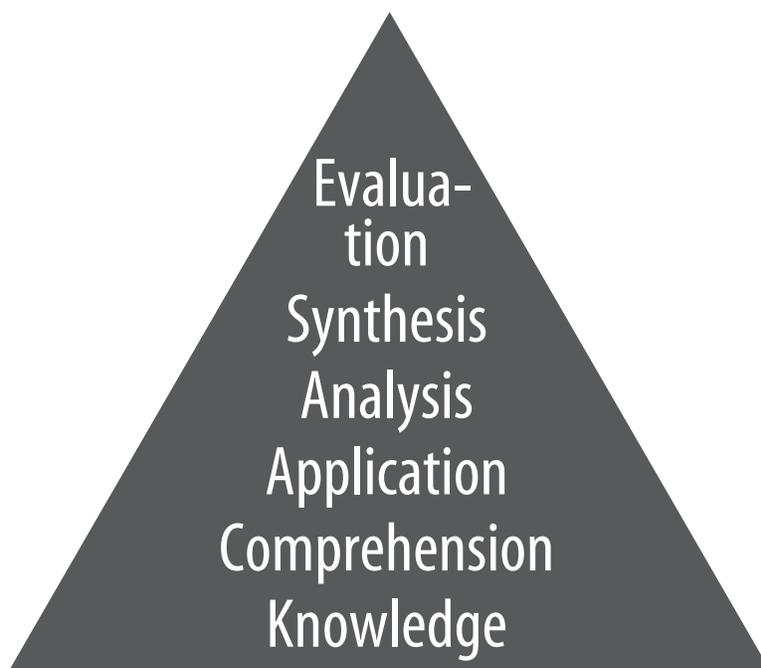
Vague verbs such as **understand**, **appreciate** and **recognise** should be avoided.

## Assessment

Although assessment comes towards the end of a course, it should be planned before writing starts. The best time to plan assessment is when the learning outcomes are being written. This helps to ensure an exact match between what the learning outcomes specify and what the assessment tests. (This process is termed 'alignment' by Biggs (1999).) By planning assessment alongside the development of the learning outcomes, problems in those outcomes can be spotted and corrected without having to rewrite any of the learning material.

It is good practice to check the spread of outcomes over Bloom's taxonomy of learning objectives (Bloom, 1956). For example, introductory courses would usually have most of their content at the lower levels (see Figure 1); higher education courses should have an emphasis on the higher levels; and practical courses will have most outcomes at the application level.

**FIGURE 1** A DIAGRAMMATIC REPRESENTATION OF BLOOM'S TAXONOMY



By drawing up a table showing the number of outcomes at each level, you can see the

balance for any given course or topic and decide whether that is appropriate or not. For example, in Table 2 the 50 outcomes of a course have been classified against the six levels of the hierarchy, revealing that 20% are at the knowledge level, 30% at comprehension level and 50% at application level. This would probably be considered to be a good balance for a low-level, practically oriented course.

**TABLE 2** A TYPICAL SPREAD OF OUTCOMES FOR A LOW-LEVEL, PRACTICALLY ORIENTED COURSE

Level	Number of outcomes	Percentage
1 Knowledge	10	20%
2 Comprehension	15	30%
3 Application	25	50%
4 Analysis	0	-
5 Synthesis	0	-
6 Evaluation	0	-

### Content

Once you are sure of the outcomes and are happy with their distribution over the six Bloom levels, you can then begin to specify the content. This means listing:

- the facts to be taught (e.g. definitions, vocabulary, dates)
- the theories to be taught (e.g. Boyle's law, Pythagoras' theorem)
- the concepts to be taught (e.g. heat, acidity, irony)
- the skills and methods to be taught (e.g. creating a database, double-entry book-keeping, proof-reading a manuscript)
- the types of analysis, synthesis and evaluation to be carried out.

Care needs to be taken to ensure that the content listed is genuinely required for the learning outcomes already identified. A good way to do this is to create a table as shown in Table 3. All the content of the course is mapped against the outcomes by placing each content outcome in the cell where it belongs. Amongst other things, this will reveal any content that is surplus to the requirements of the outcomes.

**TABLE 3** FORMAT FOR MATCHING CONTENT TO LEARNING OUTCOMES

Content to be taught						
Learning outcome	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
1						
2						
3						
etc.						

### Teaching methods and sequencing

Rowntree (1990, pp.61–70) suggests a number of ways in which you can sequence the units of a course.

- **By topic** – this method can be used when the topics can be studied in any order.
- **Chronologically** – this involves looking at how a topic has developed over time – an approach that might apply to a history course but which could also be used for a mathematics course.
- **By place** – for example, working outwards from the home to the world; working from the micro scale (inside a cell) to the macro (the whole organism).
- **By cause and effect** – for example, starting with a phenomenon and exploring its causes and origins.
- **By structural logic** – following the logic of a subject – mathematics is often taught like this.
- **Problem-centred** – this involves identifying a problem and exploring its solution.
- **Spiral approach** – the same material is revisited several times at increasing depths.
- **Backward chaining** – here you start with the end result and gradually work backwards through the course to explore how this result has been achieved.

### Media

See *Media choice and mix* below.

### Quality assurance

Your course planning and development system needs to have a quality assurance system built into it to ensure that each stage of the process is satisfactorily completed. This is important since the process of development is costly. For example, if writers are allowed to begin writing before learning outcomes have been carefully checked, they may produce

irrelevant material. Once the problem is spotted you will have to pay for both the writing and the rewriting. Suitable methods of quality assurance include:

- using subject experts to check the course plan for relevance and accuracy of the aims, outcomes, assessment and content
- using learning materials experts to check the course plan for good practice in learning materials design
- field testing – see *Developmental testing*.

## MEDIA CHOICE AND MIX

### INTRODUCTION

Bates (1995, pp. 16–17) suggests that you should choose media on the basis of six factors:

- accessibility to students
- costs to institution
- teaching capability
- capacity for interactivity
- organisational impact
- speed of update.

We shall look at each of these in a bit more detail below.

### ISSUES FOR DECISION MAKERS

- 1 Which media do your potential students have access to?
- 2 What will be the cost per learner hour of the various media to your organisation? (This cost will have two components: the cost of producing the original material and the cost of copying or distributing that material.)
- 3 What are the capabilities of the media you identified in question 1? What issues arise from this?
- 4 How well does the media cater for interactivity? What issues arise from this?
- 5 What is the organisational impact of each of the media ?
- 6 How easy is it to update each of the media and what are the issues that will arise from this?

### ACCESSIBILITY TO STUDENTS

There is no point in choosing media that your students will have difficulty in accessing. Print is accessible to all students. Other media depend on students having access to the appropriate technology. For example, if you broadcast material, students must have access to radio; if you use web pages, students must have access to a computer, and so on. Part of your market research (see *Market research in ODL*) should establish which technology your students have access to.

## COSTS TO INSTITUTION

Cost will clearly be a factor in media choice. The usual measure of cost is cost per learner hour for a given number of students on a course. For example, Bates (1995, p. 7) quotes (for a course with 625 students per year) \$0.63 per hour for print, \$2.97 for audio cassettes and \$0.99 for computer conferencing.

Generally, in costing a course you will start with the fee that students are prepared to pay and then identify what mix of media, tuition and administration you can provide for that fee. The lower the fee, the more the cheaper technologies (print, radio, audio, computer conferencing) will predominate over the more expensive ones (video, television, computer-based courses, web-based courses).

## TEACHING CAPABILITY

Not all media are equally good at the same educational task. Your media mix must match the five key student needs of your learners:

- 1 To stimulate/motivate learners
- 2 To present new material
- 3 To provoke student interaction
- 4 To give feedback to students
- 5 To help students to assess their progress.

We have matched these against some of the media options in Table 4.

**TABLE 4** STUDENT NEEDS AND MEDIA CAPABILITIES

Student need	Best media	Worst media
Stimulate/motivate learners	Video and audio	Print
Present new material to be learned	Print, video, audio	Broadcasting (since students cannot control the pace or review material)
Encourage students to interact with the material	Computer-based material Web-based material	Broadcasting (since there is no pause for interaction)
Give feedback to students on their work	Computer-based material Web-based material	Any mass media, e.g. print, broadcasting
Help students to assess their progress	Print Computer-based material Web-based material	Any mass media, e.g. print, broadcasting

## CAPACITY FOR INTERACTIVITY

The faster students receive feedback, the faster they learn. In lecture halls, students receive no feedback on their work (since students are not active during lectures). In classrooms, feedback can come from both the teacher and from other students. In ODL, feedback largely comes from the learning materials, although some (infrequent) feedback comes from interactions with tutors and other students.

The importance of feedback in learning means that, all things being equal, we should favour interactive media, i.e. media that can deliver an individualised feedback to students in response to their activity. The medium that does this best is the computer (computer-based courses and web-based courses). Since computer- and web-based courses are expensive, we often have to accept the less effective interactive capabilities of other media. Print can be remarkably effective if it includes well-designed learning activities.

(Bates (1995, p.16) offers a more generous view of the interactive capability of certain media since he is prepared to rate a medium as 'good' on interactive if it can accommodate student activity. He does not require that the medium can respond to the students' responses.)

## ORGANISATIONAL IMPACT

Organisational impact refers to the amount of disruption that the introduction of a medium causes to an ODL system. The easier that the medium is to introduce, the less organisational impact it is said to have. So, factors that would give high organisational impact would be:

- the need to install special equipment
- the need for specially trained staff
- maintenance requirements
- long lead-times.

## ISSUES OF MEDIA IMPACT

### **Deakin University**

*'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.'*

(COL 1999)

## SPEED OF UPDATE

Some media can be updated more quickly than others. Web-based courses can be updated daily (although this would be an unusual thing to do) whilst print-based courses take much longer to update. Any media which requires the storage of finished copies of learning material will tend to take longer to update simply because existing copies (usually) have to be used before the updated versions can be issued.

Thus, the faster moving your subject matter, the more you need to use easily updated media.

## UNIT WRITING

### INTRODUCTION

This section provides an overview of what is involved in developing a short sequence of learning material. This is the micro level of course planning, corresponding to the macro level discussed in *Course planning*.

We will illustrate the principles of unit-level course planning with the example of print-based materials. The same principles apply to other media.

### ISSUES FOR DECISION MAKERS

- 1 Which of the following do you see as essential components of study units produced by your system?
  - Statements of what students will learn
  - Reminders of previous learning
  - Study guidance
  - New material to be learnt
  - Learning activities with feedback
  - Examples
  - Summaries
  - Progress tests.
- 2 What layout will you use for your materials?
- 3 What unit level quality standards will you set for your materials? (Part of the quality checklist in *Unit writing* is relevant here.)

### ILLUSTRATIVE MATERIAL

The aim in writing good ODL materials is to create a 'tutorial in print' (Rowntree, 1990, p. 82), although nowadays we might say 'tutorial in the medium of your choice'. The aim is to re-create the best features of a high-quality teaching environment. The unit of material (whether

in print or in any other medium) must include all the constituents of a successful teaching-learning interaction, and should include the following:

- a statement of what students will learn
- a reminder of previous learning
- study guidance
- new materials to be learnt
- learning activities with feedback
- examples
- summaries
- progress tests.

We will look at each of these components in turn.

### A statement of what students will learn

Most authors agree that learning outcomes should be stated at unit level within a course. These might be in behavioural form, starting with words such as 'By the end of this unit you should be able to ...' or, in some more informal form such as 'Reasons for studying this unit' or 'Benefits of studying this unit'.

It is axiomatic that there should be a good match between the stated learning outcomes, the content and the progress test. In some units, this match is very tight, as is illustrated in Figure 2.

### FIGURE 2 MATCHING OUTCOMES, CONTENT AND PROGRESS TEST QUESTIONS



### A reminder of previous learning

Reminding students of what they already know is considered to be an effective way of helping them to learn a new topic. By encouraging students to recall prior knowledge, they can form links between the new and old material. This is thought to promote deep and meaningful learning.

Reminders of this type can be achieved by methods such as:

- summarising the previous unit's content
- summaries of relevant previous learning

- activities that ask students to recall what they can remember about something.
- activities that ask students to recall their previous experience of something.

(We have listed these four suggestions in order of their increasing power to create strong links between old and new content.)

## Study guidance

In the classroom, the teacher is always present and available to direct student learning. That is, the teacher tells students which tasks to do, when to do them and how long to spend on them. The teacher can offer immediate advice to those students who have problems and can spot those students who seem to be studying unproductively.

All this active direction and guidance is lost in the ODL environment, so the materials must consciously replace it with study advice. Some of this advice might be generic to a course, in which case it would not appear in a particular unit. Other advice would be specific to a unit and therefore placed there. Students might need advice on:

- how long to spend on each task
- other resources it might be useful to consult
- how to make notes on a particular topic
- how to apply a particular topic at work or elsewhere
- how to overcome common difficulties with a particular topic.

## New material to be learnt

Each unit needs to contain the content relevant to that unit. However, presenting content in ODL material is (or should be) different from presenting content in a textbook or a lecture. It is a truism (often ignored in education) that we learn by doing. Thus, good learning materials try to minimise reading, listening and viewing. Instead, they try to maximise thinking, writing, talking, calculating, presenting, and so on. This is often achieved by finding ways to embed new content within the learning activities – an approach known as ‘teaching through activities’ (see below).

## Learning activities (with feedback)

The feature that most distinguishes ODL learning materials from those used in face-to-face teaching is their large number of learning activities. It is assumed that, since we learn by doing, the materials must stimulate a high level of student activity. Generally, with well-designed ODL materials, the bulk of students’ study time will be spent doing activities, rather than passively reading, listening or viewing.

Studies have shown that successful activities depend not just on content but also on their being carefully structured with sections for a title, a motivational introduction, task/instructions, an answer grid, a time guide and feedback. (Lockwood, 1992, p.131). This format is illustrated in Figure 3.

Feedback to activities is essential and should give the correct (or best) answer as well as respond to likely student errors.

**FIGURE 3** A WELL-STRUCTURED LEARNING ACTIVITY

<b>Activity 1: Apostrophes with singular words</b>	<b>Title</b>
This activity will help you improve your use of apostrophes to show possession.	Motivational introduction
Rewrite each of the following to use an apostrophe. We've done the first one for you. 1 the palace of the Queen 2 the book of my friend 3 the computer of Charles 4 the surface of the Earth	Task/instructions
1 the Queen's palace _____ 2 _____ 3 _____ 4 _____	Answer grid + example if needed
Take no more than 3 minutes over this	Time guide
<b>Feedback to Activity 1</b> Your answers should have been as follows: 2 my friend's book. If you wrote my friends' book then your answer refers to a book owned by more than one friend. 3 Charles' computer or Charles's computer. If you wrote Charle's then you should note that the apostrophe never goes inside the original word. It is always after the word. 4 the Earth's surface. If you wrote the Earths' surface then you are referring to more than one Earth.	Feedback  Includes comments on likely wrong answers

## Examples

Examples are also important in ODL materials. Martens (1998) showed that students made more use of examples than of any other learning device in ODL materials.

## Summaries

One side effect of well-designed ODL materials is that they are less easy to scan or skim (say for revision purposes) because the text is broken up by so many learning devices. To overcome this, most ODL texts include summaries and/or lists of key points.

## Progress tests

The final component of a unit of ODL materials is some method to help students to check their progress. This may be a simple tick list:

I now feel confident that I can explain the main features of the carbon cycle.  (Tick)

Another approach is to provide a list of self-test questions such as:

Which one of the following is the correct way to show possession for a singular word ending in **s**?

- A Add **'s** to the end of the word.
- B Add **s** to the end of the word.
- C Add **'** to the end of the word.

## LAYOUT

ODL materials use a generous page or screen layout in order to make the material easy to follow and to prevent the material appearing dense and unwelcoming. Typical layout features of ODL texts are:

- an A4 page size
- a short line length, ideally with a maximum of 12–13 words per line
- clear and consistent use of headings and sub-headings
- generous use of white space (i.e. empty space on the pages) to allow for note taking
- an easily read font, usually 11 or 12 point
- a line of white space between paragraphs
- generous use of bullets and other lists
- generous use of tables, figures, diagrams, maps, illustrations and other visual material
- generous use of other layout devices, e.g. icons
- enough space for students to write in answers to activities.

All this has cost implications.

# DEVELOPMENTAL TESTING

## INTRODUCTION

Developmental testing is the name given to various quality assurance processes that are applied to a course during its development and prior to its first full use. The typical processes involved are:

- reviews by subject experts
- reviews by ODL experts
- piloting with students.

Rowntree (1990, p. 339ff) also suggests a substitute method for use when there is not time to pilot materials fully.

## ISSUES FOR DECISION MAKERS

- 1 What will be the role of subject experts in the developmental testing of your materials?
- 2 Draw up a job specification for the subject experts.
- 3 What will be the role of ODL experts in the developmental testing of your materials?
- 4 Draw up a job specification for the ODL experts.
- 5 What will be the role of developmental testing with students?
- 6 How will you recruit the student testers?
- 7 How will you reward the student testers?
- 8 Draw up a list of things that you would wish to find out from such testing.

## REVIEW BY SUBJECT EXPERTS

The subject expert's role is to make sure that the course content is accurate, up to date and appropriate for the target audience. If the course will prepare students for public examinations, then the expert should also check that the materials match the qualification.

### Who to ask

Subject experts need to be chosen with care. In addition to being experts in their subject, they need to also be experts in how the subject is taught at the level at which the course is set. If they are not, they may well recommend adding irrelevant content (from the syllabus point of view) and may suggest changes that will make the course too difficult for the students.

### What questions to ask

Subject experts should be asked to answer questions such as:

- Is the material at the right level for the syllabus and the assessment?
- Is the content accurate?
- Is the content up to date?

- Does the content cover the whole syllabus?
- Is anything missing which is essential to teaching the syllabus?
- Does the material reflect a modern approach to teaching the subject?

If the expert answers 'No' to any of these questions, they must make positive suggestions for the changes needed to the material.

## REVIEW BY ODL EXPERTS

ODL experts also need to look at the materials during development in order to check on the quality of the ODL features (see *Characteristics of good ODL materials and Unit writing*).

### Who to ask

There are three main groups of people who are likely to make good ODL reviewers:

- ODL authors
- ODL editors
- ODL tutors.

### Questions to ask

ODL reviewers are asked to concentrate on the ODL features of the materials, rather than the content. (It can even help if they don't know the subject being taught. In that way they will tend to look at the material from the student viewpoint rather than as a subject specialist.)

The types of questions they should answer are:

- Does the content match the learning outcomes? (Subject experts will have checked the learning outcomes before the ODL review takes place.)
- Do the activities match the learning outcomes?
- Do the progress tests match the learning outcomes?
- Are there enough activities?
- Are the activities challenging and interesting?
- Is there enough feedback on the activities?
- Are there enough examples and are they appropriate?
- Is good use made of diagrams, figures and illustrations?
- Are the materials of the right length in terms of study time?
- Are there enough summaries and lists of key points?

## PILOTING WITH STUDENTS

### Face-to-face

A quick method of piloting, but one that is not often used, is for the author to sit down with a typical student and watch them work through the draft materials (Rowntree, 1990, p339ff). The author can note how the student uses the materials (e.g. the order they work through the materials, the bits they skip), how much they write in response to each activity, and where

they get stuck. If the student has a problem and has to ask the author to explain a point, the author then knows where there is weakness in the materials. The student may even be able to suggest changes and improvements to the materials.

The face-to-face approach is only really suitable for short pieces of material but is probably one of the fastest ways of getting student reaction to material.

### Field testing

A more formal approach to piloting is field testing, i.e. asking a group of students to work through the materials in more or less realistic conditions. Sometimes students are paid to do this.

There are two fundamentally different ways of field testing.

- 1 Students are not enrolled on the course and therefore get no credit for their studies.
- 2 Students are enrolled on the course and so can take the assessment and receive credit for their studies.

The second method probably gives more reliable results since the students are studying under realistic conditions. Also, because students can gain credit they are likely to be more motivated to both participate in the pilot and to complete the course.

Generally, successful developmental testing requires:

- testers being as similar to the target population as possible
- the use of course credit rather than cash to motivate the testers
- simulating the real learning conditions as closely as possible
- collecting data within the materials, e.g. questions printed into the texts – so avoiding separate questionnaires
- measuring students' performance on each learning outcome
- designing an efficient way of processing the data that you obtain.

(Henderson, Hodgson and Nathenson, 1977, p.81)

### Questions to ask students

As previously stated, it is best to collect data within the materials so the student questions listed below indicate an agenda rather than precise questions to ask.

- Is the language clear?
- Is the presentation (typography, layout, diagrams) clear?
- Is the level right for you?
- Does the material assume prior knowledge and skills that you do not have?
- Are the activities at the right level for you?

- Do you find the activities interesting?
- Did the progress tests confirm that you had satisfactorily learnt the material?
- How helpful are the examples?
- Are there enough examples?
- What changes would you suggest to the materials?

## CASE: USING EXTERNAL REVIEWERS TO MAINTAIN QUALITY

### University of Tanzania

*'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.'*

(COL 1999)

# MANUFACTURING

## INTRODUCTION

Manufacturing involves producing multiple copies of learning media for despatch to students and tutors. This section highlights some of the key issues to consider in choosing your manufacturing processes.

## ISSUES FOR DECISION MAKERS

- 1 For your chosen ODL system, what will be the advantages and disadvantages of in- and out-of-house manufacture?
- 2 What method will you use to determine stock levels?
- 3 Which types of printed product do you intend to manufacture?
- 4 How will you manufacture audio cassettes?
- 5 How will you manufacture video cassettes?
- 6 How will you manufacture computer media?
- 7 What quality standards will you set for each media?

## IN-HOUSE OR OUT-OF-HOUSE?

A fundamental question is whether to manufacture in-house or out-of-house. The main advantages and disadvantages of each approach are set out in Table 5.

**TABLE 5** ADVANTAGES AND DISADVANTAGES OF IN- AND OUT-OF-HOUSE MANUFACTURE

Method	Advantages	Disadvantages
In-house	<ul style="list-style-type: none"> <li>• immediate control of work</li> <li>• may be able to produce low runs more cheaply than an outside supply</li> <li>• short turnaround times</li> </ul>	<ul style="list-style-type: none"> <li>• capital tied up in equipment</li> <li>• need for trained staff</li> <li>• equipment and staff may be idle at slack times</li> <li>• jobs may have to wait when there is too much production</li> <li>• in dual-mode institutions, print jobs may have to fit around a pre-existing schedule of face-to-face mode printing tasks</li> <li>• may deny you access to the latest technology</li> <li>• needs extensive management</li> </ul>
Out-of-house	<ul style="list-style-type: none"> <li>• a range of outside suppliers will help keep costs down</li> <li>• a range of outside suppliers will help avoid delays when production levels are high</li> <li>• no costs when there is no manufacture</li> <li>• access to the latest technology</li> </ul>	<ul style="list-style-type: none"> <li>• less control</li> <li>• costs may be higher</li> <li>• longer turnaround times</li> </ul>

## STOCK LEVELS

Another key issue is that of deciding what levels of stock to produce. Generally speaking, the more copies that you produce of any one item (e.g. a workbook, an audio cassette, a computer disk), the lower the unit cost becomes, so this favours a large production run. However, the more copies you make, the longer that stock will be in your warehouse. This ties

up capital that could have been used for some other purpose. It also increases the risk that some stock will have to be thrown away because it has become outdated before it is used.

The most critical issue here is to decide your minimum economic run. Your course costing will allow a cost for materials, for example, you might have set a fee of \$300, to include materials that cost \$40 to manufacture. If you have far fewer students than expected, your unit manufacture cost might rise to, say, \$70, so making the course less economic to run.

### WHICH TYPE OF PRINT MANUFACTURE?

Print offers a wide range of types of product, as shown in Table 6.

**TABLE 6** ADVANTAGES AND DISADVANTAGES OF VARIOUS PRINTING TYPES

Method	Advantages	Disadvantages
Loose sheets	<ul style="list-style-type: none"> <li>• cheap to manufacture</li> </ul>	<ul style="list-style-type: none"> <li>• messy – easily damaged</li> <li>• expensive to handle</li> </ul>
Loose sheets, punched with ring-binder holes, sealed in a plastic envelope	<ul style="list-style-type: none"> <li>• cheap to manufacture</li> </ul>	<ul style="list-style-type: none"> <li>• student has the cost of providing a binder</li> </ul>
Perfect-bound booklets	<ul style="list-style-type: none"> <li>• cheap to manufacture</li> </ul>	<ul style="list-style-type: none"> <li>• will not open flat without damaging the binding, so awkward for study purpose</li> <li>• tend to fall apart</li> </ul>
Wire-stapled booklets	<ul style="list-style-type: none"> <li>• cheap to manufacture</li> <li>• open flat</li> </ul>	<ul style="list-style-type: none"> <li>• limited to approximately 40 pages in total</li> </ul>
Plastic spiral-bound booklets	<ul style="list-style-type: none"> <li>• open flat</li> <li>• can be folded back through 180</li> </ul>	<ul style="list-style-type: none"> <li>• expensive (but look cheap)</li> <li>• stack badly</li> <li>• spirals can pierce packaging</li> </ul>
Wire-bound booklets	<ul style="list-style-type: none"> <li>• open flat</li> <li>• can be folded back through 180</li> </ul>	<ul style="list-style-type: none"> <li>• expensive</li> <li>• stack badly</li> <li>• wire can pierce packaging</li> </ul>
Stitch-bound booklets.	<ul style="list-style-type: none"> <li>• open reasonably flat</li> <li>• durable</li> </ul>	<ul style="list-style-type: none"> <li>• expensive</li> </ul>

## Methods of printing

There is also a range of printing methods, of which the main ones relevant to ODL are:

- photocopying – useful for very small runs
- Docutext (a Rank Xerox technology) – a good intermediary between photocopying and offset litho
- offset litho – the standard technology for long runs of printing.

## ELECTRONIC MEDIA

There are two methods of manufacturing audio and video cassettes.

- Real-time copying – the tape is copied at the same speed that it would be played at, so a half-hour tape takes half an hour to copy.
- High-speed copying – the tape is copied on a special machine and each copy takes just a few minutes.

Generally, real-time copying only makes sense when you want a handful of copies. For other purposes, you need to have tapes copied by a company that has high-speed copying machines. Copied tapes also need labels attached to them.

As with audio and video material, computer media can also be copied at varying speeds. Except for small quantities, it is best to employ a specialist company.

## STORAGE OF MASTER COPIES

All manufacturing processes involve a master copy from which the other copies are produced. Generally, this is a very expensive item to produce; for example, a master copy of a half-hour video might cost \$100,000. ODL systems therefore need secure storage of master copies. There will generally be at least three master copies: one kept permanently in a highly secure environment (e.g. a fire-proof safe or an underground, bomb-proof store), one kept at the office and one kept by the manufacturer.

## QUALITY ASSURANCE ISSUES

You will need to specify quality specifications for your manufacturing processes such as:

- paper colour and quality
- ink colour and density
- binding durability
- signal-to-noise ratio on audio and video tapes
- error rates in computer files.

## METHODS OF DELIVERY

### INTRODUCTION

An ODL system can deliver learning materials to students in a variety of ways.

- Pick up from local centre
- Pick up from tutor
- By mail
- By courier
- Online.

### ISSUES FOR DECISION MAKERS

- 1 For your ODL system, what will be the advantages and disadvantages of the various methods of delivering materials?
- 2 Which method will you choose?
- 3 Why?

### METHODS OF DELIVERY

Some delivery methods such as picking up from a centre or from a tutor offer the opportunity to:

- build a relationship with students
- induct the students into the system.

This is a useful bonus since there is considerable anecdotal evidence that students are more likely to start a course and more likely to succeed at it if (a) they have built up a personal relationship with their tutor (or other staff) and (b) have been well-inducted into the ODL system.

The methods are discussed more fully in Table 7.

**TABLE 7** SOME METHODS OF DELIVERY OF MATERIALS

Method	Advantages	Disadvantages
Pick up from local centre	<ul style="list-style-type: none"> <li>• students have a chance to build a relationship with the centre</li> <li>• can include an induction session in the visit</li> </ul>	<ul style="list-style-type: none"> <li>• student has to travel to the centre</li> <li>• time-consuming for centre staff</li> </ul>
Pick up from tutor	<ul style="list-style-type: none"> <li>• students have a chance to build a relationship with their tutor</li> </ul>	<ul style="list-style-type: none"> <li>• student has to travel to the centre</li> <li>• time-consuming for tutor</li> </ul>
By mail	<ul style="list-style-type: none"> <li>• cheap</li> </ul>	<ul style="list-style-type: none"> <li>• cannot be sure that the materials have been received</li> <li>• does not help to engage the student socially within the ODL system</li> </ul>
By courier	<ul style="list-style-type: none"> <li>• can be sure of the delivery</li> </ul>	<ul style="list-style-type: none"> <li>• expensive</li> <li>• does not help to engage the student socially within the ODL system</li> </ul>
Online	<ul style="list-style-type: none"> <li>• cheap</li> </ul>	<ul style="list-style-type: none"> <li>• student must have a computer and Internet connection</li> <li>• limited to certain types of material</li> <li>• student may have to bear the cost of printing the materials</li> </ul>

## STORING MATERIALS

### INTRODUCTION

Storing ODL materials is quite a sophisticated operation. If the job is not done well students will get the wrong materials, stock will be lost or damaged and costs will rise.

## ISSUES FOR DECISION MAKERS

- 1 How will your course components be identified?
- 2 How will your component versions be identified?
- 3 How will your course constituents be defined?
- 4 How will you make up and store made-up courses?
- 5 How will you define and store short-term stock?
- 6 How will you define and store long-term stock?
- 7 How will you operate stock control?

## PRINCIPLES OF STORING MATERIALS

The principles of storing materials are based on three concepts:

- course components, e.g. a workbook, an audio tape, a computer disk
- versions, e.g. year 2002 edition, 3rd edition, 2003 exams edition
- courses, e.g. all the materials for 'An Introduction to Ecology.'

## IDENTIFICATION OF COMPONENTS

The basic item that is manufactured and stored is a course component, e.g. a workbook or an audio tape. (A component may be used in more than one course.)

Each component needs to bear a unique identifier so that staff, students and tutors do not mistake one component for another. When such mistakes occur, students may be sent the wrong materials and even study the wrong materials. To avoid this, each component should be labelled with:

- its title, e.g. 'Interview Skills Tape 1', 'Basic Ecology Workbook 1'
- a stock number or stock code that is unique to that version of item, e.g. 875320, A-167-02.

## IDENTIFICATION OF VERSIONS

Any one component may exist in various versions. The simplest way in which this arises is when an item is updated. For example, a workbook might be updated annually. Each course component needs to show which version it is. You might do this by:

- version number, e.g. Version 3
- date, e.g. June 2002
- some other factor such as course offering, e.g. 2002–3 edition. Note, though, that this method has problems if, for some reason, you need to produce a second version of the 2002–3 edition.

## IDENTIFICATION OF COURSE CONSTITUENTS

Each course will have a unique set of components. To avoid errors and misunderstandings, this list needs to be carefully controlled by a course manager. The list needs to be openly available to despatch staff, students and tutors.

A typical course constituents list would read as follows:

### **Course: An Introduction to Ecology**

Course offering: 2002–3

Components

Study Guide 6358-v3

Basic Ecology Workbook 1 3698-v1

Basic Ecology Workbook 2 8547-v2

Basic Ecology Assignments Booklet 2968-v1

Basic Ecology Practical Kit 2591-v2

*Please notify the despatch office if any of these items is missing from your pack.*

## Made-up courses

Stock will be stored in various ways. Usually, there will be a small stock of made-up courses, sufficient for one week, and ready for despatch. These may even be packed in advance, ready for an address label to be pasted on.

## Short-term storage

In addition to the made-up courses, the immediate working area in the despatch department is likely to have small stocks of all course components, sufficient for one month, so that further courses can be made up fairly quickly.

## Long-term storage

Elsewhere (sometimes in another building) will be the long-term storage. This is any stock that is not part of the made-up courses or the short-term storage.

## Stock control

There needs to be a good system of stock control, to ensure that:

- no component goes out of stock
- before any component is reordered, the editorial staff are asked whether any changes are needed to that component
- the quantities ordered are appropriate for the forecast need.

## UPDATING MATERIALS

### INTRODUCTION

When new ODL systems are set up, staff are unlikely to think about updating materials – far too much effort will be needed just to produce first editions of materials. However, an updating system needs to be in place as soon as the first materials start being used.

An updating system typically consists of three components:

- a revision file
- a review system
- updating action.

### ISSUES FOR DECISION MAKERS

- 1 How will your system collect comments on courses?
- 2 Who will record those comments?
- 3 What system will you use to review the comments?
- 4 How will routine course revisions be made?

### THE REVISION FILE

Each component and each course needs a revision file. This is a file into which comments about components or courses from students, tutors and staff are placed. Comments may be small ('There is a spelling mistake on page 23') or large ('My students seem dissatisfied with every aspect of this course').

Recording such comments in the file can be a routine task, delegated to a member of the administrative staff.

### THE REVIEW SYSTEM

Alongside the revision file must be a review system. This has two aspects: reactive and proactive review.

#### Reactive review

Reactive review involves someone (such as a tutor or an editor) checking the revision file on a regular basis and deciding what action to take. This might be:

- immediate action, e.g. an errata sheet
- action when the next manufacture run takes place
- action when the next scheduled revision occurs
- no action.

### Proactive review

Proactive review will be a scheduled, formal course review activity. For example, courses might be formally reviewed every three or every five years. Such a review would gather together relevant student progress data and comments from students and tutors. This would then be reviewed by a group of (usually) tutors, ODL experts and subject experts, who would recommend whether the course should continue as it stands, be revised or be discontinued.

### Updating action

Updating action is the process whereby course components are revised. This task is usually fairly straightforward and so is often delegated to an editorial assistant or to trainee editors.

### STAFF ROLE IN COURSE REVIEW

In dual-mode institutions, tutors may also be course writers. This has the advantage that they are always available to make minor revisions and corrections and the disadvantage that they may be too keen to update and improve their course, even when there is no pressing institutional need to do so.

# UNIT 5

## TUTORING AND SUPPORTING STUDENTS

This is a substantial unit of the handbook, covering the many aspects of tutoring and supporting students. Whilst student support has some basic underlying principles, it has a wide range of methods. No one course would use all these methods, so this section must be regarded as a shopping list of possibilities: you will need to choose which best match the needs of your students, taking into account any constraints in your system.

### REASONS FOR OFFERING TUTORING AND SUPPORT

The first topic looks at why student support is considered to be so important and the consequences of not having sufficiently robust support systems.

### THE TUTOR ROLE AND TASKS

This section looks at what ODL tutors do and how that role differs from face-to-face teaching. Since most ODL tutors are face-to-face teachers before they become ODL tutors, this change of role is an important issue to consider.

### TUTOR SKILLS

We then go on to look at the range of skills that a typical ODL tutor will need and, in particular, to highlight those skills that are in addition to ones generally practised in face-to-face teaching.

### RECRUITING TUTORS

Some ODL organisations automatically use their face-to-face staff as their ODL tutors; others have to recruit new tutors. This section looks at possible recruitment methods and selection criteria.

### INDUCTING AND TRAINING TUTORS

New tutors need to be trained both in the generic skills of ODL tutoring and in the systems of the ODL organisation. Here we discuss various approaches to tutor training.

### MONITORING TUTORS

As part of the ODL organisation's quality assurance, the work of tutors needs to be monitored. This section looks at monitoring methods and possible monitoring criteria.

### MARKING AND COMMENTING ON ASSIGNMENTS

One thing that particularly distinguishes ODL tutoring from face-to-face teaching is the nature of commenting on written work. ODL commenting is much more detailed, since the tutor will have few opportunities to give face-to-face feedback.

## TUTORING FACE-TO-FACE/TUTORING BY TELEPHONE/ONLINE TUTORING

In these three sections we look at the skills and organisational issues that arise in three commonly used methods of ODL tutoring.

## TUTOR GUIDES

In addition to initial training, ODL tutors need printed or, possibly, online guides to provide them with basic information about the ODL system within which they are working. This topic looks at the content of such guides and how they might be provided to tutors.

## STUDENT GROUPS

In many ODL systems, students form their own groups in addition to any tutor-lead group sessions. In general, students need help in setting up such groups; this topic looks at how these groups work and what sort of help they need.

## COUNSELLING STUDENTS

Supporting students involves both pedagogic support and personal support – usually called counselling. This topic looks at the nature of counselling in ODL and how it can be provided.

## COURSE GUIDES FOR STUDENTS/PROVIDING INFORMATION TO STUDENTS

The final two topics look at methods of providing information to students within the ODL environment.

# REASONS FOR OFFERING TUTORING AND SUPPORT

## INTRODUCTION

Robinson (1981a, pp. 141–161) has identified three main areas in which students experience problems as open/distance learners.

- Study and learning difficulties
- Interacting at a distance
- Personal problems.

## ISSUES FOR DECISION MAKERS

- 1 What types of study and learning difficulties do you expect your students will have?
- 2 What types of problems in interacting at a distance do you expect your students will have?
- 3 What types of personal problems do you expect your students will have?
- 4 What types of tutorial and support activity do you think will best meet these problems?

## STUDENT PROBLEMS

Some typical student problems are set out in Table 1.

**TABLE 1** TYPICAL STUDENT PROBLEMS

Type of difficulty	Examples
Study and learning	<ul style="list-style-type: none"> <li>• managing their time</li> <li>• preparing written work such as assignments and essays</li> <li>• being able to learn from text (students often see text as something to be learnt by heart and lack strategies for understanding and critiquing text)</li> <li>• understanding difficult material</li> <li>• unhelpful course information</li> <li>• dissatisfaction with tutorials</li> </ul>
Interacting at a distance	<ul style="list-style-type: none"> <li>• feeling isolated and alone</li> <li>• feeling that he/she is different from the 'other' students, e.g. 'they are cleverer', 'they understand the course better than I do'</li> <li>• not knowing who to contact about various problems</li> <li>• being in awe of tutors and staff whom they have never met</li> <li>• not having the skills to initiate and sustain relationships at a distance.</li> </ul>
Personal	<ul style="list-style-type: none"> <li>• lack of a place to study</li> <li>• lack of access to libraries</li> <li>• not able to attend tutorials or local centre activities</li> <li>• family or work commitments</li> <li>• financial costs</li> </ul>

(Robinson, 1981a; Tresman, 2002)

## THE TUTORIAL AND SUPPORT SYSTEM

The tutorial and support system of an ODL organisation are a response to the problems in Table 1 and tend to be focussed on the following.

- Breaking down the students' isolation, e.g. through tutorials, telephone/online conferences, newsletters, radio programmes.
- Responding to particular problems, e.g. tutors' advice on time management or planning assignments.
- Building up the students' study skills and self-confidence, e.g. by the direct teaching of study skills or through encouraging reflective learning.

## SUPPORT ACTIVITIES

Support activities include:

- correspondence with tutors via letter or email
- telephone discussion with tutors
- telephone/online discussions led by tutors
- tutorials
- weekend study sessions
- field trips
- newsletters and newspapers
- radio tutorials
- self-help groups
- social events
- web sites (especially bulletin boards).

## SHOULD SUPPORT BE OPTIONAL?

Student support has universally been seen as a range of services offered to students which they can choose to use or ignore. However, this view has been challenged on the grounds that students who most need these services are the ones least likely to use them. The researchers attribute this effect to students not possessing the skills and background to decide what help they need. To overcome this, they suggest that support services should be more interventionist; for example, seeking out students with poor study skills and inviting them to accept help in this area. (Brindley and Jean-Louis, 1990)

## A VARIETY OF LEARNER SUPPORT METHODS

### **Open University of Sri Lanka**

*'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.'*

(COL 1999)

## A DIFFERENT VARIETY OF LEARNER SUPPORT METHODS

### Open Access College

*'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.'*

(COL 1999)

## THE TUTOR ROLE AND TASKS

### INTRODUCTION

Tutors are a common feature of ODL schemes and tutorial costs can be as much as 30% of the budget of an ODL system. Since tuition costs are variable costs, rising in proportion to enrolment, there are almost no economies of scale in tutorial work. (Rumble, 1997, p.119)

Tutors are just one means of supporting learners, but they are widely seen as the most important component of a support system.

*'Tutors are the most crucial form of learner support. Without tutorial support, the best materials in the world may prove disappointing.'* (Rowntree, 1997, p. 115)

### ISSUES FOR DECISION MAKERS

- 1 How would you describe the role of tutors in your ODL system?
- 2 What will be the main tasks of your ODL tutors?
- 3 To what extent will your tutors be expected to carry out counselling tasks as well as tutoring tasks?

### HOW THE TUTOR ROLE DIFFERS FROM FACE-TO-FACE TEACHING

The tutor's role is distinctly different from that of a face-to-face teacher. Some of the main differences are summarised in Table 2. These differences centre on the fact that ODL courses are based around pre-prepared learning materials, so the tutors have no need to prepare lessons as they would in face-to-face teaching. '... their [the tutor's] role is not to re-teach the content of the materials. Rather, it is to help learners make their own sense of what they are learning.' (Rowntree, 1997, p.115)

It should be noted, though, that students might not share this interpretation of the tutor's role and may well arrive at tutorials, for example, expecting to be taught in a direct teach-and-tell manner. This can result in a low level of student participation in tutorial sessions. (Chadibe, n.d.).

**TABLE 2** SOME DIFFERENCES BETWEEN FACE-TO-FACE TEACHING AND ODL TUTORING

<b>Classroom teacher</b>	<b>ODL tutor</b>
Planning and preparing content	Explaining content prepared by others
Being an expert	Being a helper/colleague
Teaching	Helping the students to learn
Being in a classroom	Being at a distance
Working with classes	Working with individuals
Marking and grading	Commenting on written work and advising on how it can be improved

### MAIN CHARACTERISTICS OF THE ROLE

'Facilitation' is a word that is often used to characterise the role of tutors. For example: '... whatever the job specification of tutors on different schemes, the *facilitation of learning is often specified as at the core of tuition*' [original italics] (Thorpe, 1993, p75). Others talk about 'managing the students' learning'.

The tutor's role is characterised by:

- working closely (whilst physically separated) with individual students
- commenting on written work
- marking written work
- occasional face-to-face tutorials
- other contact maintained by telephone and online.

Robinson (1989, p.149) uses the word 'dialogue' to summarise the nature of an ODL tutor's work with students.

## TASKS OF AN ODL TUTOR

Some of the tasks that a tutor performs are listed below. We have divided these into two groups. Group A are normally seen as tutorial tasks and group B as counselling tasks (see Counselling students). In some organisations tutors are responsible for both tutoring and counselling and may be called tutor-counsellors; in other systems the roles are separated.

### Group A – Tutorial tasks

- Advise on available learning materials.
- Answer course-related queries.
- Mark and comment on written work such as assignments.
- Tutor individual students face-to-face.
- Tutor face-to-face groups.
- Tutor individual students by phone or online.
- Tutor groups by phone or online.
- Keep records of student progress.

### Group B – Counselling tasks

- Answer non-course-related queries.
- Give guidance about choice of course.
- Support students during their course.
- Advise students on post-course choices.
- Advise students about the ODL system.

(Robinson, 1989, p. 150; Thorpe, 1993, p. 76)

## TUTOR ROLE AS PERCEIVED BY STUDENTS

Of all the tasks that tutors carry out, students tend to most value those tasks associated with commenting and marking on written work. In one survey, where students were asked to rate 17 types of tutor help, the five highest rated were:

- identifying errors in written work
- advising on what constitutes a good answer
- identifying good points in written work
- explaining difficult parts of the learning materials
- giving a wider view of the course subject matter.

(Kelly and Swift, 1983, in Thorpe, 1993, p. 78)

In a more recent study, students ranked 'know the subject well' as the top quality that they sought in tutors. (Gaskell and Simpson, 2000)

## WHO MAKES THE BEST TUTORS?

The following case study is interesting since it illustrates a situation in which the students seemed to confuse the role of tutors with that of teachers/lecturers.

### **University of Nairobi Distance Education Teachers' Programme**

*'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 ten 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.'*

(COL 1999)

## PERSONAL TUTORING IS TOO EXPENSIVE

### **Makerere University**

*'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.*

*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.'*

(COL 1999)

## TUTOR SKILLS

### INTRODUCTION

It is generally agreed that the change of role from face-to-face teacher to ODL tutor (see *The tutor role and tasks*) requires a different set of skills from that of conventional teaching. One view of the attitudes, knowledge and skills required in ODL tutors is that of O'Rourke (1993, p. 9), as shown below.

#### Attitudes/feelings

- At ease with adult learners.
- Open to new ideas in their discipline.
- Willingness to learn new approaches to teaching and learning.

#### Knowledge/awareness

- Aware of the needs and circumstances of adult learners.
- Knowledge of distance education.
- Knowledge of organisation's administrative systems.

#### Skills

- Expertise in their subject area.
- Expertise in teaching their subject area.
- Ability to work in a team.
- Able to balance demands of their discipline with the needs of students.
- Able to communicate students' needs to the organisation.
- Interpersonal skills in advising, counselling and problem solving.

### ISSUES FOR DECISION MAKERS

- 1 Which of the items in O'Rourke's list above will be important in your ODL system?
- 2 What other factors will be important in selecting tutors?

## RECRUITING TUTORS

### INTRODUCTION

In recruiting tutors, the normal procedures for staff recruitment should be followed.

- Draw up a job specification, listing all the tasks to be performed.
- Draw up a person specification, listing the knowledge, skills and attitudes needed to carry out the tasks in the job specification (see, for example, column 1 of Table 4 below).
- Develop a scoring system for measuring candidates' performance on each item in the person specification.
- Set a minimum total score for accepting a person as a tutor.
- Decide whether, in addition to the minimum total score, you need to set a minimum performance level on certain items in the person specification.
- Devise a set of methods to collect evidence.

### ISSUES FOR DECISION MAKERS

- 1 What will be your tutor job specification?
- 2 What will be your tutor person specification?
- 3 What scoring system will you use to select tutors?
- 4 What methods will you use to collect evidence on each item in your person specification?

### METHODS OF COLLECTING EVIDENCE

There is a range of methods for collecting evidence when recruiting staff and some of the main ones are listed in Table 3. This table also shows the validity of the various methods. (Validity measures how well each selection method finds the right candidates for a job. A validity of 1 would mean that perfect candidates were selected every time; a validity of zero would mean that the method always chose completely useless candidates.)

From Table 3 it can be seen that one of the commonest methods (the interview) is almost the worst method of choosing candidates. On the other hand, an interview based on a dossier of information on the candidate is one of the best methods.

The high ranking of assessment centres and work samples in Table 3 emphasise the value of setting exercises in order to select candidates; for example, an assignment to mark and comment on or the planning of a telephone tutorial. The closer a method is to real work, the higher its validity.

**TABLE 3** SOME METHODS OF COLLECTING EVIDENCE ON JOB CANDIDATES

Method	Validity
Interview based on dossier	0.5 to 0.6
Assessment centres	0.41 to 0.49
Work samples	0.38 to 0.54
Dossier	0.3 to 0.4
Situational exercises	0.25 to 0.35
Interviews	.09 to 0.29 (job-related produce the higher scores)
References	0.14 to 0.23

(Argyle, 1989, pp. 79–84)

On the basis of Table 3, we can draw up some fairly valid methods of selecting ODL tutors. These methods are shown in column 2 of Table 4. You will see that ‘assessment centre’ features quite frequently. This refers to, say, a half- or one-day session in which up to 30 candidates come together to carry out various simulated tasks which they are then assessed on prior to selection. Where this method is too costly, the next best alternatives must be used, i.e. work samples and dossier.

**TABLE 4** SOME TYPES OF EVIDENCE FOR USE IN SELECTING ODL TUTORS

<b>Factor</b>	<b>Possible evidence</b>
<b>Attitudes/feelings</b>	
At ease with adult learners	<ul style="list-style-type: none"> <li>• assessment centre (role play or actual teaching)</li> </ul>
Open to new ideas in their discipline	<ul style="list-style-type: none"> <li>• dossier (track record of involvement in innovatory activities)</li> <li>• interview</li> </ul>
Willingness to learn new approaches to teaching and learning	<ul style="list-style-type: none"> <li>• dossier (track record of involvement in innovatory activities)</li> <li>• interview</li> </ul>
<b>Knowledge/awareness</b>	
Aware of the needs and circumstances of adult learners	<ul style="list-style-type: none"> <li>• interview</li> <li>• dossier (examples of how they have identified and met needs)</li> </ul>
Knowledge of distance education	<ul style="list-style-type: none"> <li>• interview</li> <li>• dossier (examples of their knowledge and experience of distance education)</li> </ul>
Knowledge of organisation's administrative systems	(Cannot expect tutors to have this knowledge before employment with the organisation)
<b>Skills</b>	
Expertise in their subject area	<ul style="list-style-type: none"> <li>• qualifications</li> <li>• dossier (examples of use of their expertise)</li> </ul>
Expertise in teaching in their subject area	<ul style="list-style-type: none"> <li>• qualifications</li> <li>• dossier (examples of use of their expertise)</li> </ul>
Ability to work in a team	<ul style="list-style-type: none"> <li>• assessment centre (role-play)</li> </ul>
Able to balance demands of their discipline with the needs of students	<ul style="list-style-type: none"> <li>• interview</li> <li>• dossier</li> </ul>
Able to communicate students' needs to the organisation	<ul style="list-style-type: none"> <li>• assessment centre (role-play)</li> </ul>
Interpersonal skills in advising, counselling and problem solving.	<ul style="list-style-type: none"> <li>• assessment centre (role-play)</li> </ul>

# INDUCTING AND TRAINING TUTORS

## INTRODUCTION

Inducting and training tutors tends to be a difficult area in ODL since (a) tutors are usually part-time and (b) they tend to join at various times in the year, especially in systems with continuous enrolment and self-paced learners.

There is very little published work on the training of distance learning tutors although various training materials are available. (COL 1995)

## ISSUES FOR DECISION MAKERS

- 1 Which tutor induction methods will you use and why?
- 2 Which tutor training methods will you use and why?

## OPTIONS FOR INDUCTION AND TRAINING

There are a number of options for induction and training, including:

- induction days
- workshops
- on-the-job training
- distance learning courses.

### Induction days

Induction days are anecdotally reported as very effective in training tutors and usually cover the following.

- An introduction to the organisation and its administrative systems.
- An opportunity to meet the organisation-based staff.
- The course material.
- Marking and commenting on assignments.
- Running tutorials.

There is a heavy emphasis on skill development and the last two items above are usually taught through simulation and role-play.

Induction days are generally held before the tutors start work and are well suited to paced systems with a single course start-date in the year.

### A series of workshops

Sometimes the equivalent content of an induction day will be spread over, say, four short workshops at two to four weekly intervals.

### On-the-job training

One of the commonest methods of training is on-the-job. New tutors are usually given a handbook to guide them in their new role. They might be attached to a mentor (an experienced tutor) and are largely left to learn as they do the job. The mentor will provide help as needed but is not seen as a formal trainer.

### Distance learning courses

Some organisations have created their own distance learning courses in how to be an ODL tutor. These may be seen as induction courses (i.e. they must be completed before the tutor can start work) or as on-the-job training (i.e. the tutor starts work and uses the distance learning course to learn how to do that work).

In theory, a distance learning course should be a good method of training in that it gives the tutor an insight into the experience of being a distance learner. However, there are no reports of this approach having proved particularly effective. The Open College tried all the methods listed above during the period 1987–1992 and found that induction workshops were by far the most effective. This may be because training face-to-face teachers to become ODL tutors includes a good deal of attitude change and face-to-face workshops can be much more effective than distance learning in this domain.

## TUTOR TRAINING

### **Mauritius College of the Air**

This tutor training is based on an annual event at which:

- tutors are briefed on the course materials
- tutors receive their copy of the course materials, student handbook, etc.

There is a tutor manual which covers:

- 'the philosophy of distance education
- characteristics of adult learners
- how adults learn
- conducting face-to-face sessions
- telephone tutorials
- marking and commenting on assignments
- counselling
- ensuring quality in distance education.'

(Jheengut, 1998)

# MONITORING TUTORS

## INTRODUCTION

Tutors' work needs to be monitored as part of the quality assurance system of any ODL organisation. Thorpe (1993, p. 87) suggests that monitoring can be classified under five headings.

- Efficiency.
- Grading.
- Relationship with students.
- Overall appraisal of students' work.
- Detailed comments on students' work.

## ISSUES FOR DECISION MAKERS

- 1 What monitoring criteria will you set for efficiency factors?
- 2 What monitoring criteria will you set for grading?
- 3 What monitoring criteria will you set for 'relationship with students'?
- 4 What monitoring criteria will you set for 'overall appraisal of students' work'?
- 5 What monitoring criteria will you set for 'detailed comments on students' work'?
- 6 How frequently will you monitor tutors' work?
- 7 Who will monitor?
- 8 How will monitoring be recorded?

## FACTORS TO MONITOR

### Efficiency

Efficiency concerns the tutor's completion of the 'mechanical' aspects of tutoring. The most important of these is the speed with which tutors mark and comment on assignments and return those comments to the students. The Hermods correspondence college in Sweden found that student progress declined significantly if assignment turnaround exceeded five days (Bååth, 1977). Although few organisations can achieve this speed of turnaround, prompt commenting on assignments is an important part of a good tutorial service.

It is also important that tutors provide comments in a legible form. This is no problem if they are word processing or emailing their comments, but poor handwriting can be an issue.

Tutors also need to maintain records in the manner set out by the ODL organisation. In some systems, all assignments are routed through the central organisation. In these cases, the organisation will probably do all or most of the record keeping. However, if assignments go to and fro between students and tutors, the tutor will have sole responsibility within the system to record what work students have done.

## Grading

Not all ODL systems grade assignments. Where assignments are graded, it is likely that the organisation will provide marking guidelines. The monitoring should check that tutors are marking according to the guidelines.

## Relationship with students

In a survey of the types of help needed by students, 53% saw 'human support and encouragement from tutor' as important to them. (Kelly and Swift, 1983, in Thorpe, 1993, p. 78) The ability to establish a warm, supportive relationship at a distance is very important in ODL tutoring. This is not easy to monitor but Thorpe (1993, p. 87) suggests judging the tone of written comments and noting whether tutors make appropriate offers of further contact or help.

## Overall appraisal of students' work

When monitoring comments on assignments it is usual to distinguish between overall comments that refer to the whole assignment and detailed comments that refer to particular parts of it.

When monitoring overall comments, the following might be looked for.

- An overall appreciation of the assignment (as positive as is possible).
- An explanation of the grade given.
- An indication of how the student could have got a higher grade.
- How the student could do better next time (this might be a matter of study skills or assignment technique).
- An overall appreciation of the student's progress on the course.

(Thorpe, 1993, p. 87; The Open University, 1974, pp. 11–14)

## Detailed comments

Monitoring detailed comments includes looking at how well the tutor:

- corrects errors
- helps the student to make better use of the course material
- explains any deficiencies of structure, length or logic in the student's answers
- shows where the student lost marks and what they could have done to prevent this
- deals with any problems of language, e.g. grammar, spelling, punctuation, syntax.

## METHODS OF MONITORING

Some monitoring (e.g. turnaround) can be done by analysing data already collected. Most monitoring, though, involves inspection of marked assignments by other tutors, normally by experienced or senior tutors. These monitors may look at the work of all tutors or they may just check the work of tutors in their own subject area.

Organisations usually prepare checklists, listing their monitoring criteria. The results of the monitoring are then recorded on the checklist. These checklists may or may not be shared with the tutor whose work is being monitored.

### Frequency of monitoring

Under-monitoring risks failing to identify shortfalls in quality. Over-monitoring is a waste of resources. So, each ODL organisation needs to establish the level of monitoring needed to assure the quality standards it has set itself.

Typically, new tutors will be monitored much more closely than experienced tutors.

## MONITORING TUTORS

### **Mauritius College of the Air**

*'Giving only initial training may not suffice to optimise tutorial support. Effective tutoring skills are not developed overnight. Monitoring and evaluation of the tutorial service is as important as provision of the initial tutor training. The purpose of monitoring is to ensure that the tutors are doing their job properly and high standards are maintained. Tutors must be aware that their work is being monitored, although it is not possible to monitor every aspect of their work. Even after initial training, tutors' work needs to be supervised. Face-to-face tutorials, the marking and comments on assignments are normally monitored at the MCA. It is also important to realise that tutors need timely feedback on their work, just as students do. The feedback highlights the strengths of their tutorial roles, motivates and keeps their morale high.'*

(Jheengut, 1998)

# MARKING AND COMMENTING ON ASSIGNMENTS

## INTRODUCTION

Marking and commenting on assignments is seen by students to be a very important part of a tutor's work. In one survey, where students were asked to rate 17 types of tutor help, the three highest rated items directly referred to assignments and were as follows.

- Identifying errors in written work.
- Advising on what constitutes a good answer.
- Identifying good points in written work.

(Kelly and Swift, 1983, in Thorpe, 1993, p.78)

However, it is widely agreed that marking and commenting on ODL assignments is very different from marking and commenting on the written work of face-to-face students. In classroom teaching, the teacher can provide extensive feedback on assignments to the class as a whole, rather than having to repeatedly write out similar comments on, say, 30 assignments. Consequently, the comments written on the assignments of face-to-face students tend to be very brief. Such brevity is inappropriate with distance students, who will have little or no opportunity for direct face-to-face feedback from their tutor.

## ISSUES FOR DECISION MAKERS

- 1 Which factors do you think will be important in marking and commenting on assignments in your system?
- 2 What criteria will you use for good tutor performance in your system?

## GOOD PRACTICE IN COMMENTING

ODL organisations have identified an extensive range of comment types that good tutors should use in their responses to written work.

- **Correcting of errors.** This goes beyond putting a cross (say) against an error. Often students need to be told the exact nature of their error. (However, there is sometimes a case for withholding the right answer – see *Questioning students' arguments*, below).
- **Directing the student to particular sections of the learning material;** for example, to help them understand a particular point or to find additional material.
- **Explaining how a higher mark could have been obtained.** This is seen by students as essential since merely being told of their errors is rarely enough to inform students of how to improve their performance.
- **Explaining points that the student did not understand,** for example, theories, concepts, methods, etc., which the student has wrongly used in their work.
- **Commenting and advising on presentation;** for example, spelling, grammar, layout,

length, referencing, use of conventions particular to the subject.

- **Questioning students' arguments or approach to the assignment.** In addition to correcting errors, on some occasions it makes sense to challenge students by questioning, rather than to tell them exactly how they should have answered a particular question. This questioning can help promote deep learning.
- **Suggesting what else the student should have included in their answer;** for example, the student may have overlooked viewpoints contrary to their own, or important evidence.
- **Providing an overall assessment of the assignment.** This might be expressed in terms of how the standard of the assignment compares with, say, the pass level for the course or with the student's performance on previous assignments.
- **Maintaining a friendly, positive tone.** The tone of the comments is seen as crucial. Students tend to be in awe of teachers, especially of remote teachers who they have never met. The tone of commenting is central to breaking down this viewpoint.

## TUTORING FACE-TO-FACE

### INTRODUCTION

Many ODL organisations offer face-to-face tutorial sessions. Attendance is usually voluntary but occasionally is compulsory.

Face-to-face tutoring can be used for:

- motivation
- induction and briefing
- reviewing an assignment
- preparing assignments
- reviewing a section of the learning materials
- preparing for the next section of the learning materials
- exploring common difficulties
- remedial work
- skill development
- practical work
- preparing for exams
- consolidation.

Most tutorials will perform a number of these functions at the same time.

## ISSUES FOR DECISION MAKERS

- 1 What will be the main purposes of face-to-face tutorials in your system?
- 2 When will tutorials be held?
- 3 How often will tutorials be held?
- 4 How long will each tutorial be?
- 5 Where will tutorials be held?
- 6 What training will you provide for tutors?

## STUDENTS' TOP REASONS FOR ATTENDING TUTORIALS

Students seem to value tutorials both for social and instrumental reasons. Their top reasons in one survey were as follows.

- 1 Meeting their tutor.
- 2 Discussing the course.
- 3 Getting help with difficulties.
- 4 Meeting fellow students.
- 5 Discussing assignments.
- 6 A place to study.
- 7 Help with pacing.
- 8 To be taught (note that this is a student expectation that may conflict with the ODL provider's view of the purpose of tutorials).

(Thorpe, 1993, p. 96; Chadibe, n.d.)

Interestingly, some of these reasons (e.g. 1 and 4 above) absolutely demand meeting face-to-face whilst others (e.g. 2 and 5 above) are easier to do face-to-face than at a distance. This could help explain why telephone tutorials (see *Tutoring by telephone*) are generally seen as second best.

## RUNNING FACE-TO-FACE SESSIONS

### Types of session

Typically sessions will be run in the evening, at the weekend or at a summer school.

### Locations

The locations used tend to be of three main types:

- premises belonging to the ODL organisation
- borrowed/rented rooms of an educational institution
- borrowed/rented community premises.

## Tutor skills

Tutors need training in the skills of face-to-face tutorials within an ODL context. Without training, there is the risk that tutors will teach the course, just as they would, say, for a part-time evening class. However, an ODL course is 'taught' by the materials; the tutor's job is to facilitate the students learning of that material.

The key skills that tutors need to develop for face-to-face tutorials are:

- facilitating learning
- promoting student discussion
- promoting student activity
- avoiding repeating the content which is in the materials.

## STUDY CENTRES AS PART OF LEARNER SUPPORT METHODS

### National Open School, India

*'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.'*

(COL 1999)

## RISKS IN OVER-PROVIDING FACE-TO-FACE TUITION

### Makerere University

*'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.'*

(COL 1999)

## QUALITY ASSURANCE ISSUES IN FACE-TO-FACE TUITION

### National Open School

*'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.'*

(COL 1999)

## STUDENT PREPARATION FOR TUTORIALS

### University of Nairobi Distance Education Teachers' Programme

*'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.'*

(COL 1999)

## ORGANISATIONAL ISSUES IN FACE-TO-FACE PROVISION

### University of the Philippines Open University

*'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.'*

(COL 1999)

## TUTORING BY TELEPHONE

### INTRODUCTION

Tutoring can be done by telephone, either one-to-one or one-to-many. One-to-one calls only require the student to telephone the tutor or vice versa. One-to-many calls may have to be set up in advance since not all telephone systems allow users to link various callers together.

Generally, telephone tutoring is used when face-to-face tutorials are not practicable. However, proponents of telephone tutorials see them as advantageous for a number of reasons.

- Telephone tutoring is cheaper than travel in terms of costs for students.
- Telephone tutoring is convenient for students who live too far from a local centre to attend face-to-face tutorials.
- One-to-one calls are an efficient and fast way for a student to get help with a problem.
- One-to-one calls are a good solution to problems that are hard to deal with by correspondence, especially if students do not know quite how to phrase their question.
- Telephone tutorials can be a useful substitute where there are too few students to form face-to-face tutorial groups in any one area.

(Robinson, 1981b, pp. 62–63)

### ISSUES FOR DECISION MAKERS

- 1 What do you see as the role of telephone tutoring in your system?
- 2 For which subjects might you use it?
- 3 What skills will you need to train your tutors for?
- 4 Which training methods will you use?

### PROBLEMS OF TUTORING BY TELEPHONE

A basic problem in telephone tutoring is that '... the majority of tutors and students prefer face-to-face meetings'. (Robinson, 1981b, p. 60) In some cases this may be because, not having tried telephone tutoring, they are anxious about their ability to teach in that way. However, tutors who have had successful telephone tutoring experiences may still prefer face-to-face tutorials.

There is also an inherent problem in teaching certain subjects by telephone, i.e. those subjects in which the sharing of visual material (such as diagrams, pictures, data) is important. Thus, teachers of maths and the sciences are more resistant to this type of teaching than teachers of other subjects. However, the tutor can overcome this problem by preparing a sheet of diagrams, for example, and mailing it to students in advance of the tutorial.

There is general agreement that it takes longer to prepare a telephone tutorial than a face-to-face one, and often there is no additional pay for this extra work.

Face-to-face tutorials typically last for one hour. The same length of tutorial by telephone makes much greater demands on tutors and students – concentrating on a discussion when you cannot see the participants is not easy.

A final problem is that the line quality of conference calls is often poor.

## TUTOR TRAINING ISSUES

Just as tutors need training for other aspects of ODL tutoring, so they need training for the very specific skills of telephone tutoring.

- How to structure a telephone tutorial session.
- What (if any) print materials to prepare and circulate in advance to students; for example, diagrams, data.
- How to involve all students.
- How to moderate the discussion – keeping it going, keeping it focused, changing the topic when necessary.
- How to engage silent students.

(These needs are very similar to the training needed for online conferencing – see *Tutoring online*.)

## Methods of training

The skills listed above fall into two groups: planning and organising (the first two items) and the dynamics of a remote discussion. Whilst the skills of planning and organising can perhaps be taught through written materials, the dynamic skills need to be practised. Suitable methods of practice include:

- role-play
- audio cassettes
- simulations.

(Robinson, 1981b, p.61)

## USE OF THE TELEPHONE AS PART OF A RANGE OF SUPPORT METHODS

### Open Access College

*'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 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.'*

(COL 1999)

## THE TUTOR'S VIEW

### Teaching statistics by telephone

*'I used to be a distance tutor on a university-level statistics course. The students were too scattered for us to meet for tutorials, so we had to use telephone tutorials.'*

*Each tutorial involved me in first producing and posting a sheet of problems, equations and diagrams, since the tutorial could not work unless we could all see these items.'*

*Conducting the tutorials was immensely difficult since students had to describe their statistical questions and problems over the phone. This is not easy for anyone to do, let alone students who are new to the subject.'*

*At the end of a one-hour tutorial, I felt that I had done a day's work. They were the most demanding and exhausting form of teaching that I have ever experienced.'*

*Much as I liked the course, I gave up tutoring on it because I could not bear the telephone tutoring aspect.'*

Richard Freeman

## ONLINE TUTORING

### INTRODUCTION

There are three types of online tutoring, also known as 'e-conferencing'.

- One-to-one emails – tutor and student exchange emails about some aspect of the student's study.
- Asynchronous conferencing – the tutor sets up an online conference with a group of students. Each person can send messages and also read the messages sent by others. The tutor controls (or moderates) the conference.
- Synchronous conferencing (chat) – this is where a tutor and a group of students discuss a topic in real time.

### ISSUES FOR DECISION MAKERS

- 1 For what purposes might your system use e-conferencing?
- 2 How will you help students acquire the skills to participate in e-conferences?
- 3 How will you train tutors as e-moderators?
- 4 What technology will you use?

## THE VOICE OF EXPERIENCE

### **Athabasca University**

*'When offering online tutoring, students' expectations are much higher than with traditional distance learning. This is largely because their experience is of industry-standard web sites. For example, their expectation is that, if the service is online, then it is always available and the response will be immediate.'*

*At Athabasca, we resolved this by setting performance indicators at an early stage. These were publicised to students so that they knew what to expect. Each department had to set a stated level of learner entitlement to service.*

*Overall, our experience is that, when online, academic quality is only a small part of expectations of quality.'*

Dominique Abrioux

## TUTORIAL USES OF E-CONFERENCING

Online tutoring is being used for a very wide range of purposes – at least 21 distinct uses have been identified. (Salmon, 2000, pp. 128–133) Perhaps some of the most relevant to the typical ODL tutor are:

- tutorials – doing online what is done in a typical ODL face-to-face tutorial (see *Tutoring face-to-face*)
- debates
- assignment preparation
- revision sessions
- problem solving.

## STAGES OF PARTICIPATING IN E-CONFERENCES

Salmon (2000, pp. 25–37) suggests that students participate in e-conferences at five different levels.

**Stage 1: Access and motivation** – this stage is about learning to log-on and to find the conference.

**Stage 2: Online socialising** – participants begin to send and receive messages. The content may not be of great value but they are learning how to interact asynchronously with people who they may never have met.

**Stage 3: Information exchange** – students give and receive useful information.

**Stage 4: Knowledge construction** – once participants can exchange information, they are ready to use the medium to construct meaning for themselves. The discussion moves to exchanging (and challenging) viewpoints.

**Stage 5: Development** – in the final stage, participants become critical thinkers, able to take autonomous control of their discussions.

Students who are new to e-conferences will not have these skills and may be very nervous about participating. ODL organisations therefore need clear strategies for introducing students to the skills of participating in e-conferences.

These suggestions are based on UK university students. It seems likely that Stage 4 would be less developed in students studying at a lower level and stage 5 might be completely absent.

## SKILLS NEEDED FOR MODERATING AN E-CONFERENCE

It cannot be assumed that experienced distance tutors will have the specific skills needed for e-conferencing.

Five types of online tutoring skill have been identified. (Salmon, 2000, p. 40)

- Understanding the online process, e.g. forming and running groups, stimulating and sustaining discussions.
- Technical skills, e.g. use of conferencing software.
- Online communication skills, e.g. adapting speaking and writing style to the media of conferencing and emails.
- Content expertise, e.g. knowledge of the course materials.
- Personal characteristics, e.g. open to new technology.

It is interesting to note that only 'content expertise' clearly overlaps the skills for being a 'traditional' ODL tutor (see *Tutor skills*). In other words, introducing online tutoring necessitates additional tutor training.

## TECHNOLOGY

ODL organisations have two options for setting up an e-conference system.

- 1 Rent time and space on another organisation's system – this has the advantage that the third party will carry out all the maintenance work.
- 2 Install conferencing software and sufficient telephone lines on the originator's computer system – this will require some expertise to maintain.

Students will of course need Internet access to participate in e-conferences.

## COSTS

Many organisations report that tutors claim to spend more time with online students than they do with offline ones. This may mean that online tutoring is going to prove to be more expensive than offline: 'The biggest, and I suggest the least costed ingredient in the costs of online learning is the cost of supporting learners online. Tutors at the Open University consistently suggest that they are spending more time supporting learners online than was the case when they supported them through correspondence and telephone contact. They are not being paid for this increased workload. The University has been talking about protocols to curb student demands on their tutors. At one level this reflects a process of change from an industrialised distance learning system in which students were expected to study more or less independently with relatively little direct support from a tutor, to a more supportive environment.'

(Rumble, 1999)

## OBSTACLES TO ONLINE TUITION

### National Open School

*'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.'*

(COL 1999)

## TUTOR GUIDES

### INTRODUCTION

Many ODL organisations provide tutors with a guide to tutoring within their organisation. These guides are distinct from tutor training material.

### ISSUES FOR DECISION MAKERS

- 1 Which items need to go into a general tutor guide for your ODL system?
- 2 Which items need to go into a typical course-specific tutor guide for your ODL system?

### CONTENT OF GENERIC TUTOR GUIDES

A generic tutor guide will typically include the following.

- Contacts for help with tutoring problems (e.g. difficult students).
- Contacts for help with administration problems (e.g. lost work, delays in payment).
- Contacts for course and marketing information (e.g. course brochures).
- Assignment commenting policies.
- Assessment policies and procedures.
- Equal opportunities policies.
- Face-to-face sessions: policies and tutor role.
- Telephone teaching: policies and tutor role.
- Online teaching: policies and tutor role.
- Record keeping policies.
- Timetables.
- Issue of course materials.
- Issue of stationery and other supplies.
- Complaints and grievance procedures.

## CONTENT OF COURSE-SPECIFIC TUTOR GUIDES

It is good practice to also prepare a tutor guide for each course so that tutors can be well-informed about the purpose and nature of the course. The content of tutor guides varies but may include the following.

- An overview of the curriculum.
- A rationale for the approach taken by the course writers.
- A structure and timetable for the course.
- An explanation of the function of the course components, e.g. workbooks, audio cassettes.
- Details of essential resources that students must use (e.g. textbooks).
- An explanation of the assessment system with timetable.
- Marking criteria for each assignment.
- Suggestions for additional resources that tutors might want to use or recommend to students.

## STUDENT GROUPS

### INTRODUCTION

Two types of self-help have been identified: self-help groups and supportive contact. (Robinson, 1981a pp. 159–160) For practical reasons, most research has looked at self-help groups and two types of activity have been identified: self-help and peer teaching. (Bailey, 1983)

Groups seem to exist for a number of reasons.

- Psychological support
- Social support
- To overcome geographical isolation
- For teaching and learning.

(Bailey, 1983)

### ISSUES FOR DECISION MAKERS

- 1 What function do you see for self-help groups in your ODL system?
- 2 What part might your ODL system play in setting up such groups?
- 3 What part might your ODL system play in supporting such groups?

## ILLUSTRATIVE MATERIAL: THE MECHANICS OF SELF-HELP GROUPS

### Locations

Within the British Open University, the majority of self-help groups meet in study centres. (Sewart, 1975) Other groups meet in local libraries, community centres and their own homes.

### Group size

A group size of 6–8 students seems to work best. (Bailey, 1983)

### Meeting frequency

In one study, groups met less regularly than once per fortnight (Sewart, 1975) and in another study of just two groups, one met weekly and the other met 'every three or four weeks.'

### Tutor and counsellor involvement

Studies of self-help groups often report that tutors or counsellors helped in setting up the groups. In one study, counsellors frequently attended the groups. (Sewart, p1975) However, it is likely that self-help groups with no tutor or counsellor involvement would escape researchers' attentions since such groups fall outside the formal structures of the ODL organisation.

Simpson (2002, p. 125) believes that the tutor role should formally include the requirement to help students set up their own groups and that staff development should be provided to ensure that they have the skills to do this. He provides a sample leaflet that he distributes to his students giving them advice on how to set up and run their own groups.

(Simpson, 2002, pp. 126–8)

## OTHER ORGANISATIONAL INVOLVEMENT

ODL systems often assist in the formation of self-help groups through such actions as:

- circulating names, addresses and email addresses (with students' permission)
- publicising groups
- making premises available for group meetings.

### Activities

Self-help groups engage in a wide range of activities including:

- sharing problems and concerns
- discussing forthcoming assignments
- discussing (and reading out) marked assignments
- viewing videos and listening to audio cassettes
- discussing course materials
- sharing out the work of studying course materials in depth.

(Bailey, p. 1983)

## STUDENT GROUPS IN RESPONSE TO REMOTENESS

### Makerere University

*'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 extra-mural 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.'*

(COL 1999)

## COUNSELLING STUDENTS

### INTRODUCTION

Counselling students is seen as a formal role in some ODL systems, carried out by counsellors or tutor-counsellors. Other systems do not formally recognise counselling as part of their work, although doubtless their tutors carry out activities that others would recognise as counselling.

There is little agreement over what counselling means in the ODL context but we would accept Hodgson (1993, p. 31) as a good representation of what counselling is: '[Counselling is] that advice and encouragement that people need, in addition to subject-specific support, to help them be successful learners.'

### ISSUES FOR DECISION MAKERS

- 1 For which problems do you think your ODL system will need to provide counselling support?
- 2 Will you use counsellors or tutor-counsellors?
- 3 Which counselling skills do you think you will need to train for?
- 4 How will you provide that training?

### TYPICAL COUNSELLING TASKS

Counsellors will be typically asked to help with problems associated with:

- choosing courses
- study skills

- part-time study
- demands of study, work and personal life
- personal problems.

(Clarke, Costello and Wright, 1985; Hodgson, 1993)

## THE COUNSELLING FUNCTION

Students may need counselling before, during and after a course (Thorpe, 1993, p101) so the counselling function needs to be designed to accommodate this. For example, if counselling is to be part of the role of tutors, how will pre-enrolment counselling be done (i.e. before the student has chosen a course or has a tutor)?

### Who should counsel?

A key issue is whether to combine the tutor role with that of counsellor. In its early days, the British Open University kept the roles separate but 'the division was found to be somewhat artificial' (Robinson, 1981, p 159) and the tutor-counsellor role was created.

## THE SKILLS OF A COUNSELLOR

The essence of counselling is to facilitate the person being counselled to come to their own decision about what is best for them. Counselling, then, is different from both teaching and advising. You cannot therefore assume that good ODL tutors will automatically make good ODL counsellors. The particular skills that are important in educational counselling are:

- enthusiasm
- capacity for sympathy
- flexibility
- knowledge of the organisation
- liaison skills
- capacity to facilitate group activities.

(Thomas, 1974)

## LEARNER SUPPORT WITH NEW TECHNOLOGY

### Open Learning and Information Network

*'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. 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.'*

(COL 1999)

## COURSE GUIDES FOR STUDENTS

### INTRODUCTION

ODL courses usually include a course guide, either as a separate document or built into the course materials. The course guide has been described as 'the component of a course which helps learners to find their way around the course material or package.' (Hodgson, 1993, p. 31)

### ISSUES FOR DECISION MAKERS

- 1 What might be the role of student course guides in your ODL system?
- 2 What would be in the contents list of a typical guide?
- 3 What format will you use for student course guides?

### CONTENT OF COURSE GUIDES

A course guide will include the following details.

- Course aims and outcomes.
- An overview of the course contents.
- An overview of all the course materials.
- How the course relates to the syllabus.
- The structure of the course as a whole and the structure of a typical course unit.
- An explanation of how the course is taught, e.g. the role of examples, activities and feedback.
- Details of other resources required, such as textbooks.
- Details of assignments, e.g. how many, how long they should take to complete, when they must be submitted, their format and length.
- Study advice.
- A course timetable.
- Details of exams.

### FORMAT OF COURSE GUIDES

Most study guides consist of ten or so A4 pages of explanatory text.

Some study guide authors take the view that, just as students need to be active learners when doing their course, so they should be active when working on the study guide. For this reason some study guides include activities and feedback. For example, instead of just explaining how the course activities work, the study guide might include practice activities.

## PROVIDING INFORMATION TO STUDENTS

### INTRODUCTION

Because ODL students are remote, much more effort has to be put into providing them with information than would be the case with face-to-face students. In face-to-face institutions, notices can be placed on general and course-specific notice boards and tutors can give out information at the start of teaching sessions. It is much more difficult to keep ODL students informed.

### ISSUES FOR DECISION MAKERS

- 1 What pre-course information needs might your students have?
- 2 What in-course information needs might your students have?
- 3 What post-course information needs might your students have?
- 4 Which methods might you use to supply that information?

### PRE-COURSE INFORMATION NEEDS

Students have information needs even before they enrol, which can be divided into general information needs and course-specific needs.

General information needs might relate to the:

- enrolment procedure
- nature of ODL study in that particular system.

Course-specific information needs might include:

- aims and outline of each course
- target audience for each course
- prerequisites of each course
- student commitment required by each course (e.g. study hours, attendances at tutorials or summer schools)
- start and end dates of the course
- what is provided with the course
- what the course will cost
- what students will have to provide for themselves, e.g. telephone, computer, textbooks
- the qualification awarded on successful course completion.

## IN-COURSE INFORMATION NEEDS

Once enrolled, students need more precise information, but again, this can be divided into general information and course-specific information.

### General information

- How to get help with course problems.
- How to get help with administrative problems.

### Course-specific information

- The tasks for this week/month (if the course is paced).
- A list of materials the student should have.
- Details of the student's tutor.
- Study centre details.
- Details of online facilities, e.g. how to join online conferences specific to the course.

## POST-COURSE INFORMATION NEEDS

Finally, when students have finished a course they will have yet more information needs, perhaps relating to further courses they might take or to what they might do elsewhere. Their main information needs will be:

- their assessment results
- other courses that they can now enrol on
- employment options.

## METHODS OF PROVIDING INFORMATION

Information can be provided in many ways.

Methods for information that does not change frequently include:

- brochures, guides
- newsletters
- audio cassettes.

Methods for fast-changing information include:

- web site
- emails
- telephone
- briefing and induction meetings.

# UNIT 6

## RECRUITING AND ENROLLING STUDENTS

This unit deals with the various processes that are needed to recruit and enrol students. Although the processes are the same as those required in face-to-face education, they can be difficult to get right because they must be done at a distance.

### COURSE INFORMATION

This topic discusses various methods of providing potential students with information about ODL courses. In most ODL systems, this has to be done at a distance, without the opportunity for students to meet tutors or advisers.

### MARKETING TO POTENTIAL STUDENTS

Once you have decided what information you wish to present to your students, you will need to set up a system that can communicate that information to them and help them to decide which course (if any) they wish to take. This is the marketing process and it must be done well to ensure that students do not choose courses that will fail to meet their expectations or for which they are not adequately prepared.

### DIAGNOSTIC TESTS

One of the ways of helping students to decide whether they are adequately prepared for a course is to offer diagnostic tests. This topic looks at how that can be done in ODL.

### BRIEFING STUDENTS ABOUT ODL

Many students who enrol on ODL courses have no previous experience of this approach to education. This can result both in their underestimating the commitment that ODL needs and in their being ill prepared for some aspects of ODL study; for example, the need to be a proactive learner. In this topic we look at methods that you can use to prepare your students for ODL study.

### ENROLMENT SYSTEMS

In face-to-face systems, enrolment often requires the students to attend an enrolment session. This is rarely possible in ODL so enrolment has to be done at a distance. Here we look at some of the issues that arise and the methods that you can use to enrol students.

### FEE PAYMENT SYSTEMS

In all educational systems there are students who have difficulty in paying fees and ODL is no exception. In this topic we look at how some ODL providers have tried to minimise this problem for students.

## COURSE INFORMATION

### INTRODUCTION

Course leaflets and prospectuses are particularly important in ODL since many students enrol at a distance. This means that they have little or no opportunity to discuss their course choice face-to-face.

### ISSUES FOR DECISION MAKERS

- 1 How will your ODL system provide detailed course information to students?
- 2 What information will your ODL system include in its prospectus?
- 3 What use will you make of tasters?
- 4 What use will you make of online promotion of your courses?

### PROSPECTUSES

A typical ODL course prospectus might contain the following information.

#### What it will be like to be an ODL student

Students enrolling with a face-to-face institution have a good idea of what to expect since they will have had previous experience of classroom education. With ODL they may have little idea of what to expect or may have very distorted ideas. For example, they may imagine that they will learn just by watching television or by listening to the radio. Or they may think that they are going to have unlimited access to their tutor.

It is important that the prospectus describes what it is like to be an ODL student, perhaps by describing a typical course experience from beginning to end. Including pen-portraits of some typical students can help. This can be a good way of drawing students' attention to some of the problems of being an ODL student (e.g. managing your time) and, at the same time, showing how the support services can help. In particular, a prospectus needs to describe:

- what it is like to study by yourself
- how the tutor support works
- how other support works.

#### Courses offered

The courses offered need to be described as fully as space allows (see *Tasters*, below), and should include the following.

- Course title.
- Course aims.
- A content summary that includes all the main topics.

- Course prerequisites.
- Start and end dates of the course (if paced).
- Number and type of assignments.
- Face-to-face activities and whether they are optional or not.
- Type and extent of tutor support.
- Materials supplied with the course.
- Materials that students will need that are not supplied with the course.
- Form of assessment.
- Certification awarded and any accreditation attached to it.

### Certification and accreditation and post-course options

Although each course will probably have a description of its certification, the prospectus should also include an overview of the qualifications that can be obtained through the organisation. Two important questions here are:

- 1 Who accredits the qualification (i.e. how do students know that it is worth anything)?
- 2 What are students able to do once they have achieved the qualification (e.g. what jobs or other training depend on achieving this qualification)?

The prospectus needs to make these points clear to students.

### Administrative information

Prospectuses also need to include information on:

- course fees
- other costs that students will incur
- enrolment forms
- regulations.

## OTHER INFORMATION DEVICES

### Tasters

Tasters are one way of overcoming the difficulty of describing a course adequately in a prospectus. A taster is a small piece of a course (e.g. the first unit) that is sent to prospective students (usually free of charge) so that they can try out the course for themselves.

### Online prospectuses and enrolment

Some organisations are beginning to experiment with online prospectuses and online enrolment. There are currently no reports of the comparative success of this method.

# MARKETING TO POTENTIAL STUDENTS

## INTRODUCTION

The first step in promoting your organisation and its courses is to be clear about who your potential students are. You will have identified these very early on in planning your organisation (see *Identifying the target population*). The more clearly you can define the target population, the more precisely you can focus your marketing effort. For example, if your market is the over-25s, you would not wish to waste money on placing advertisements in magazines for the under-25s. So, it is important that your marketing starts from a good knowledge of your potential students.

- Which newspapers and magazines do they read?
- Which radio and television programmes do they watch?
- Which places do they visit?

This section assumes that you have identified your target population.

## ISSUES FOR DECISION MAKERS

- 1 Who are your potential students?
- 2 What do you know about newspapers and magazines that they read; radio and television programmes that they watch; places they visit?
- 3 What methods can you use to raise awareness of your ODL system?
- 4 What methods can you use to raise comprehension of your ODL system?
- 5 What methods can you use to reinforce conviction about your ODL system?
- 6 What methods can you use to facilitate enrolment?

## MARKETING COMMUNICATIONS

Marketing can be very expensive. Prospectuses, postage, advertising and staff time all cost a good deal of money yet may yield few enrolments. One way to minimise the cost of recruiting students is to plan and monitor the marketing carefully. A useful model for this is Colley's (1961) five stages of consumer decision making (Figure 1). These stages and their implications for ODL are discussed in more detail below.

**FIGURE 1** THE CONSUMER DECISION PROCESS

(Colley 1961, adapted)

## Unawareness

Before you start to market your organisation, you can assume that potential students are unaware of its existence and, perhaps, unaware of the concept of ODL.

## Awareness

The first step in your marketing activity is to make potential students aware of your organisation. At this stage you might seek to embed three ideas in the minds of potential students.

- 1 The name of the organisation
- 2 A visual identity, e.g. a logo or a crest
- 3 A 'tag line', i.e. a memorable phrase that helps students remember the organisation, e.g. 'the college that comes to you' (used for many years by the National Extension College in the UK).

Good awareness methods are:

- posters
- newspaper advertisements
- radio
- television.

## Comprehension

The next step is to help potential students to understand what you are offering and what it means for them. This stage involves giving more information than the awareness stage since you will need to describe courses and what it is like to be an ODL learner. Good comprehension methods include print (e.g. a prospectus) and face-to-face (e.g. an open evening at a local centre).

## Conviction

If you have designed the right sort of organisation and the right courses for your target audience, then the more they find out about you, the more convinced they should be that they wish to enrol. Conviction – getting the students to believe that what you have to offer is right for them – is the next stage. Conviction methods include:

- tasters
- self-diagnostic tests
- open evenings where potential students can try out part of a course
- offering a free trial period
- meeting enrolled students.

## Enrolment

The final step is enrolment. This should follow naturally from conviction but you still need to consider how to facilitate that enrolment. For example, when sending out tasters and self-diagnostic tests, enrolment forms should be included. At open evenings, facilities for enrolment should be available.

# DIAGNOSTIC TESTS

## INTRODUCTION

Students may have difficulty in judging their readiness for a course just from a course description. This is particularly the case with sequential subjects such as maths, languages and sciences. Diagnostic tests can be used to overcome this problem.

Diagnostic tests serve two purposes.

- To help students decide whether to enrol on a particular course.
- To help students to choose between a range of courses at different levels.

## ISSUES FOR DECISION MAKERS

- 1 For which courses might you need to provide diagnostic tests?
- 2 How will you deliver those tests to your students?
- 3 How will they get feedback and advice?

## CONSTRUCTION OF DIAGNOSTIC TESTS

Diagnostic tests focus on the assumed prior knowledge and skills of a given course (or a range of courses). Designing a test for a single course case is the easiest to describe.

- Review, say, the first ten hours of the course.
- Identify all the knowledge and skills used.

- Subtract from the knowledge and skills list any items that are explicitly taught within those ten hours.
- The list you are left with is the untaught, assumed prior knowledge and skills.
- Devise a test to measure how many of these items students know or can do.

## USE OF DIAGNOSTIC TESTS

Once you have developed a test you can then make it available to potential students.

Options for distribution include:

- a self-marking paper-based test, mailed to students
- a centre- or tutor-marked test, mailed to students
- a computer disk, mailed to students
- online.

Marks are reported to students in a format that relates their score to their suitability for the course (see below).

More than 25	You should have no difficulty in following this course.
18-24	You may have some difficulties with a few of the ideas in this course but, if you are prepared to do a bit of extra study, you should succeed in completing this course.
Less than 18	We do not recommend that you start this course without further preparatory study.

## BRIEFING STUDENTS ABOUT ODL

### INTRODUCTION

Your students will find that ODL is different from their previous experience of education, but how is it different?

Robinson (1981a, pp.141–161) has identified three main areas in which students experience problems as open/distance learners.

- Study and learning difficulties.
- Interacting at a distance.
- Personal problems.

(See *Reasons for offering tutoring and support*.)

It is good practice to help students anticipate and avoid these problems rather than just wait until they ask for help. This can be done by briefing students about what it is like to be an ODL student.

## ISSUES FOR DECISION MAKERS

- 1 Which topics do you think your students will need to be briefed on before they start an ODL course?
- 2 What briefing methods will you use?

## BRIEFING TOPICS

Race (1986) puts forward the view that students need to know about the following briefing topics (his book provides activities for students on all of these points).

- Recognise the benefits that you are seeking from your studies.
- Plan a study regime that suits you.
- Make good use of spare moments of time.
- Make the most of wherever you are rather than learn in one place only.
- Recognise that hours of study are less important than signs of really understanding what is being learnt.
- Recognise the importance of activity in learning.
- Make full use of activities, self-assessment questions, etc., in the learning materials.
- View your tutor as a helper rather than as a marker/grader.
- Ask for help when you need it.

## BRIEFING METHODS

There is much anecdotal evidence to suggest that printed advice in the form of student guides, welcome packs, etc., is not effective in preparing students for ODL. Race (1986) uses an interactive approach in which students are given exercises to (a) diagnose their attitudes and readiness for self-study and (b) to let them experience self-study and learn from that experience how best to plan and organise their future self-study.

Other methods that are held to be effective are:

- briefing sessions in local centres
- induction sessions, provided they include some (simulated) experience of ODL.

# ENROLMENT SYSTEMS

## INTRODUCTION

Unsurprisingly, enrolment in ODL systems often takes place at a distance – whether by mail, email or online form. This means it takes place without the aid of a tutor, counsellor or administrator to guide students and check for errors and misunderstandings.

## ISSUES FOR DECISION MAKERS

- 1 How will your students enrol – at a distance or at centres?
- 2 How will enrolments be submitted – paper form or online form?
- 3 What contractual details need to be stated on the enrolment form?
- 4 What student information do you need to collect when students complete the enrolment form?
- 5 Who will process enrolments?
- 6 What job aids will you provide your staff to ensure quality of checking?

## FUNCTIONS OF AN ENROLMENT SYSTEM

Enrolment systems have four functions and we will look at each of these in turn.

(Freeman, 1997, pp. 23–24)

### Contractual

The enrolment form is a contractual document, so it must therefore make the terms of the contract clear, either by including this information on the enrolment form or by referring the student to another document. The form must clearly state the following.

- How much the student is to pay at the point of enrolment.
- Any further payments due and their dates.
- What services the organisation will provide.
- What materials the organisation will provide.
- What other costs the students will have to incur (e.g. exam fees).
- The period over which services will be provided.
- Cancellation and refund arrangements (e.g. if a student is no longer able to continue with a course).
- Repeat tuition and arrangements for resitting exams.

### Collection of information to meet students' needs

The enrolment form is often the point at which students' personal details are collected for use in tuition and counselling. For example, it is usual to ask students to give details of:

- their prior education
- any qualifications that they hold
- any disabilities that they have.

(Separately, after enrolment, tutors may ask for further personal details on a voluntary basis in order to help them get to know their students better.)

### Provision of information to students

If enrolment takes place more than a few days ahead of starting a course, the organisation should provide students with the following initial information.

- General information about the organisation.
- Information on what happens next.
- Who to contact in case of problems or queries.

### Collection of management information

Finally, the enrolment form may be used to collect management information both for internal use and for external use; for example, completing government statistical returns.

Typically such information might include details of a student's:

- age
- sex
- ethnic origin
- disabilities
- highest educational level
- funding details ( i.e. who is paying for the student's course).

## PROCESSING ENROLMENTS

Enrolment forms need to be processed with care to ensure that:

- students are admitted to courses for which they are eligible
- students are not able to take inappropriate combinations of courses
- students have paid the correct fees
- no mandatory information is missing.

Staff must be provided with suitable job aids to help them check enrolment forms.

## FEE PAYMENT SYSTEMS

### INTRODUCTION

Problems with fees have been identified as a significant factor in students failing to enrol on courses and in dropping out after having started a course. (Rumble 1997, p. 194) ODL systems therefore need to seek every possible method to avoid fees becoming a problem for students. Fee problems can be diminished by:

- government subsidies
- sponsorship of a given number of places by third parties, e.g. large companies
- a hardship fund operated by the ODL system
- flexible payment methods.

### ISSUES FOR DECISION MAKERS

- 1 What difficulties might your potential students have with fees?
- 2 What can you do to help minimise these problems?

### METHODS OF PAYMENT

ODL systems operate a variety of payment methods.

#### Full payment in advance

The simplest (for the organisation) is full payment in advance. This helps to keep administrative costs down and gives the organisation the benefit of earning interest on advance payments held in its bank account. However, students usually find this the most difficult method of payment.

#### Payment by instalments

Many organisations offer the option of payment by instalments, usually over the first few months of the course but, sometimes, over longer periods. This approach helps students with their own personal cash flow. However, it is expensive to administer and the organisation will earn less interest.

#### Payment by a third party

In some situations, a third party, such as an employer, will agree to pay a student's fees. Whilst this is good news for the student, it can create extra office work since the fee has to be obtained from the employer and matched up to the student's account.

#### Refunded payments

In a few cases, students have to pay their own fees but can claim the costs back (e.g. from the government or their employer) on successful completion of the course.



# UNIT 7

## ASSESSING STUDENTS

In this unit we look at methods of assessing ODL students. Although the assessment options are similar to those used in face-to-face education, there are some practical difficulties in assessing students at a distance.

### TYPES OF ASSESSMENT

This topic briefly reviews the functions of formative and summative assessment and then looks at how these can be implemented in ODL.

### METHODS OF ASSESSMENT

This section contains four topics covering the more commonly used methods of assessment in ODL: exams, tutor-marked assignments, portfolios and online assessment. The topics focus on the practical issues of making these methods work at a distance.

### ASSESSMENT INFORMATION NEEDS

Two topics deal with the issues of providing adequate information about assessment to students and tutors. The topics discuss what students and tutors need to know about assessment and what methods can be used at a distance to provide them with this information.

### EXAM PREPARATION GUIDES

The final topic looks at how to prepare ODL students for examinations and, in particular, with the preparation of exam guides.

## TYPES OF ASSESSMENT

### INTRODUCTION

There are two types of assessment: formative and summative.

Formative assessment is 'all those activities designed to motivate, to enhance understanding and to provide learners with an indication of their progress'. (Morgan and O'Reilly, 1999, p.15)

Summative assessment is designed to 'record or report an estimate of students' achievements'.

(Morgan and O'Reilly, 1999, p. 15)

### ISSUES FOR DECISION MAKERS

- 1 Which methods will you use to ensure that your students receive sufficient good quality formative feedback?
- 2 Which methods will you use for summative feedback?

### FORMATIVE ASSESSMENT

There is good evidence that formative feedback needs to be frequent and complete. Ausubel and Robinson (1971), and Rogers (2001) give the following as some of the key requirements for effective formative feedback. To be effective, formative feedback should:

- be immediate, frequent and continuous (for concept learning)
- aim to help the student to avoid making errors, rather than correcting them
- prompt the student to the right answer rather than tell them the right answer
- always tell students why their answers are right or wrong; offer complete explanations as to why an answer is 'right' or 'wrong', or tell the student the direction of their error rather than simply stating their answer is wrong.

(Ausubel and Robinson, 1971, pp.301–302)

### SUMMATIVE ASSESSMENT

The main means of summative assessment are:

- exams
- projects
- theses
- portfolio assessments.

## THE VOICE OF EXPERIENCE

*'Transferable credit is of absolute importance because:*

- *students want it*
- *many students want to mix traditional and ODL courses, often with different institutions.*

*Even if you would prefer students to do the whole programme with you, you need to accept their desire to mix modes and to allow transfer in from conventional universities. If you don't provide credit, you marginalize yourself.'*

Sir John Daniel

## SOURCES OF FORMATIVE ASSESSMENT AND FEEDBACK

In the classroom, much formative assessment is given informally when the teacher responds to individual questions or discusses individual pieces of work. It is difficult but important for ODL to reproduce the richness of this feedback. A number of devices can be used to give formative feedback.

- Activities in course material (although some poorly designed ODL texts fail to give feedback on activities).
- Self-assessment tests and progress tests in course material.
- Tutors' comments on assignments and other written work.
- Tutors' responses to specific student questions (e.g. over the phone or by email).
- Comments during tutorials (face-to-face, by phone or online).
- Comments from peers (informally or in student groups).

## METHODS OF FEEDBACK IN LEARNING MATERIALS

Because ODL students spend most of their time working on their learning materials, the quality (and quantity) of feedback in those materials is of particular importance to them. Some activity/question formats that are particularly good for formative feedback are shown in Table 1.

**TABLE 1** APPROPRIATE ACTIVITY/QUESTION FORMATS FOR GIVING FEEDBACK

Case studies with tasks or questions.
Complete a graphic outline.
Fill-in-the-blank.
Guided reading with tasks or questions.
Interpreting graphs and diagrams.
Labelling diagrams.
Matching the correct answer.
Multiple choice.
Questions about a text passage.
Select items from a list.
Short-answer questions.
Tables for completion by the learner.

## ASSESSMENT BY EXAM

### INTRODUCTION

Open learning (if not distance learning) has been criticised for using assessment methods that are seen as incompatible with an open, student-centred approach to education (Peters, 1995). Why, then, are exams still common practice on ODL courses? One response to this is that examinations are necessary in an ODL system because:

- the learners are less well known to the tutors
- proof is needed that the work submitted by the student is really theirs
- plagiarism is harder to detect with ODL learners
- examinations give your system respectability in the public eye.

## ISSUES FOR DECISION MAKERS

- 1 What arguments do you have in favour of using examinations in your ODL system?
- 2 What arguments do you have against using examinations in your ODL system?
- 3 Which types of exam will you use?

## WHAT SORT OF EXAMS?

Another response to the critics of exams in ODL systems is that there is more than one type of exam and it is not necessary to set exams which just test memory. Table 2 details four types of exam, only one of which (the first) is the conventional exam. The other types (open book, take-away topic and take-away question) all place a premium on skills other than memorising.

**TABLE 2 SOME TYPES OF EXAM**

Exam type	Indicative characteristics	Puts a premium on
Closed	<ul style="list-style-type: none"> <li>• fixed time period</li> <li>• no use of notes or textbooks</li> <li>• choice of questions</li> </ul>	<ul style="list-style-type: none"> <li>• working at speed</li> <li>• knowledge</li> <li>• exam technique</li> </ul>
Open book	<ul style="list-style-type: none"> <li>• fixed time period</li> <li>• can use own notes and textbooks</li> <li>• choice of questions</li> </ul>	<ul style="list-style-type: none"> <li>• retrieval skills</li> <li>• synthesis skills</li> </ul>
Take-away topic	<ul style="list-style-type: none"> <li>• topic set in advance to allow for preparation</li> <li>• fixed time period when the exam is taken</li> </ul>	<ul style="list-style-type: none"> <li>• retrieval skills</li> <li>• selecting information</li> </ul>
Take-away question	<ul style="list-style-type: none"> <li>• question set in advance to allow for preparation</li> <li>• fixed time period when the exam is taken</li> </ul>	<ul style="list-style-type: none"> <li>• retrieval skills</li> <li>• selecting information</li> </ul>

## DUAL-MODE SYSTEMS

In dual-mode systems the face-to-face examination system usually forms the basis of the ODL assessment. This helps to demonstrate that the ODL standards are identical to those of the face-to-face part of the institution.

## ASSESSMENT BY TUTOR-MARKED ASSIGNMENTS

### INTRODUCTION

Assignments generally have both a formative and a summative purpose, with the formative being the stronger. In some systems the summative purpose is formally recognised by the assignments being marked, with the marks forming part of the final grading for the course. The problem that this presents is highlighted by noting three key things that the tutor should do when marking and commenting on an assignment.

- 1 Teach rather than mark.
- 2 Seek to engage the student in dialogue rather than just tell him things.
- 3 Encourage the student to reflect on his performance rather than just to accept the tutor's judgment.

(Morgan and O'Reilly, 1999, p.75)

These three qualities of assignment marking and commenting can be undermined if students know that the mark they receive will be part of their final grade. This is because:

- students will pay more attention to what the mark tells them than how the teacher marks their assignment
- any dialogue that results is more likely to focus on the justness of the mark rather than deeper issues regarding the subject
- student reflection is more likely to be 'that mark was unfair' rather than a genuine development of taking personal responsibility for learning.

On the other hand, continuous assessment assignments act as a strong motivator for students to continue with their course. It can be hard to resolve the tensions between the ideal formative system and the benefits of continuous assessment.

### ISSUES FOR DECISION MAKERS

- 1 List the formative aspects of assignments that are important to you.
- 2 List the summative aspects of assignments that are important to you.
- 3 What does this tell you about your attitude to the use of assignments for summative assessment?
- 4 Plan a policy on assignments and summative assessment.

### SOLUTIONS

Some solutions to this problem which have been adopted are to:

- keep all the assignments as formative only
- have some formative and some summative questions in each assignment
- have a mixture of formative assignments and summative assignments.

## ASSESSMENT BY PORTFOLIO

### INTRODUCTION

One form of assessment that is highly compatible with the idea of students taking responsibility for their own learning is that of the portfolio. A portfolio can:

- show a range of the student's work (i.e. more than can be seen in an exam)
- assess process and content (many assessment methods focus only on content)
- require a student to collect evidence of their learning throughout the duration of their course (many assessment methods concentrate on the last few weeks of the course)
- be used beyond assessment, e.g. to support a job application.

(Gibbs, 1995, p. 141)

However, portfolio assessment is demanding in tutor time and is rarely an option except for the best-resourced ODL providers.

### ISSUES FOR DECISION MAKERS

- 1 Which aspects of portfolio assessment match the assessment philosophy of your ODL system?
- 2 What sort of general criteria might you use for portfolio marking?
- 3 How might you prevent portfolios from becoming over-large?

### ASSESSMENT CRITERIA

The particular criteria for a given portfolio assessment will vary but may require the student to provide evidence that they have:

- carried out every step in a process
- made a particular contribution to group work
- reflected on the material in the portfolio
- engaged with the material in the portfolio
- analysed a design problem before proposing a solution.

Whatever assessment criteria are adopted they must be clearly communicated to both students and tutors.

### OVERCOMING THE PROBLEM OF BULK

There is a danger that portfolios become just a collection of unconsidered pieces of paper, with the attendant risk that they become too large for the tutor to assess. To keep the volume of material to a minimum, students can be asked to include, say:

- their three best presentations

- their two best designs
- one very early report and one very late one.

To reduce the volume that the tutor marks, the criteria might specify that five given types of document will be assessed, each for one of five key things. The documents are then randomly selected so that the tutor only marks a sample of the total portfolio.

## ASSESSMENT ONLINE

### INTRODUCTION

The term 'online assessment' is currently being used in two senses.

- Online submission; for example, using the Internet to send a copy of a word-processed assignment to a tutor.
- Online testing and marking.

### ISSUES FOR DECISION MAKERS

- 1 What do you see as the role of online assignment submission in your system?
- 2 What do you see as the role of online testing and marking in your system?
- 3 Do you intend to use a virtual learning environment (VLE)?
- 4 If so, how will you select which VLE to use?
- 5 How will your staff be trained to write objective tests?

### METHODS OF ONLINE SUBMISSION

Online submission is the commonest use of online systems in ODL assessment. Its main virtue is speeding up turnaround time (Mason, 1995). In its simplest form, the student word processes an assignment and attaches it to an email addressed to the tutor. The tutor may respond by email or post a marked copy of the assignment back to the student.

A refinement of this system is the use of Microsoft Word's 'Track Changes' facility. This allows the tutor to add (in a different colour) comments to the student's assignment. The annotated assignment can be sent back to the student as an attachment to a second email.

### METHODS OF ONLINE TESTING AND MARKING

A more sophisticated use of online methods is to create tests that are presented online. Once the student has completed a test and clicked the submit button, the test is marked and their mark reported back to them. Depending on the system, they may also receive feedback on their right and wrong answers.

Such tests are usually limited to the following question types:

- multiple-choice
- true/false
- matching the correct answer
- short-answer.

There are two types of computer applications for creating online tests:

- free-standing
- embedded within a virtual learning environment (VLE).

### Free-standing test creation programs

Free-standing test creation programs will create a test which you can then deliver on a variety of systems. Vendors of programs of this type include Question Mark, Hot Potato and Castle. One advantage of this type of test is that it can exist as a discrete item that can be run alone or it can be integrated into a web site.

### Embedded within virtual learning environments

A more popular approach for large educational institutions is to use a VLE (FERL). This is a computer program, installed on the central server, which allows all authorised staff to create web-based courses. One of the standard tools of a VLE is an assessment test creation program that can be used to create an online test for an offline course.

One advantage of the VLE approach is that the VLE program automatically collects students' marks, stores them and makes them available to students and tutors. Free-standing programs are sometimes capable of being integrated into student management systems but the integration has to be built by someone with the appropriate skills.

Typical VLEs include WebCT and Blackboard and both provide facilities for creating online tests, administering them and storing marks.

## TEST CREATION SKILLS

Since online tests are generally limited to objective questions and, in some cases, short-answer questions, staff involved in creating tests must be skilled in writing such questions (Pritchett, 1999). This requires specific training, using materials such as those published by the University of Aberdeen and Guildford Educational Services Ltd.

# ASSESSMENT: INFORMATION NEEDS OF STUDENTS

## INTRODUCTION

Students need to be provided with three key types of assessment information.

- Information on the process.
- Information on the tasks.
- Information on the results.

(Freeman, 1997, p. 106)

## ISSUES FOR DECISION MAKERS

- 1 What assessment process information do you need to communicate to students and how will you do this?
- 2 What assessment task information do you need to communicate to students and how will you do this?
- 3 What assessment results information do you need to communicate to students and how will you do this?

## INFORMATION ON THE PROCESS

Process information covers the:

- number of assessment items there are in the course
- type of assessment items (e.g. essay, objective test)
- recommended date for starting work on the assessment
- date by which the assessment must be submitted
- acceptable formats for submission (e.g. hand written, type written or word processed)
- method by which the assessment items are processed.

## INFORMATION ON THE TASKS

For each assessment task, students will need details of the:

- purpose of the task
- part of the course covered by the task
- task instructions
- length and format of their expected response
- criteria that will be used to mark the task.

## INFORMATION ON THE RESULTS

After assessments have been marked, students will need information on:

- their mark or grade
- what the marks/grades mean, e.g. a pass = 50%
- feedback on their performance (if the assessment has a formative aspect).

## PROVIDING THE INFORMATION

Much of the above assessment information will be known at the start of the course. This information is best included in the course materials or in the course guide (see *Course guides for students*).

Information that cannot be included in the course materials or the course guide is more problematic in ODL since there are no notice boards on which to display information and no class sessions at which to make announcements. The commonest methods of communicating such information are mailings (but these are expensive) and newsletters. In systems where students all have online access, emails are now increasingly used, as are online course notice boards.

## ASSESSMENT: INFORMATION NEEDS OF TUTORS

### INTRODUCTION

Tutors must receive exactly the same information as students since they need to know what their students have been told about their assessments.

Since tutors should automatically receive the course materials and course guides for the courses that they teach, they will receive any assessment information that is contained in those materials. However, ensuring that tutors receive other assessment information sent to students is a little more difficult to arrange. One solution is to add tutors names to the student mailing lists for each course they teach on.

### ISSUES FOR DECISION MAKERS

- 1 How will you ensure that tutors receive the assessment information sent to their students?
- 2 What other assessment information will your tutors need?

### OTHER ASSESSMENT INFORMATION FOR TUTORS

Tutors will find it helpful to receive summary information about their students, and in computerised systems this can often be provided at little cost. Some types of useful information are shown below.

- All assessment results for the tutor's students, course by course, for the year to date.
- Comparative summary information, course by course, for the tutor's students against all students on the course, e.g. the average mark of the tutor's students versus the average mark for all students.

## EXAM PREPARATION GUIDES

### INTRODUCTION

In face-to-face teaching, many teachers give their students lots of exam practice. This is rare in ODL so ODL students arrive at examinations less well prepared than face-to-face students.

Most students need advice on revision, particularly since they tend to believe that revising is the same as memorising.

(Northedge, 1990, p.216)

The following skills are seen as essential to effective exam preparation.

- To see revision as an active process of reconstructing the course.
- To avoid attempting to memorise facts in a rote manner.
- To plan revision over a long period rather than making it a last-minute activity.
- To make good use of past exam papers, both to structure revision and to become familiar with the format and length of questions.
- To be selective in what is revised – attempting to go over the whole course is not likely to be effective.
- To have a revision timetable.
- To produce condensed notes, particular in mind-mapping format.
- To write down practice answers – this not only gives practice in answering questions but also aids memory and understanding.

(Good and South, 1988; Northedge, 1990)

### ISSUES FOR DECISION MAKERS

- 1 What sort of revision aids will your students need?
- 2 What sort of exam practice will your students need?
- 3 What form of exam guidance will your students need?

### PROVIDING HELP

ODL students can be provided with exam preparation help in various ways, as shown below.

#### Advice guides

This is the commonest method of providing exam preparation guidance. Students are provided with a booklet of advice and tips on how to prepare for exams. Gibbs (1981) maintains that this approach is ineffective in changing student behaviour.

### Active revision guides

Active learning guides take the same material as is found in the advice guides but the material is taught through a set of activities in which students try out ideas and find out what works for them. It is thought that by reflecting on their own experience of revision, students will adopt strategies that work for them.

### Advice built into their courses

A final approach is to teach students good revision habits by building revision exercises (of the same type as are used in active revision guides) into the course material itself. For example, at intervals in the course there might be:

- special revision exercises that require students to use information they have learnt in some new way
- practice exam questions
- activities that ask students to make mind maps of a part of the course to aid memory and understanding.

# UNIT 8

## MANAGING AND ADMINISTERING THE SYSTEM

To operate successfully, open and distance learning requires more systems than conventional education. Such systems are also more integrated and this necessitates additional planning and routine administration. This first topic looks at what is involved in operational planning and the type of operational plans that you will need to make. The main areas for consideration are:

- **Staff development** – in conventional education, schools, colleges and universities can recruit teachers who have already been trained in standard classroom techniques. The various other support staff can also be recruited ready-trained; for example, secretaries, laboratory technicians and librarians. ODL, on the other hand, involves many new skills, not readily available in local labour markets. An ODL organisation must therefore run its own staff development programmes and this topic looks at what is involved in this.
- **Quality assurance** – Quality assurance is an issue for all education providers. This topic looks at the particular issues that arise in implementing quality assurance in an ODL organisation.
- **Support staff** – ODL organisations employ a range of support staff in areas such as student advice, student records and materials dispatch. Here we remind you of the types of staff that you might need to employ and of some of the issues that might arise.

## OPERATIONAL PLANNING

### INTRODUCTION

Most of what happens in a face-to-face institution is due to the work of individual teachers: they give lectures, mark work, make and hand out notes, etc. Most of what happens in ODL happens only because it has been planned well in advance and on a scale that is often inconceivable to a classroom teacher. This means that ODL has a large element of operational planning, most of which is done on a yearly basis to match both a financial and a teaching year.

## ISSUES FOR DECISION MAKERS

- 1 What routine operations will your ODL system need? (See Table 1 below.)
- 2 Who will plan each operation?
- 3 What will be the timescale for operational planning?
- 4 How will this be coordinated?

## THE VOICE OF EXPERIENCE: THE ROLE OF SUBCONTRACTORS

*'When using subcontracting you need to pay close attention to any subcontracting of important parts. For example, at the British Open University, the OU/BBC contract was of particular importance. You need to be alert to how it works from the student point of view and to be aware of your partner's needs – how it looks from their side.*

*You also need to watch the boundaries of the contract. For example, at the British Open University an issue arose over whether the University's newly developing web activities should or should not fall within the remit of the OU/BBC contract.'*

Sir John Daniel

## THE VOICE OF EXPERIENCE: PROTECTING CRITICAL SYSTEMS

*'You need to pay very careful attention to any aspect of your system that is crucial to its functioning. The National Extension College moved offices. Our telephone company had said that we could take our telephone number with us. That was very important to us since it is our main means of communication with enquirers. At the last minute, we were told that the number could not be moved. We then contacted another company who said they could move the number, which they did. Whilst all this was happening, our enquirers had the greatest of difficulties in contacting us. We lost thousands of calls. We learnt from this that:*

- *you should never rely on just one supplier for a vital function*
- *you should always have a contingency plan against any failure in a vital function.*

Dr Ros Morpeth

## THE VOICE OF EXPERIENCE: AN AGENDA FOR OPERATIONAL PLANNING

*'Here's an initial agenda of issues to think about when setting up an ODL system in a dual-mode environment.*

- *Look at what you do and ask "What can be done in the same way for ODL?"*
- *What has to be done differently?*
- *What systems need to be created specifically for ODL?*
- *Always create a separate administrative and academic structure for ODL – it is very difficult to bolt a new mode of learning onto an existing structure.*
- *Try to create a system where you directly control the key workers, whether on the staff or contracted for a task.*
- *If you rely on face-to-face teachers to write and tutor courses, they will almost always give ODL second priority.*
- *Avoid relying on goodwill.*
- *Identify what it is you don't know enough about – how will you bring in the appropriate skills?*
- *If you can't bring in those skills, try to find some other way that is within the skills available to you.*
- *Know when to buy in expertise.*
- *Make sure you know enough (or do so through bought-in advice) to judge the price and quality of what you are being offered.'*

Dr Ros Morpeth

## THE VOICE OF EXPERIENCE: WORKING WITH OTHER ORGANISATIONS

- *'Are their skills/offers complementary to yours?*
- *Are they using you in order to gain experience and then will become your rival?*
- *Formalise the responsibilities and the income/cost division – this can save an enormous amount of anguish later.*
- *Consider what will happen if something goes wrong, e.g. they pull out.*
- *Partnerships double management time – so they must be worth it – but benefits can be much greater than the costs.*
- *Make sure your risks are covered.*
- *Make sure you are in total control of the things you have to deliver on, e.g. do not be dependent on another organisation's authors.*
- *Make sure an arrangement is a win-win.*
- *Look for possible conflicts of interest and competitiveness.'*

Dr Ros Morpeth

**TABLE 1** TYPICAL OPERATIONAL PLANNING ACTIVITIES

<b>Area</b>	<b>Routine operational activities to plan</b>
Finance	<ul style="list-style-type: none"> <li>• annual budget</li> <li>• budget control</li> <li>• outline budget for longer period – say three years</li> </ul>
Student recruitment	<ul style="list-style-type: none"> <li>• leaflets, prospectuses, forms, advertising</li> </ul>
Enquiries processing	<ul style="list-style-type: none"> <li>• staffing, phones, typing</li> <li>• course information for advisory staff</li> </ul>
Enrolment	<ul style="list-style-type: none"> <li>• enrolment forecasts</li> <li>• enrolment system – staff, computers, office procedures</li> </ul>
Materials development	<ul style="list-style-type: none"> <li>• profile of courses to offer, year by year</li> <li>• plan of new materials needed, with dates</li> <li>• dates for reviews of existing materials</li> <li>• plan of updates needed, with dates</li> </ul>
Materials manufacture	<ul style="list-style-type: none"> <li>• forecasts of quantities needed and when</li> <li>• forecasts of stock levels</li> <li>• production plan</li> </ul>
Tuition and support	<ul style="list-style-type: none"> <li>• forecasts of student numbers by subject</li> <li>• forecasts of numbers of tutors needed</li> <li>• tutor recruitment plan</li> <li>• tutor training plan</li> </ul>
Assessment	<ul style="list-style-type: none"> <li>• schedule of assessments for the year</li> <li>• plan for preparation of assessments</li> <li>• plan for conducting of assessments</li> <li>• plan for marking assessments</li> <li>• recruitment of setters, markers, etc.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• technology requirements review (say every 2–3 years)</li> <li>• assessment and choice of new technology</li> <li>• installation programme for new technology</li> <li>• staff training plan for new technology</li> </ul>

## STAFF DEVELOPMENT

### INTRODUCTION

Staff development is a particular issue in ODL, which requires skills not widely used elsewhere in education. This means that you may need to train the staff you recruit rather than rely on finding experienced personnel.

The three areas where ODL skills most differ from those in other types of education are:

- tutoring
- course development
- advising and counselling.

### ISSUES FOR DECISION MAKERS

- 1 What sort of people will you be able to recruit as tutors, writers, editors and advisers?
- 2 What skills will they lack?
- 3 How will you train them in these skills?

### STAFF SKILLS YOU WILL NEED

Hill (1998) has suggested that the 'ideal' distance learning staff member will have the following qualities.

- Training.
- Consulting, including finding 'innovative solutions to such problems as bringing conflicting parties with like interest and goals together'.
- Curriculum development.
- Evaluation skills, for keeping programmes under regular review.
- Marketing and promotion.
- Administration (because there are more systems in ODL and more staff to manage).
- Technical/computer knowledge and 'extensive knowledge of the Internet'.

Realistically, though, these skills may have to be spread over a team rather than reside in every member of the team.

### SKILLS AREAS FOR ODL STAFF DEVELOPMENT

The areas in which you are most likely to need to organise staff ODL skills development are tutoring, writing, editing, counselling and advising. Some of the key skills in these jobs are set out in Table 2.

**TABLE 2** ODL SKILLS

<b>Role</b>	<b>Skills most likely to be new</b>
Tutors	<ul style="list-style-type: none"> <li>• Act as subject expert, knowing when to give information and when to refer students to another source</li> <li>• Act as coach, being able to question, listen, give feedback, encourage and motivate</li> <li>• Act as assessor, knowing how to monitor and judge students' progress</li> <li>• Build relationships at a distance</li> <li>• Communicate in media such as writing, email and online conferencing (Fastrak, 2002)</li> </ul>
Course writers and editors	<ul style="list-style-type: none"> <li>• Course planning</li> <li>• Sequencing learning material</li> <li>• Choice of media</li> <li>• Writing learning outcomes</li> <li>• Writing learning activities</li> <li>• Writing feedback</li> <li>• Choosing examples</li> <li>• Writing self-tests</li> </ul>
Counselling and advising skills	<ul style="list-style-type: none"> <li>• How to give information</li> <li>• When and how to commend a particular choice to a student</li> <li>• When and how to explore an issue with a student</li> <li>• Listening skills</li> <li>• Clarifying skills</li> <li>• Contextualising skills</li> <li>• Conceptualising skills</li> <li>• The skill of challenging (Simpson, 2002)</li> </ul>

## STAFF DEVELOPMENT NEEDS IN NEW MEDIA

### Deakin University

*'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 email, bulletin boards, and computer conferencing. Their effective use requires the development of new skills and a willingness, in the case of students, to participate.'*

(COL 1999)

### Open Learning and Information Network

*'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.'*

(COL 1999)

## COURSE WRITERS NEED TIME MANAGEMENT TRAINING

The University College of Education of Winneba

*'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.'*

(COL 1999)

## PROBLEMS IN FINDING THE TRAINERS

### University of the Philippines Open University

*'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.'*

(COL 1999)

## QUALITY ASSURANCE

### INTRODUCTION

Quality assurance is about delivering an agreed standard of service by anticipating points of failure and dealing with them before any failure occurs. It is a notoriously difficult concept to apply in education but no ODL system can overlook its importance.

There are basically two approaches to quality assurance.

- Quality assurance management systems, such as ISO 9000, which seek to manage processes in a way that will deliver quality.
- Total quality management systems, which seek to change culture so that quality assurance is built into how staff think and act.

The basic idea of the ISO 9000 approach to quality assurance is shown in Figure 1.

**FIGURE 1** THE ISO 9000 APPROACH TO QUALITY ASSURANCE



## ISSUES FOR DECISION MAKERS

- 1 What standards of quality do you wish to set?
- 2 What procedures will you need to put in place?
- 3 What criteria will you use to judge your achievements?
- 4 What evidence will you need to demonstrate your achievements?
- 5 What mechanisms do you have for identifying and correcting poor quality?
- 6 Who will be responsible?

(Robinson, 1995, adapted)

## THE VOICE OF EXPERIENCE

*'If you want to establish a reputation for quality, remember that it is easier to go downmarket rather than up, both in terms of quality in general and in terms of qualifications.*

*Beware of the big challenge – it may be genuinely difficult. It is better to prove your ability through a smaller project that you think has a high chance of success and will win you friends. Some examples of smaller, easier projects that opened the gates to greater things are:*

- *short courses in the British Open University post-graduate programme in manufacturing, which reached technical directors of firms (i.e. not typical OU students). Their favorable impressions of the OU meant they also valued the undergraduate programme, so they became more supportive of it*
- *in Ethiopia the first course for an MBA was done by the Cabinet. Everything else was much easier after that.'*

Prof Geoff Peters

**TABLE 3** TYPICAL AREAS IN WHICH STANDARDS CAN BE SET FOR ODL **SYSTEMS**

Area	Standards to be set
Products	<ul style="list-style-type: none"> <li>• learning materials</li> <li>• courses</li> <li>• media</li> <li>• assessment</li> <li>• standard of learning achieved</li> </ul>
Services	<ul style="list-style-type: none"> <li>• advice and counselling</li> <li>• registration</li> <li>• tutoring</li> <li>• local centres</li> <li>• technology, e.g. web site, conferencing system</li> </ul>
Processes	<ul style="list-style-type: none"> <li>• materials delivery systems</li> <li>• record keeping</li> </ul>
Culture	<ul style="list-style-type: none"> <li>• mission</li> <li>• ethos</li> <li>• attitudes</li> </ul>

(Robinson, 1995, adapted)

### THE ISO 9000 APPROACH

ISO 9000 is an international management standard which seeks to deliver a standard of service expected by students. It does this by:

- identifying good practice
- codifying that good practice into a set of procedures
- auditing performance against those procedures
- correcting any variations from the standards set in the procedures
- delivering a product or service to the standards that the users expect.

## THE TOTAL QUALITY MANAGEMENT (TQM) APPROACH

The key principles behind the TQM approach are:

- detect problems before they occur
- staff focus on customer satisfaction
- suppliers focus on customer satisfaction
- quality is seen as continuous improvement
- eliminate unnecessary work
- empower employees
- use problem solving methods
- use problem anticipation methods.

(Organized Change)

## TYPICAL ACTIVITIES THAT CONTRIBUTE TO QUALITY ASSURANCE

We often talk about quality assurance as if it were something completely new. In fact, ODL has many well-developed quality assurance techniques, such as:

- using expert groups to develop curricula
- asking experts to read and comment on draft materials
- piloting materials
- collecting feedback from students
- using external examiners.

## ONE DIFFICULTY IN IMPLEMENTING A QUALITY ASSURANCE SYSTEM

### **Deakin University**

*'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.'*

(COL 1999)

## DOUBTS ABOUT PROCEDURE-BASED QUALITY ASSURANCE

### **Charles Sturt University**

*'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.'*

(COL 1999)

## PROBLEMS OF QUALITY ASSURANCE IN STUDENT SUPPORT

### **University of the Philippines Open University**

*'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.'*

(COL 1999)

## PROBLEMS OF QUALITY ASSURANCE IN ASSIGNMENT MARKING

### **Open University of Sri Lanka Post-Graduate Diploma in Education Programme**

*'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.'*

(COL 1999)

## PROBLEMS OF QUALITY ASSURANCE OF TEACHING PRACTICE

### **Open University of Sri Lanka Post-Graduate Diploma in Education Programme**

*'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).'*

(COL 1999)

## RISKS IN ADOPTING ALIEN QUALITY SYSTEMS

### **University of Lincolnshire and Humberside**

*'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.'*

(COL 1999)

## SUPPORT STAFF

### INTRODUCTION

Support staff carry out a wide range of functions in ODL, such as:

- dealing with enquiries from prospective students
- giving information and advice to prospective students
- enrolling students
- maintaining student records
- production of materials
- dispatching materials.

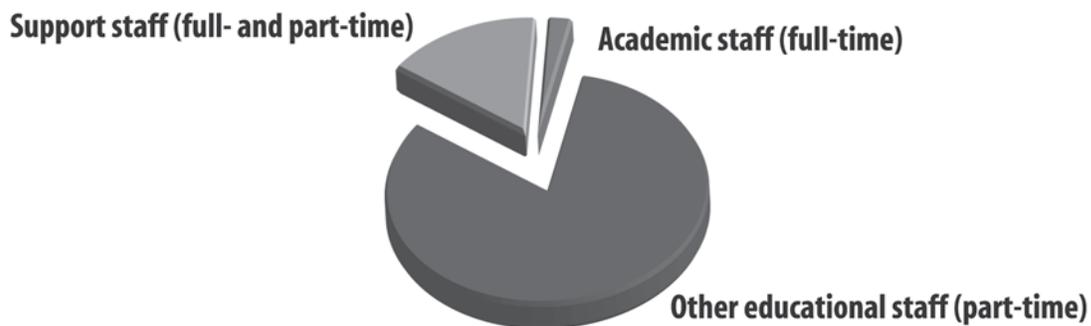
This means that ODL has a higher proportion of support staff than in conventional systems, so the selection, training and support of these staff is an important issue.

### ISSUES FOR DECISION MAKERS

- 1 What tasks will you need support staff to cover?
- 2 What knowledge and skills will they need?
- 3 How many of each type (e.g. secretaries, designers) will you need?
- 4 How will you select support staff?
- 5 What special training will they need because they are moving into ODL?
- 6 How will you keep their skills up to date?

### THE IMPORTANCE OF NON-ACADEMIC STAFF IN ODL

The following diagram illustrates the staffing distribution at Dr B R Ambedkar Open University. It is typical of ODL, i.e. there is a very small cohort of full-time academic staff, a large number of part-time teaching staff and a large number of support staff.



(Source: Ramakrishna, 1995)

## DEVELOPMENT OF SUPPORT STAFF IN ODL

A study of staff development needs at Dr B R Ambedkar Open University found that:

- support staff did not, in general, need skill development in their specialist areas; the skills they had used in previous employment were no different from those needed in their ODL work
- support staff did, however, need development in their orientation towards ODL
- some technical staff needed updating because of changes in their specialist areas.

It was reported that, for staff development to be successful, support staff needed to be open to change and learning.

(Ramakrishna, 1995)

## TRAINING NEEDS OF STAFF FROM CONVENTIONAL BACKGROUNDS

### University of Guyana Institute of Distance and Continuing Education

*'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.'*

(COL 1999)

## SUPPORT STAFF IN A LOCAL CENTRE

### UNISA local centres

Each centre has three permanent members of staff who administer and coordinate tutorial activities. These staff are seen as being 'a human face for the university'.

Tutors and students come to these centres for tutorials. Thutong, a typical centre, has 680 students looked after by 50 tutors.

There are also smaller, satellite centres which are looked after by a single part-time person who is only present on days when tutorials will take place at that satellite centre.

(Chadibe, nd)



# UNIT 9

## EVALUATION

In this unit we look at the typical evaluation needs of an ODL provider and at some of the methods used to carry out such evaluations.

### EVALUATION AT SYSTEM LEVEL

The first topic begins with evaluation at system level, in which we seek to answer the basic question: 'How are we doing?'

### EVALUATION AT PROGRAMME AND COURSE LEVEL

The next two topics look at the issues and methods involved in evaluating an ODL programme or an ODL course.

### MONITORING STUDENT PROGRESS

This topic looks at an important part of evaluation – the monitoring of student progress. In face-to-face education, this is part of the teacher's role and, since he or she meets the students regularly, monitoring their progress is straightforward. In ODL, students and tutors meet only occasionally (and, in some systems, never) so much more deliberate monitoring systems are needed.

## EVALUATION AT SYSTEM LEVEL

### INTRODUCTION

*'Evaluation is the collection, analysis and interpretation of information about any aspect of a programme of education and training, as part of a recognised process of judging its effectiveness and any other outcomes it may have.'*

(Thorpe, 1993, p.5)

There are two main types of evaluation: formative and summative (Table 1). Formative evaluation tends to be used to adjust a course or programme whilst it is in progress, whilst summative evaluation is used to look back on a completed course or programme.

Evaluation has similarities and overlaps with quality assurance (see *Quality assurance*) but there is a distinct difference. Quality assurance is a management tool and an ongoing process, which has no end. It happens every day and should pervade all the actions taken by all staff. On the other hand, evaluation involves taking a step back and reflecting on the organisation, and is often carried out by people known as 'evaluators'. Generally, evaluation is a project-based exercise, that is, it is carried out through specific studies with start and end dates.

**TABLE 1** TYPES OF EVALUATION

Type of evaluation	Aim	Typical questions
Formative	<ul style="list-style-type: none"> <li>to measure 'progress towards achieving programme goals' (Thorpe, 1993, p. 9)</li> </ul>	<ul style="list-style-type: none"> <li>how is the programme going</li> <li>what progress are the students making?</li> <li>what problems are students experiencing?</li> </ul>
Summative	<ul style="list-style-type: none"> <li>to measure the effectiveness of a programme once it is completed</li> </ul>	<ul style="list-style-type: none"> <li>did we achieve the programme aims?</li> <li>what did the students learn?</li> <li>what did it cost?</li> </ul>

(Based on Thorpe, 1993, pp. 5–9)

Evaluation at system level refers to collecting and analysing data that will allow you to make evaluative statements about the ODL system as a whole, rather than about particular programmes or courses.

## ISSUES FOR DECISION MAKERS

- 1 What evaluative information will your stakeholders want?
- 2 What evaluative information will your managers need?
- 3 What evaluative information will your educational staff need?
- 4 What baseline data will you need to collect?
- 5 What evaluation instruments will you build into your system?

## WHO NEEDS TO KNOW WHAT?

Evaluation starts by asking what issues most concern different stakeholders in an ODL system. For example, Table 2 shows that politicians will probably be most concerned about how many people are enrolling and graduating, and at what cost. Managers may be more concerned with slightly shorter-term issues about the success or otherwise of particular programmes.

**TABLE 2** ISSUES FOR DIFFERENT STAKEHOLDERS IN AN ODL SYSTEM

Stakeholder	Issues
Politicians	<ul style="list-style-type: none"> <li>• Is the target population being reached?</li> <li>• Is that population gaining the desired qualifications?</li> <li>• What is the cost?</li> <li>• What is the quality?</li> </ul>
Managers	<ul style="list-style-type: none"> <li>• Are we reaching our programme goals?</li> <li>• Are we using resources efficiently?</li> <li>• Are we meeting our stakeholders' expectations? (See 'Politicians' above.)</li> </ul>
Educational staff	<ul style="list-style-type: none"> <li>• Are the materials effective?</li> <li>• Are the tutors effective?</li> <li>• Are the systems running smoothly?</li> <li>• What problems do students report?</li> <li>• What problems do tutors report?</li> </ul>

## BASELINE DATA

A key concept in the evaluation of ODL systems is to collect baseline data about the type of students that are being recruited. This then enables an ODL organisation to make statements about its comparative enrolments and outputs (certificates, diplomas, etc.) for different age groups, different genders and different educational backgrounds, etc.

Examples of typical baseline data collected by ODL organisations are shown in Table 3.

**TABLE 3** TYPICAL BASELINE DATA

Age
Gender
Prior education
Occupation
Income
Method of fee payment, e.g. self, grant, employer
Initial course choice
First language
Other languages
Home address

## MEASURES OF EFFECTIVENESS

Each ODL organisation has to decide what it will accept as suitable measures of its effectiveness. Common measures include the percentage of students who complete courses or gain qualifications. Some other measures are shown in Table 4.

**TABLE 4** MEASURES OF EFFECTIVENESS

<b>Measure</b>	<b>Most useful for</b>
Course or programme completion rates	Summative evaluation
Programme progression rates	Summative evaluation
Course progression rates, e.g. proportion of assignments completed	Formative evaluation
Assignment marks	Formative evaluation
Final assessment results	Summative evaluation
Post course or programme employment	Summative evaluation
Post course or programme on-the-job performance	Summative evaluation
Students' comments	Formative evaluation
Tutors' comments	Formative evaluation
Employers' comments	Summative evaluation

(Rowntree, 1997, p.52)

## EVALUATION AT PROGRAMME LEVEL

### INTRODUCTION

Evaluation at programme level refers to the collection and analysis of data that will allow you to make evaluative statements about particular programmes within your ODL system.

### ISSUES FOR DECISION MAKERS

- 1 Who will want programme level evaluations of your ODL system?
- 2 What questions will they wish those evaluations to answer?

### PROGRESS AT PROGRAMME LEVEL

The term 'programme' generally refers to 'an evaluation that focuses on programmes of study'. (Calder, 1994, p.19) For example, one might conduct a programme evaluation for a Bachelor of Education degree programme. This type of evaluation is conducted with the following aims.

- To measure progress towards organisational goals (rather than, say, course goals).
- To measure overall quality (rather than, say, quality within one course).
- To measure academic standards.
- To measure tutorial and support standards.
- To guide the development of the organisation.

(Calder, 1994, p.117)

Some typical evaluative measures of progress at programme level are shown in Table 5.

**TABLE 5** MEASURES OF PROGRESS AT PROGRAMME LEVEL

Types of student recruited to the programme, e.g. by age, gender, previous qualifications
Programme completions
Qualifications obtained
Effectiveness of the learning materials
Effectiveness of the tutorial system
Effectiveness of the assessment system

## METHODS OF PROGRAMME EVALUATION

Calder (1994, p. 132) identifies 13 types of study that can contribute to programme evaluation, divided into three groups.

- Statistical studies using routine data collected by the organisation, e.g. analysing marks or numbers of assignments completed.
- Regular monitoring studies, e.g. sending out questionnaires to students once a year.
- Ad hoc studies, e.g. carrying out a review of a programme after it has been in operation for a number of years.

## EVALUATION OF A DISTANCE LEARNING PROGRAMME

### **Imperial College, Wye**

This programme evaluation has three components.

- *'Methodological: to develop an appropriate and effective methodology for evaluating learning outcomes arising from distance learning study at postgraduate level.*
- *An assessment of EP [external programme] output: an evaluation of EP participants' views of the quality of EP postgraduate level distance learning programmes.*
- *An assessment of EP impact: an evaluation of the extent and manner to which completing an EP distance learning programme has had an impact upon participants.'*

(Imperial College, Wye, 2002)

## EVALUATION AT COURSE LEVEL

### INTRODUCTION

Evaluation at course level refers to the collection and analysis of data that will allow you to make evaluative statements about particular courses within your ODL system.

### ISSUES FOR DECISION MAKERS

- 1 Who will want course-level evaluations of your ODL system?
- 2 What questions will they require those evaluations to answer?

### PURPOSES OF COURSE-LEVEL EVALUATIONS

Course-level evaluations are carried out to answer such questions as:

- How well are the students doing?
- How effective are the course materials? Do they need changing?
- How effective is the support system? Does it need changing?
- How effective is the assessment system? Does it need changing?
- Is the course up to date and accurate?

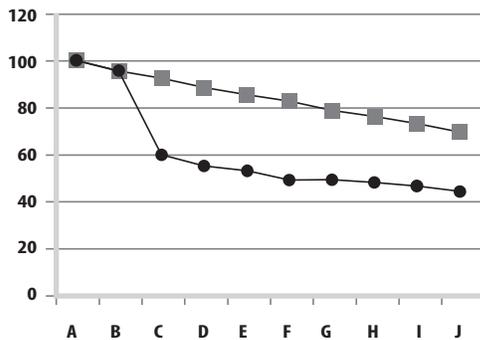
### MEASURES FOR COURSE-LEVEL EVALUATIONS

Some examples of the wide range of measures used for course evaluations are shown in Table 6. However, most organisations would only use a small selection of measures, given the cost of collecting this type of data. Three of the most commonly used measures are the percentage of students who complete the course, the percentage who pass, and the percentage of assignments completed.

**TABLE 6** EVALUATIVE MEASURES AT COURSE LEVEL

Percentage attending each tutorial
Percentage participating in each online discussion
Percentage using local centre facilities
Percentage completing each assignment
Average marks on each assignment
Percentage taking the final exam
Pass rates on overall course assessment
Average marks on overall course assessment
Student workload (hours)
Student comments
Tutor comments
Relative use of the different components of the course, e.g. course notes, textbook, audio cassettes, tutorials
Perceived level (by students) of difficulty

The assignment completion rate is a particularly powerful way of evaluating a course and can reveal problem areas if they exist. For example, in Figure 1 the top line shows the average assignment completion rate for all the courses in one ODL organisation and the lower line shows the assignment completion rate for one particular course. From this we can immediately see that (a) the particular course is much less successful than the average course and (b) the problem with the course seems to lie between Assignment B and Assignment C – perhaps this section of the course needs rewriting.

**FIGURE 1** ASSIGNMENT COMPLETION RATES

## TIPS FOR SUCCESSFUL COURSE EVALUATIONS

Below are some ideas for successful course evaluations that do not require too many resources to carry them out.

- **Use routine data** as far as possible, i.e. try to make sure that your normal day-to-day administrative and quality systems are collecting data that can also be used for evaluation.
- **Collect key statistics** that quickly show where the problems (if any) are, e.g. assignment completion rate, average marks for each assignment, rates of participation in face-to-face or online sessions.
- **Display statistics visually** – this helps to quickly see trends or sudden changes that you might not otherwise spot.
- **Share these displays** – put them on notice boards, distribute them to writers and tutors.
- **Always display a benchmark comparator** on your graphs and diagrams, e.g. in Figure 1 we have shown the average assignment completion rate as a benchmark against which to compare the course that we are evaluating.

## MONITORING STUDENT PROGRESS

### INTRODUCTION

The essential idea behind monitoring is to provide managers with data on which to decide whether they need to intervene with the running of a course. Monitoring is closely related to quality assurance, although there is a subtle difference: quality assurance seeks to prevent problems arising; monitoring seeks to detect and avert problems before they cause larger difficulties. In practice, it is often hard to distinguish between the two processes.

### ISSUES FOR DECISION MAKERS

- 1 What aspects of student progress will you monitor?
- 2 How often will monitoring take place?
- 3 What instruments will you use for monitoring?
- 4 Who will be responsible for acting on the results of monitoring?

### When to monitor

Measures for monitoring data are very similar to those used to obtain course evaluation data, as can be seen in Table 7.

**TABLE 7** MEASURES FOR MONITORING STUDENT PROGRESS

Number of tutorials attended
Level of participation in online discussions
Frequency of use of local centre facilities
Number of assignments completed
Average marks on each assignment
Mark trend, i.e. are the student's marks rising or falling?
Hours of student work
Student's comments

### When to monitor

Monitoring data needs to be collected and reviewed more frequently than evaluation data. For example, if a course lasts 30 weeks and has ten assignments for submission every three weeks, monitoring will need to commence at the end of week 4 in order to see whether there are any problems connected with the first assignment.

### Who should monitor

Monitoring is best seen as the responsibility of the teachers in charge of a particular course. In some ODL systems, there might be one person who writes and tutors a particular course. Such a person should also be responsible for interpreting and acting on data received from the monitoring data collected by the organisation's administrative staff.

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