UNIT 1 COURSE DESIGN

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1.0 OBJECTIVES

By the end of this unit, you should be able to:

- explain how and why the curriculum for distance education may differ from that used in conventional education;
- describe different ways of assessing educational needs, and explain the importance of carrying out such an assessment;
- describe the process of curriculum planning for distance education;
- describe the systems approach to course planning and explain each stage in it;
- use this approach to develop a course outline; and
- describe and discuss problems commonly encountered in the process of course planning.


1.1 INTRODUCTION

In conventional education, when we talk of 'a course', we usually refer to a subject and the level at which it is studied - standard chemistry, primary-level maths, undergraduate biology and so on. In distance education, the term 'course' means more than this. It is used to describe the teaching materials and other components of study. A typical open university course will, for example, consist of a number of texts, usually called units, audio, and video components, contact sessions, assignments and correspondence teaching, library work, laboratory work and project work. A course outline will show how these components are used, and will indicate how much time is allocated to each of them. It will also indicate, usually in the form of a numbered list of unit titles, the sequence in which topics are taught.

The word 'course' is, thus, used for software, hardware and teaching materials. To complicate matters, it is frequently used loosely but conveniently to refer to the course text alone. Such a misuse of the term draws attention to a major shift in perspective that teachers must make when planning to teach at a distance instead of face-to-face. Traditionally our planning is subject-centred; we think in terms of the topics to be covered. In distance education, we have to consider the methods to be used alongside the subject to be taught. In addition to this, the special nature and requirements of distance learners further complicates planning. Course design, the subject of this unit, is a complicated and lengthy process. We have presented to you a number of ideas and possible ways of approaching the task, which will help you in practice.

We should warn you, however, that even experienced distance educators find the job difficult and demanding, so you should not expect to find any single easy option in what follows.

In this unit, we introduce you to the principles of planning and designing a course for distance education. We will do this first by making some comparisons between conventional and distance education, and then by discussing some of the techniques that distance educators have adopted to help with the specific research and planning which distance education requires.

1.2 DEVELOPING A CURRICULUM

The term 'curriculum' is normally used to refer in the broadest sense to what is learnt in a particular course or programme. It covers both learning that is planned and intended and learning that is unplanned and incidental [Our course ES-316 which is part of our M.A. in Distance Education Programme looks at curriculum in greater detail.]
In face-to-face education, only a part of the learning is planned by the teacher. She will choose which topics to cover, how to treat them, and the order in which they will be presented. Often, the subject matter is prescribed in a syllabus, and all the teacher needs to do is to develop ideas for presenting the topics in class. If necessary, the teacher can change the content of a lesson or a lecture on the spur of the moment, and discard the planned presentation.

In a normal class or lecture, a large number of unplanned events occur. A good teacher will encourage students to ask questions, to discuss new concepts, and to debate issues. Such dialogue, which may take place within the classroom or outside it, is an important part of education, though its content and conclusions are obviously unplanned.

Students are also encouraged to work individually, completing projects or assignments, through which activities they develop their personal understanding of a subject, develop essential skills and grow in competence and maturity. In other words what the student learns is often something that the institution or the teacher does not intend to teach or say but which is there in the curriculum, so that much of what our learners learn will be 'caught rather than taught'. For example, the way a doctor or a physician speaks or reacts to various situations, is a characteristic of their future roles which does not form part of the students' formal learning but is very important to their socialisation as members of a profession. Every teacher expects such learning to happen, but does not usually articulate/teach the need for them, and does not specify in the plans for a course, events and processes that relate to what is often called the hidden curriculum.

Distance education is different since there is no hidden curriculum, and everything is open. We can place very little reliance on unplanned learning. Let us consider what this means.

### 1.2.1 Teaching the hidden curriculum

A course taught at a open university and through system of distance education, must include the deliberate teaching of all those areas covered informally in conventional education, which the course planners must incorporate in their plans.

*What are those areas that a course planner should incorporate in his/her plan?*

**Learning objectives**

We saw in Unit 1, Block 1 of this course that there are three important categories of learning objectives: cognitive, affective and psychomotor. A conventional curriculum usually restricts itself to considering only cognitive learning. A curriculum for distance learning must have a wider range and should cover objectives concerned with affective and psychomotor learning,
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which need to be included specifically in the curriculum, since otherwise they might be overlooked.

Dialogue

The text cannot literally speak to the learner in the way a teacher can, but it can have an interactive tone. Let us elaborate on this. The writer may include questions or activities in the text or present the materials in a conversational style which may provide a substitute for the teacher’s voice in a classroom. The comments written by the teacher on assignment-responses and the voice of a teacher on audio cassettes and video presentations can also help the learners feel that they are interacting with the teacher. Thus the sense of loneliness which otherwise curbs the enthusiasm of the students may be eradicated. Holmberg (1983) has called this ‘guided didactic conversation’ and considers it an essential feature of distance education.

Consider what Holmberg has to say about a problem-solving approach. He suggests in the following extract that the distance educator may need to consider presenting the subject matter in a way different from the usual approach.

“My theory implies that the character of good distance education resembles that of a guided conversation aiming at learning and that the presence of the typical traits of such a conversation facilitates learning. The distance-study course and the non-continuous communication typical of distance education are seen as the instruments of a conversation-like interaction between the student on the one hand and the tutor/counsellor of the supporting organisation administering the study on the other. There is constant interaction (conversation) between the supporting organisation (authors, tutors, and counsellors), simulated through the students’ interaction with the pre-produced courses and made real through the written and/or telephone interaction with their tutors and counsellors....”

“Both the presentation of learning matter in a printed or otherwise pre-produced course and the two-way communication brought about by assignments (or otherwise) serve the purposes of didactic conversation. Whereas the former can show the way/set the pace for profitable interaction with the study material and thus represents a kind of simulated communication, the communication between the student and the tutor or counsellor in writing on the telephone or by other means represents real communication. The two together constitute the kind of didactic conversation possible in distance education. It is this simulated communication that is above all studied in this presentation of the guided didactic conversation in distance education.

“So-called self-checking exercises, review questions with model answers, inserted questions and similar components often stand out as important elements of simulated communication. They are not always necessary, however, useful as they are in many contexts. If a problem-learning
approach is applied in the sense that the whole learning is based not on what we now know but on the problems asked by scholars of earlier times and by any serious student, then the discussion of how to put the questions, what paths to take and what procedures to use to come to a conclusion may include the conversational elements.”

In Block 2, Course Es-311 we have presented what Holmberg considers features of guided didactic conversation. The seven features listed there should be seen as an attempt to describe the essential traits of good distance education and thus to represent, and promote an understanding of, its basic character. However, it is also a prescriptive theory in that it suggests procedures effective in facilitating learning.

**Personal development**

You will have noticed that in distance education texts, it is normal to address the reader as ‘You’. This helps the student to feel involved in the course and to gain the sense that it is meant to help develop his/her ideas.

There are other ways in which courses are planned to cultivate individual development. A learner may be asked to apply skills or relate ideas to his/her own environment, or he/she may be asked to discuss examples drawn from personal experience. Such activities make learning relevant to each individual.

**Face-to-face interaction**

As you know, distance education includes some face-to-face learning. It is not possible, however, for debates to take place naturally and informally at any time, as happens in the classroom. Meetings between learners, even if regular, will normally take place infrequently and where debate is necessary it can only take place on such occasions. You can see that this situation has implications for the order in which certain topics are presented and the pace of presentation. For example, ideally, in a course on philosophy, written essay assignments are never attempted until a seminar has taken place to discuss the topics. Other courses too require some face-to-face sessions. For example, while teaching science courses, it is often necessary for teachers to give practical demonstrations. Course planners might need to consider postponing the introduction of certain topics until such face-to-face sessions can occur.

**Developing competence in study skills**

A classroom student observes his/her fellow students and talks to them regularly. Through such informal contact he/she learns what kind of standards are expected, what techniques and strategies other students use, how they approach their assignments, and which books are the most useful. The distance learner, however, usually has to sort out such matters unaided by his/her peers. The distance educator, should therefore, try to help the learner by hints and guidance built into the study materials.
In essence, wide-ranging objectives, dialogue, personal development, face-to-face interaction and competence in study skills are the features of distance education which help to ensure that the learning experience is as good, and at times even better for distance learners as for conventional students.

1.2.2 The nature of the students

Formal education is a continuous process, neatly divided into stages. A young person completes school, passes an exam, and moves straight on to the next stage — a university course. The new undergraduates are all about the same age, have similar qualifications and a similar (rather limited) experience of life. Their aspirations and expectations will therefore also be largely similar.

As far as distance education is concerned, the learners may be of any age - young or old. Entrants into a particular programme may have broadly similar qualifications, but they may have acquired them at different times, perhaps while following different syllabi. The education of distance learners has usually been interrupted at some stage. Older learners will only remember partially what they learnt at school. Distance learners will thus have varying experiences of life, and different ambitions and expectations, while they will study the same course.

Such factors may affect what is taught. First, with older learners it is often possible to go deeply into a subject quite rapidly. Adults often have experience and a maturity of outlook which more than compensate for the lack of formal education.

Secondly, adults may not remember various things that they have been taught at school. This means that refresher material has to be incorporated into courses, particularly in the early units, so as to ensure that everyone starts at the same level.

Lastly, it is difficult to decide what that level should be. For this reason, it is advisable to conduct research into students’ needs (see section 1.3). Such research will help to define the content of the curriculum.

1.2.3 National considerations

We have described above how distance learners may as individuals, have objectives that differ from those of conventional students. Institutional objectives may also be influenced by external factors to a greater degree than happens in conventional education. A national system of formal education tends to have broad and comprehensive objectives, whereas distance education, particularly for adults, is expected to be more functional. Conventional universities, for example, tend to offer degrees in a wide range of subjects, while distance education universities often provide only a small range of largely functional courses, related to national manpower needs and
to the requirements of employers. The committees convened by such institutions to plan courses usually include among their members, representatives of government bodies and private concerns who ensure that the curriculum conforms to their objectives.

1.2.4 Content and methods

We have seen that the curriculum of a distance education course may differ in content, objectives and presentation from that of one in conventional education.

What is learnt is also affected to some extent by the choice of media and methods, a theme that we shall develop later in the unit (see sub-section 1.5.5). Next, however, we need to consider in more detail how to establish the educational needs of distance learners. A knowledge of their background and characteristics is a prerequisite for course planning.

Before we discuss these educational needs in detail, let us work on the following exercise.

Check Your Progress 1

State, in not more than 10 lines, the differences between the curriculum in distance education and that in conventional education.

Note: a) Space is given below for you to write your answer.
   b) Compare your answer with the one given at the end of this unit.
1.3 ASSESSING EDUCATIONAL NEEDS

Heterogeneity in student-population, among other factors, demands careful scrutiny of the educational needs of the students. The courses should be designed in such a way as to cater to individual needs. To elucidate the point, consider that eighteen-year-olds entering university come straight from school, having gone through more or less identical courses. On the contrary adults starting a degree under a distance education scheme, or any other course, will have widely different backgrounds, experience and aspirations. When we are planning distance education, we can guess at the common factors — and indeed as we shall see below, adult learners do share several characteristics — but we will plan more effectively if we conduct some research to verify our assumptions.

In what follows we have suggested some general guidelines for identifying the ‘needs’ of students.

1.3.1 The characteristics of adult learners

The points that follow are generalised ones, and exceptions can be found to each case. The generalisations, however, provide useful guidelines for planning.

Adults bring experience and maturity to their studies. By relating new information to their experience, adults can often understand and learn more quickly than younger people. Maturity can result in wiser judgement and better decisions.

Most older people learn just as effectively as young people, but they may learn with less ease. Affective learning which involves a shift in opinions is particularly difficult, as with increasing age, our attitudes become more fixed. In courses for adults with a substantial affective component, opportunities for discussion and debate are crucial.

Adult learners are often strongly motivated. Usually, they have made a conscious decision to study, have paid for their course, made arrangements to find time for their studies, and in the process given up other activities. Such people have a different attitude to learning from young people, who are often simply following the general rule or obeying their parents’ wishes by attending school or university.

Many people turn to distance study because they have missed out on educational opportunities earlier in life. Some will have been prevented from continuing with formal education by economic or environmental factors: perhaps when they were young they had to learn to support their family, or perhaps there was no university nearby. Others are school drop-outs with an incomplete education, people whose school-leaving marks were
not high enough to allow them go on to the next stage, or even first time failures.
In an ideal world, such people would be given a second chance right at the point of failure; in practice, the formal system rejects them. Naturally, they turn to distance education. They approach their study tentatively and with little confidence, because of their inadequate educational background and previous lack of success. They need constant support and encouragement if they are to persist in their studies. Such learners may be in a minority but they deserve special attention because of their courage and determination to try again. We can be sure that if they dropout or fail a second time, they will not return, so we must design our materials and support system to try and prevent this.

Those who completed their formal education some years ago will have forgotten some of what they learnt at school, unless they have been studying part time regularly. They will need some guidance in revising certain elementary aspects of the subject they have chosen and they will also need help with study skills. Those who are out of practice find it difficult to organise note-taking, to plan and compose essays and to find and use reference material. Our courses for adults should, therefore, help with the process of study as well as provide the required content.

Having touched upon the general ‘needs’ of adult learners, we shall now talk about how specific needs may be assessed. Before that we shall consider the extract below. It raises important questions about the way adults learn, and has implications for the design of the curriculum. Consider how far these ideas might affect your own.

“Most developmental psychologists were acknowledging a new body of descriptive and experimental evidence which indicated that cognitive (i.e. thinking) decline was not a necessary consequence of ageing. This evidence and the research methodology which produced it constituted an effective challenge to a much larger body of psychological evidence which had supported the socially persistent stereotype of inevitable and irreversible decline with advancing age. The psychologists had formulated a more complex and sophisticated research design, in order to correct recognised biases in the designs which were normally used to produce descriptive evidence of development. What they found was that whether or not individuals’ cognitive or thinking abilities decline, remain stable or continue to develop over the years of adulthood, depends on the interplay of many factors. Psychologists began to recognise that development, or the lack of it, during adulthood was inextricably linked to the degree and quality of individuals’ interactions with their social and historical contexts. Since such interactions could fluctuate, the pattern of development could do so as well. This model of development has been called the ‘plasticity’ model.

This evidence may complicate our thinking about adult development, it does make it quite clear that people have a ‘potential’ for continuing development across the entire life-span, and this idea has revolutionised our thinking about adults. To say that the ‘potential’ of adults is for lifelong cognitive
development contradicts the prevailing view that adulthood is a stable period of life at least until what were believed to be 'the inevitable consequences of aging' cause a decline in cognitive functioning. This 'non-development' concept of adulthood was the only one available to adult educationists until the mid-1970s. Directly and indirectly, it has affected the practice of education for adults. If we expect adult learners to have fully mature and stable cognitive structures, then it is quite reasonable to define the developmental objectives of an educational experience with a somewhat limited framework. In other words the differences between a child and an adult are considered similar to the difference between a novice and an expert. Children (like novices) and adults (like experts) perceive things differently because adults are able to attend to different details of a problem with the help of their different perceptual – cognitive templates. This is why adult educators have thought of development as either the further elaboration or accumulation of knowledge or the growth of self-knowledge and understanding. Both of these functions focus upon types of content or knowledge and assume that the processes and thought structures which deal with this content are unchanging. The revolution in our thinking about 'adults' potential for lifelong cognitive development requires that we re-examine our practice of adult education and discuss whether it is fulfilling its role in enabling this potential for continuing development to be realised. This values what adult learners bring to a course from the time they enter. For example, in business studies, adult learners can make worthwhile contributions as a result of the experiences from the jobs they had. Even if there is no direct application of the experience to the future job, adult learners bring with them experience of life, and maturity. This puts much of the responsibility for designing a course in distance education. The course writer should provide constructive situations for the adult learners, as the learner is actively constructing both the knowledge acquired and the strategies to acquire it when constructing his or her own unique experience. It is this constructivist approach he/she then uses to deal with any new experiences in that field."

**Constructivist approach to course design**

Most conventional text books deal with objectivist approaches in designing their chapters, content and tasks or activities. They are concerned with the transmission of knowledge and facilitating the process of learning of that knowledge. But constructivist approaches put at the centre of the course design, the learners, and the knowledge they bring to the learning situation. This approach is based on the following principles.

- Learners are a legitimate source of knowledge, and must be encouraged to learn to trust themselves and their knowledge.

- Learning is not a passive exercise that consists of absorbing knowledge (information) developed and transmitted by experts. Learning is a matter of the learners creating meaning from the materials and interactions that are available to them as resources.
Learners are encouraged to take control of and initiate their own learning.

Ambiguity and contradiction are not problematic. They can be helpful in pushing the learner towards a problem-solving, or problem-posing, approach to learning.

In designing materials using this approach, the course designer’s role is that of a collaborator, not just with regard to the subject expert but to the learner as well.

When viewed together, our reconceptualisations regarding the nature of development during adulthood hold profound implications for the adult educationist. It seems indisputable that whenever in life there is some potential for development the function of education is to enable it; and to achieve this function, the educationist must understand both the nature of what might be realised as well as the process by which development proceeds. However, it is worth noting that there is a fundamental difference between enabling the development of youth and the development of an adult. The teacher of children and adolescents will be enabling the learner to develop competencies, ideas and cognitive structures which the teacher has already developed. The enabling process where adults are involved demands a different perspective on development, because enabling in this context pertains equally to teachers and students. This difference alone would appear to require essentially different relationships between teachers and learners.

### 1.3.2 Assessment of specific needs

A new institution will normally make a broad assessment of educational needs before planning its first courses. At its foundation for example, the Indira Gandhi National Open University commissioned a study from Educational Consultants India Ltd. (New Delhi) to inform decisions to be taken on its first courses. The survey found a demand for general undergraduate courses, and also a specific demand for management and computer-related courses. In addition, there was a strong demand for courses on rural development, the improvement of writing abilities, the special needs of women, and teacher training. The survey strongly influenced the initial programme of the university.

When it comes to planning individual courses, general surveys often need to be supplemented by a specific survey to clarify needs. Rowntree (1990) has mentioned at least seven major questions we need to ask in planning a self-learning course or lesson.

1. Who will the learners be?
2. What are the aims and objectives?
3. What is the subject-content to be?
4. How will the content be sequenced?
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5. What teaching methods and media will be used?
6. How will learners be assessed?
7. How will the course or lesson be evaluated with a view to improvement?

A survey will need to consider the following:

i) Identifying the target group,
ii) Collecting information about their background and experience, and
iii) Identifying their needs

We have elaborated on these items (i, ii and iii) below.

Who will the learners be?

A course in a particular subject is normally aimed at a specific group. For example, a course on an educational topic may be aimed at all teachers, or only at experienced graduate teachers, or trainee non-graduate teachers. The nature of the target group will affect the content and objectives of the course. Sometimes, a course is designed with a target group in mind, while in other cases, a subject is chosen, such as any particular aspect of management, and then efforts are made to identify the kinds of people who would be interested in taking it up. To some extent, most courses can be flexible; to some extent, all learners must do some adjusting on their own. If you wish to emphasize flexibility, you may need to build in alternative content or treatment to suit individual differences. If you need to rely on learner’s adjustments, you will need to think of selection tests – what competencies do learners need before they can begin work on the materials?

There are six types of information you might need about the perspective learners. In other words the characteristics of open and distance education learners can be considered in these different terms:

- Demographic
- Motivation
- Learning factors
- Subject background
- Resource factors
- Typical problems

Let us see below the various components associated with each factor.

Demographic factor

How many learners are there? What age range do they belong to? Do they include members of both sexes? What is their family status and employment or occupation? There are also questions about the learner’s geographic locations, previous education and knowledge of various languages.
Motivational factors

Why are the distance learners going to take a specific course/programme? How does this programme relate to their life and work? What do the learners want to get from the programme? Why do they choose self-learning? What are their expectations and fears?

Learning factors

What are the distance learners beliefs about the learning experience, and hopes from it? What learning styles do they prefer? What learning skills do they have? What experience do they have of distance learning or have they had prior experience with self-learning at all? Do they have adequate time and facilities available for study?

Subject background

What knowledge, skills and attitudes do learners have? How do the distance learners feel about the subject or course? What personal interests and expectations are relevant?

Resource factors

Where, when and how will learners be learning? How will they be paying their fees and expenses? How much time will they have to study? How much access will they have to the required equipment and human support?

Typical problems faced by distance learners are

- family pressures
- worries about work and money
- lack of access to books and libraries
- lack of own study pace
- isolation from peer group/other learners
- lack of transport (in some places)
- lack of confidence
- lack of time required to attend tutorials

From the above discussion you may infer that such information may help the course designer to decide the ways that the subject/course may provide encouragement through useful anecdotes, examples and analogies. The above factors also emphasize that with a self-learning course when learners are studying at a distance, one needs to obtain information about the distance learners before the course begins. Otherwise knowledge of the learners cannot affect the teaching as much as it should.
What will the target group be like?

Course planners need some information about the background and experience of the target group. The following are the essential questions to which they should find adequate answers:

- What kind of educational qualifications do they have?
- Have they all reached the same standard of knowledge, or are they at different levels?
- What languages did they use for their earlier studies?
- If they used other languages from the one now proposed what standard of language performance can we expect?
- How long ago did they study?
- Is their subject-knowledge likely to be out of date?
- What do they want or need to learn?

What do they want or need to learn?

Often, some of the aspects of a syllabus are already well-known to adults. Therefore, we need to first ask how much our potential students already know. We may find we can treat lightly certain topics which might need fuller coverage for younger people. There will be other cases where students will want to pay special attention to a topic, or will need extra help, for example, adults often forget some of the basic mathematical techniques learnt at school, and thus need help revising those techniques which are perhaps needed to study science. The conventional student, on the other hand, retains the competence acquired even a year ago and can thus concentrate on the scientific content. In yet other cases, adults may have particular objectives and these are sometimes impossible to guess. For example, would other workers, being interested in computers, prefer to start with a course in computer appreciation or to start by learning some practical application? We can only answer this question by asking them and following the opinion of the majority.

There are many examples of courses which have failed because such simple questions have not been asked.

Check Your Progress 2

If you were to conduct research to assess educational needs, what are the steps you would follow?

Note:  a) Space is given below for you to write your answer.
       b) Compare your answer with the one given at the end of this unit.

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1.4 THE PROCESS OF CURRICULUM PLANNING

We have discussed at length possibilities for developing the curriculum and the constraints we might face while doing so. Planning is only complete when decisions concerning the objectives have been reached. How can this stage be achieved? There are no set rules but the strategies described below are common practice.

First, it is usual to convene a group. This will include senior faculty or editorial staff from the institution which offers the course, and outside experts including subject specialists and representatives of those industries or agencies which will absorb the graduates of the programme. This group may itself develop the curriculum or it may simply consider proposals put to it.

The curriculum may be developed in several ways. One of these is to use an existing syllabus as a model and adapt it; or a group can start from 'scratch', using the technique of brainstorming to generate ideas; another method is to collect ideas through research, which it must be admitted, is rather a slow process; finally, we can adopt a combination of all or any of these methods.

Whatever approach is chosen, we should not be rigid in its implementation, and should be prepared for curriculum planning to take time and to require several meetings. It is unsuitable for an individual to undertake such a task without reference to a large group. A planning group can be quite large, bigger than a writing team, so long as the members are prepared to give constructive advice. As for the course outline, we shall consider it when we examine the systems approach to course planning.

1.5 THE SYSTEMS APPROACH TO COURSE PLANNING

Distance education should be systematically planned, and the system shown in Figure 1 provides a framework for planning. Note that the order of
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events given here is not always followed strictly, and in practice some stages occur simultaneously, or overlap with each other.

Fig. 1: Course planning - A Systems Approach

Now we shall describe each stage of the process here.

### 1.5.1 Educational needs

There is no need for further comment on this, except to stress that a consideration of educational needs must precede all other stages of planning. A wrong judgement about level of learning required, a poor choice of content, or a mismatch between course objectives and student aspirations can condemn a course to failure even before it is written.

### 1.5.2 Defining objectives

From a definition of needs, we arrive at broader aims. These provide a general framework. But for detailed planning, we need greater precision, and we can acquire this by defining objectives. A statement of course objectives describes what learners will be able to do at the end. Objectives will cover cognitive, affective and psychomotor learning as required. For example, courses for managers will normally have a number of affective objectives, arising from the need for managers to develop skills in managing personnel, as well as cognitive objectives concerned with learning about different theories and practices of management.

### 1.5.3 Resources and constraints

Once we have defined the objectives, we can make decisions about methods, in the light of the resources available to us and the constraints on their use. In figure 1 (see p. 22) ‘resources’ and ‘constraints’ are set beside ‘objectives’ to indicate that they are to some extent interdependent. Sometimes, course planners decide on all the objectives and then consider methods; at other times, certain constraints will exclude particular methods or objectives from consideration.

The resources and constraints to consider include the following:

**The learners and their environment**

We should already by now have sufficient information about the educational background and aspirations of the learners. We also need to know a little about their ‘material’ circumstances. Do they personally own audio-visual equipment? Are they likely to own cassette players, radios or television sets? Will they be able to bear the cost of buying textbooks if such a suggestion is given? How many hours a day are they likely to be able to set aside for study? What kinds of places do they live in? Are there facilities within easy reach which can be used as study centres? Are there local resource persons who can at a later stage, become supervisors of the study centre? Are there accessible libraries or laboratories?
If you consider a subject like medicine you can see how important such questions are. Let us suppose you are planning to offer a distance education postgraduate diploma in a subject like immunology. If all the candidates are in urban areas they will have access to every facility, and you can plan to use a variety of idea and methods. If your target group is doctors in rural areas, the picture is quite different. Each doctor may have to travel for hours to reach the nearest hospital for supervision and laboratory work. Power supplies may be available only during working hours, which could make part-time study difficult, as the learner needs good light. For a mixed group or urban and rural doctors it would be a difficult task indeed to choose the best method of learning.

Access to media

We need to list all the media available: print, broadcasting, video, audio programmes, teleconference, computer assisted learning or Internet etc. What are the constraints on their use? Are they available to all our potential learners? Are they within the range of our budget?

Keeping in view the resources and constraints, the design of any learning material in a course needs to take into consideration at least the following seven factors: time factor, learning skills, appropriate workload, optimal learning activities, levels, technology and cost. The above seven factors, one considered as the key parameters for designing materials. Let us discuss them one by one.

- **Time factor** – The course writer has to consider how much time distance learners have to devote to their studies. Is there assistance available for students to develop time management skills, should they need it? Is there any opportunity for relaxation, family, social life?

- **Learning skills** – Distance learners have to learn the basics of ‘how to learn’ at a distance. The experience of previous learning in classroom may hamper the learning process so they have to develop independent learning skills.

- **Appropriate workload** – What is an appropriate workload for a distance learner? With full-time on campus students the workload is usually balanced, but the translation of these same courses to a distance mode is not always so direct. In this translation, workload requirements may change.

- **Optimal learning activities** – What are the best activities which can best give students feedback on a wide range of skills? Is the assessment designed to be a learning exercise or will it be a formal evaluation of learning? What should the balance be? Is it more desirable to have a number of shorter exercises, each concentrating on a particular aspect of learning, or to select one or two exercises which encompass a number of the learning skills to be assessed?
Course Design

- **Levels** – At what level is the learning? Are the students just beginning learning? Or is it at a second or third year level? Is it on an undergraduate level or more advanced?

- **Technology** – What are the best technologies to be used in students’ learning? Print is the traditional mode but other modes may prove more effective. The potential for audio, video, broadcasts, computer networks and other technologies should be considered.

- **Cost** – What is the most cost effective balance which can be achieved between learning and teaching? What is the cost to the students? What resources can be made available by the institution?

**Language**

Which language do our learners use? How well do they know the language we will use in our course?

**Finance**

What is the budget for the course? Is this a fixed amount? Are there any services we can acquire free, or any existing materials that we can use at a small cost?

**Distribution facilities**

How shall we distribute our materials? Are the postal services efficient? Are broadcasting signals strong enough for our learners to receive our programmes?

**Manpower and administrative facilities**

How many potential writers, broadcasters, subject specialists, counsellors, supervisors do we have available? What can we expect them to do and at what speed?

The design of any learning material needs to take consideration of the following factors.

**Time**

How long do we have to prepare the course? If the available time is very short, we will have to recruit several writers to work simultaneously on different aspects of the course, and will have to streamline production, probably hiring at greater cost additional editors, designers and printers from outside. With more time, an institution can rely more on its own resources and avoid incurring extra costs.
1.5.4 Selection criteria

The examples above suggest the kinds of choices that have to be made, and indicate how selection criteria may determine choice. The last example shows that time may determine methods of production and costs. The earlier examples of medical studies given on pages 23 and 24 show how a concern for particular target groups could affect the method of choice and determine the focus on the method that reaches the largest number, or the one which can reach a particular target group most effectively.

1.5.5 Alternative methods of meeting objectives

Before we finally make up our minds, we can consider all the options for organising our course. Most distance teaching courses are printed, with texts as the main teaching medium. To a great extent, this is so for sound educational, financial and practical reasons, but there is also an element of habit in this arrangement. Perhaps, a certain course should have audio cassettes as the main medium. Or perhaps, objectives would be met more effectively if greater emphasis were placed on face-to-face practical work.

1.5.6 Alternative subject matter

We have already suggested that the curriculum for distance education may need to differ from the conventional curriculum. At the level of greater detail, the way the topics are presented may also need to be different. In science subjects, for example, standard experiments are often used in schools and universities to present particular topics. In distance education we usually have to devise different experiments which can be done at home without laboratory equipment, or with simple kits provided by the institution. Although many academics find this difficult to accept, it is unnecessary to insist that distance learners perform the same practical experiments as their counterparts in the formal system.

1.5.7 Choice of method

This stage is the end of curriculum planning and the point at which the course begins to take shape. The course planning group considers all the available information and ideas and then makes its decisions.

1.5.8 Development, production, feedback and evaluation

The units that follow will elaborate on these stages; our final task in this unit is to consider the development of a course plan or outline. This has been discussed in the next section.
Check Your Progress 3

Think about your own discipline. Imagine that you are planning to teach your subject at a distance. List the possibilities and constraints you foresee for course design? (If you already have some experience of distance education, use this experience in your answer).

Note:  

a) Space is given below for you to write your answer.  
b) For this question, we haven’t given you any model answer, as the answer varies depending on your chosen subject.

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1.6 MAKING A COURSE OUTLINE

A course outline needs to:

- Specify the aims and objectives of the course;
- Describe how the course is divided into units, providing titles for each unit; and
- Describe the different media components of the course, indicating how each of them will be used.

The first two of these points should need no further elaboration. The third is peculiar to distance teaching, and an example may be helpful in understanding it. A typical undergraduate course at IGNOU, for instance, would have the following plan.
The Programme Guide to IGNOU's Diploma in Management provides a good example. The extract below gives the aims and objectives, the target participants, and the structure of the programme, and then indicates how the media are used (we have included the media components for only one of the seven courses). This Programme Guide passes on to the participants the same information that the course planners put together when they constructed the course outline.

Diploma Programme in Management

IGNOU has several schools directly responsible for imparting education in various fields and disciplines. The school of management studies is offering its first programme called a diploma in management. The underlying objective of this programme is to make you aware of the well-known methods, concepts, theories and practices of managing men, machines, money and materials for achieving staged organisational goals. Of course, the degree of your success as a manager will depend on how appropriately you assimilate, adapt and practise these educational inputs. The programme is designed to be general in nature, providing most of the required foundational inputs. It does not focus on the management of any particular type of firm or institution.

The School of Management Studies is, of course, designing a whole range of follow up programmes in management. We sincerely hope that you will benefit immensely from these courses.

Target Participants

The programme has been designed to cater to the needs of managers, administrators, officers and functionaries in terms of managerial knowledge, skills and attitudes.

Target segments are:
- Managers who have received little or no formal training and wish to update their knowledge; and
- Technologists, professionals and functionaries who are in various jobs and have not been able to avail of the facilities of management education.

1.7 PROBLEMS IN COURSE PLANNING

We have provided a description of the systematic process of course planning. In practice, however, it seldom works smoothly.

Often the information available on all the factors outlined above is insufficient, and decisions have to be made in the dark. While an institution may make every effort to collect enough information, it may particularly for a new institution prove to be an impossible task in the time available. In such circumstances, it is wise to insist that the resulting course is a trial or
pilot course. If it turns out to be unsatisfactory, the institution may then reshape it without losing face.

Another common problem is a conflict of views between the different members of the planning group. Many of the subject experts in the group will have no experience of distance teaching and its potential, and will mistrust its methods. Misunderstandings can arise when a new approach to teaching the subject is perhaps seen as an attempt to compromise or lower standards. Such reactions are to be expected from conscientious and experienced people — a planning group therefore needs a skilled and knowledgeable chairperson to steer it firmly past such obstacles.

1.8 LET US SUM UP

In this unit, we have tried to delineate the differences between designing distance education courses and conventional ones. We have focused particularly on the need to take care in deciding what to teach. The main points are as follows:

i) Traditionally, the curriculum is subject-centred. In a distance education system it must be learner centred, and must also take account of teaching methods.

ii) The educational needs of students must be investigated before the course is planned.

iii) The characteristics of the students will affect the curriculum. Typically, distance students are mature in outlook and highly motivated, but lacking in confidence.

iv) Curriculum planning cannot be completed hastily, and requires working in a group.

v) Courses may be effectively planned using a systems approach which considers needs, objectives, resources, constraints and alternative methods.

vi) A course outline consists of a description of aims, a list of topics and a plan detailing the various components of the course and how each of them will be used.

Check Your Progress: Possible Answers

1) The main points are given below:

The curriculum in distance education:

i) provides a full and explicit statement of objectives;

ii) includes areas not usually covered by the conventional curriculum;

iii) is functional and related to national manpower needs;

iv) is selective and related to the needs, experience and educational background of learners; and
Principles of Text Design

v) includes consideration of how the course will be taught as well what is taught.

2) To assess needs, you have to conduct a survey, which may be small and informal or formal and extensive. In either case, you will need to seek the advice of a social researcher. In the latter case, it would be advisable to employ a professional social researcher to conduct the survey.

3) You should approach the following:

i) Potential learners; these are the most important source in providing a balanced view of learning needs.

ii) Employers in various businesses, managers in relevant ministries, institution and concerns.

iii) Agencies representative of target groups, i.e., professional associations and trade unions.

iv) Academics and professional training organisations.

(You may have included others in your list; ours is not exhaustive. We hope this exercise helped you rethink the role of research in distance education.)