

Chapter 2

PLANNING AND DESIGN

Introduction

This chapter is about the planning and design of audio media – radio, audio cassettes and audio-vision – for distance and open learning.

It starts from the assumption that you have made a decision in principle to use audio as one of the media in a distance learning package; and that you now want to go on to the detailed planning and design of the audio material and accompanying visual support.

The chapter starts by distinguishing between three levels and types of planning:

- Institutional planning
- Series planning
- Programme planning

Here the emphasis is mainly on series planning. Institutional planning is dealt with briefly, since it involves a range of management questions which are beyond the scope of this handbook. The detailed planning of individual radio programmes and audio cassette materials is dealt with in the next section as part of the development and production process.

The chapter then asks three essential questions:

- What needs to be planned?
- Who should be involved in the planning and design of audio?
- How can the process be best organised and managed?

In responding to the first of these questions, the chapter offers an eight-point checklist, which will guide you step-by-step through the planning and design process. The second question leads to a discussion of the different professional skills needed for effective planning and design. And then, thirdly, we look at how the process of planning and design can best be organised and managed.

So by the end of the chapter you should know:

- What you need to do to plan and design an effective series of radio programmes or audio cassette materials
- What professional skills are needed for the planning and design process
- How this process can most effectively be organised and managed to get the best results

Three levels of audio planning

It's useful to think about the planning and design of audio materials at three main levels:

- **Institutional planning** – involving the allocation of resources for audio to particular areas of an institution's activities – e.g. departments, programmes of study or courses – usually expressed in terms of policy, staffing and budgets.
- **Series planning** – which involves the planning and design of a series of radio programmes or audio cassette materials linked to a particular course or programme of studies, usually presented in the form of a fairly general series outline.
- **Programme planning** – which covers the detailed planning and design of individual radio programmes or audio cassette sequences, and is usually put on paper in the form of a detailed programme or audio cassette outline.

Here we're focusing mainly on series planning. But before we do, let's put series planning in context, by looking briefly at its links with institutional and programme planning.

Institutional and series planning

Institutional planning involves making decisions about the overall allocation of resources – human, technical, financial – to the planning, development, production and distribution of audio materials. These decisions are usually made at a senior management level within an institution. In relation to audio, the senior management team of a distance or open learning institution typically has to decide:

- What proportion of the budget should be allocated to audio – as opposed, for instance, to the production of printed materials, television or video, the provision of student support services, etc.
- How the audio budget should be distributed between different departments, programmes of study, perhaps even down to the level of individual courses.

- How to make the most efficient and effective use of the professional skills and technical facilities available to the institution.

To make such decisions rationally, planners and managers need good quality advance information, about the range of options available to them, and the extent to which the various options are likely to help the institution achieve its goals – e.g. to provide the best quality distance and open learning to the largest number of educationally disadvantaged students.

It is at this point that we can see most clearly the link between series plans and institutional planning. For an institution to make rational choices on the allocation of resources to audio, it needs clear advance information on how, why and with what effect, different departments and courses are proposing to use audio.

This is exactly the type of information that a carefully prepared series outline provides. As you will see later in the chapter, such an outline will typically cover:

- who the audio is intended for
- what contribution it will make to teaching and learning
- what it will cover and what form it will take
- how it will be integrated with other media and learning activities
- what will be involved in developing and producing the materials
- how the audio material is intended to be used by the students
- how its impact and effectiveness will be monitored and evaluated

Armed with this information, planners and managers can make comparisons and rational choices between the different options presented to them; and in this way maximise the efficiency and effectiveness with which an institution uses its scarce resources.

Series and programme planning

The detailed planning and design of individual radio programmes and audio cassette sequences will be dealt with in the next chapter, as part of the development and production of audio for distance and open learning. At this point, however, it's worth noting that agreeing on a clear series outline leads to a number of positive advantages for those involved in developing and producing the audio materials. For instance:

- The series outline provides clear guidelines on the amount and type of audio to be produced. It will also spell out the role of audio in relation to other media and learning activities.
- It will also become possible to integrate the development and use of audio more closely with that of other media being used – for instance, print, television and video – and with the face-to-face support offered to students at tutorial sessions and residential courses.
- This in turn will make it possible to exploit the unique characteristics of different media (including audio); to use them in a way that maximises their effectiveness; and to provide the students with better quality learning materials, and a more interesting, satisfying and worthwhile experience of studying at a distance.

In this way, the preparation of series outlines for audio not only makes it possible for institutions to undertake rational forward planning, but also enables subject specialists and media staff to make the most effective use of audio and other media in distance and open learning. This is why series planning is important. Now we go on to the question of how to do it – asking three key questions:

- What needs to be planned?
- Who should be involved in the planning and design of audio?
- How can the process be best organised and managed?

What needs to be planned?

Here the focus is mainly on series planning. So the question we're asking is: What needs to be planned and designed if you are preparing a series of radio programmes, audio cassettes or an audio-visual package for distance or open learners? In answering this question, you may find the following checklist useful. It is presented first in summary form. Then we will look at each item in more detail.

Checklist for audio planning

- Audience
- Aims and objectives
- Content and structure
- Form and format
- Support material
- Resources

- Scheduling
- Monitoring and evaluation

Now we look at each of these items in more detail. Under each heading we suggest the key questions that need to be asked and answered in series planning. And we also provide some additional information that may help you answer the questions. In this chapter, we concentrate on the first five headings. The next two – resources and scheduling – we'll look at in Chapter 3, as part of development and production. And we'll deal with monitoring and evaluation in the final chapter of the handbook.

If you are currently in the early stages of planning an audio series, you might find this is a good opportunity to prepare a series outline. You can apply what you're learning under each heading to your own particular project. By the time you've covered the first five headings, you should have most of the information you need for an effective series outline.

1. Audience

In planning any audio series, it's important to know the main characteristics of your target audience. Without this knowledge, it's difficult to know how to communicate with them in a way that they'll understand and respond to.

Some key questions

- What do you need to know about your target audience?
- How much of this information do you have already?
- What do you need to find out?
- How can the information be obtained?

What we're doing here is preparing an 'audience profile'. There are at least three types of information that you'll find useful:

- **Demographic data** – e.g. information on age, gender, literacy and education levels, occupation, environment (e.g. rural/urban), etc.

- **Knowledge, skills and attitudes** – information on what the students are likely to know already, what they can do, their attitudes to the subject matter and their expectations of the course.
- **Access, facilities and study skills** – access to audio equipment (radios, cassette players, sources of power), quality of reception, experience of learning from audio.

It's easy enough to identify the information you need. It's usually more difficult to obtain it. Some of the information may already be available – from colleagues, from other educational institutions, from national and local organisations. If the information is available, do your best to obtain it. If not, or if you suspect the information may be inaccurate or out-of-date, you'll need to try and obtain it for yourself. There are a number of ways of doing this – e.g. sample surveys, questionnaires, interviews. But most of these methods are expensive and time-consuming, especially in developing countries.

Probably the most efficient and economic way of obtaining the information you need is to meet with a small number of 'focus groups' – i.e. groups of people who are broadly representative of the audience you're aiming at. The information you obtain may not be statistically representative of the target audience. But it will at least give you a chance to discuss the questions raised above with a group of people who are fairly typical of your potential students, and will help you begin to see the world from their perspective.

There's no standard way of presenting an audience profile. You can organise it in whatever way you find most useful. Once you've completed the task, the next step is to start thinking about how the audience profile will influence and shape the way you design and present your audio series.

What can you learn from the audience profile? How will it help you design better audio materials?

In general, the audience profile should help you decide:

- What the students want and expect from the course and its audio material
- The prior knowledge, skills and attitudes you can assume from your students
- The level and style of language that will be appropriate
- The type of examples and illustrations you should use
- Whether to use radio or audio cassettes – or neither or both
- Whether to aim for individual or group use of the audio materials

- What type of support material and study activities would be appropriate

We'll return to most of these questions as we work our way through the checklist; and a number of them will also be discussed later in the handbook.

2. Aims and objectives

When planning audio for distance and open learning, it's important to be clear about exactly what you want to achieve through the use of the medium. One way of clarifying your thinking on this is to spell out your general aims and specific objectives in using audio.

We have already looked at some of the main roles of audio in Chapter 1. We can use these roles as a basis for a checklist that will help you start thinking about some of the general aims for which you might want to use audio materials in your courses.

Checklist on aims for audio

- Do you want to use audio to provide news and up-to-date information to your students?
- Can you use audio to motivate students and to provide general encouragement and support?
- Is there a more specific tutorial role that you want audio to play? Are there parts of the course that would benefit from additional tutorial support?
- Are there additional learning resources that could be offered through audio, which could not be provided in other ways?
- Are there parts of the course in which audio could usefully play a direct teaching role? Are there parts in which such a role would be essential?

Once you've spelled out your general aims, you can then elaborate them in terms of specific objectives or competencies that you want the students to acquire or develop. You may find it useful to think about objectives or competencies in terms of knowledge, skills and attitudes. These three headings again offer a useful checklist for a more detailed statement of how you're planning to use audio.

Checklist on specific objectives for audio

- What kinds of knowledge can you communicate effectively through audio, or through a combination of audio and visual materials?
- Are there particular skills (either intellectual or physical) that you want the students to acquire or develop through the use of audio?
- What role can audio play in helping students think about their own attitudes and value systems? Can it be used to encourage critical thinking, discussion and debate?

However you decide to approach the question of aims and objectives, it's important to be clear about exactly what you want to achieve through audio. Clarity at this stage will help you decide:

- What to include and what to exclude from your audio series
- How audio will relate to other media and learning activities in a course

In addition, if you don't know precisely what you're trying to achieve through audio, you'll find it very difficult later to discover how successful you've been and whether it's all been worth the effort.

The precise nature of aims and objectives will of course depend on the subject matter and the particular type of course to which they relate. But whatever the context, they should have the following characteristics. They should be:

- Clear and unambiguous – preferably free from educational jargon
- Realistic and relevant – in terms of what can be achieved through audio
- Capable of being evaluated – i.e. it should be possible (at least in principle) to find out whether the aims and objectives have been achieved

3. Content and structure

Once you've identified and characterised the audience, and defined your aims and objectives, then it's time to go on to the content and structure of the audio series. You've answered the 'who?' and 'why?' questions; now we turn to the questions of 'what?' and 'how?':

- What content do you want to include in the audio series?
- How should this content be organised for presentation to the students?

If you've defined your aims and objectives clearly, identifying content and deciding on a structure or sequence should not be difficult. In order to achieve each objective, you'll need to present a certain amount of 'content' – i.e. appropriate audio material. And for this content to make sense to the students, it will need to be presented in a logical and coherent order.

Checklist on content and structure for audio

- What subject matter or topics will the audio material deal with?
- In what order should they be presented to the student?
- How will the audio material relate to the other media being used in the course – e.g. printed texts and other visual materials?
- Should there also be a link between the audio series and any face-to-face tutorial sessions that form part of the course?

Once you have identified the audience, defined your aims and objectives and decided on the main content and structure of your audio series, then you are probably in a position to start preparing a general series outline. This usually includes information on:

- The target audience
- The aims and objectives for audio
- The subject matter to be covered
- The order in which it will be dealt with
- The relationship of audio to other parts of the course – e.g. print and face-to-face contact

There's no standard format for this outline. But you might find it useful to present the information in the following type of table.

Preliminary draft for an audio series outline

1. Audience:	[A brief statement identifying your target audience and its main characteristics]
2. Aims and objectives:	[A statement of your general aims in using audio, followed by the specific objectives you want to achieve through the medium]
3. Content and structure:	[A list of the subject matter/ topics to be covered, arranged in order of presentation, with an indication (if appropriate) of links to other media and study activities, and (where possible) a timetable for presentation]

This preliminary series outline will become a basic working document for the development of the audio material. You can add to it and amend it as your thinking develops. It can serve as a basis for communication between the different people involved in and affected by the development of audio. (This is a topic we look at later in this chapter.) And it can also be used to incorporate your collective ideas and agreements about the purposes of audio and how it's going to be used.

4. Form and format

There are two main types of decision you need to make here:

- First, whether to distribute the audio material to students through broadcasting or in recorded form – i.e. whether to use radio programmes or audio cassettes
- Secondly, what particular forms and formats of audio will enable you to communicate most effectively with your students

Radio versus audio cassettes

We discussed the comparative strengths and limitations of radio and audio cassettes in Chapter 1. It was suggested there that radio has the great advantage of reaching large numbers of students simultaneously and at relatively low cost. But it also has the major disadvantage of giving students relatively little control over their use of the audio

materials. Audio cassettes may involve additional copying and distribution costs, but they offer a much higher level of student control. As a result, audio materials can be more closely integrated with other media and learning activities, and this can make possible more student-active learning.

What are the main factors you need to take into account in deciding whether to use radio or audio cassettes?

Checklist on choosing between radio and audio cassettes

Your decision on whether to use radio or audio cassettes will usually depend on the following main factors:

- Your target audience – the number of potential students, their geographical spread, and their access to audio technology and sources of power
- The type of course and subject matter you're teaching (e.g. formal/non-formal), the role of the audio material and its relationship to other media and learning activities
- Your access to suitable radio transmission times and the competing demands for them from other programmes and courses
- The relative costs of distributing the material on radio and on cassette, and your judgement about the educational benefits of using one medium rather than the other

Audio forms and formats

The second type of decision you need to make, whether you're distributing by radio or on audio cassette, is about how you can use the medium most effectively. This is in part a question about audio forms and formats.

- By 'form' we mean a particular type of audio material – such as those discussed below
- By 'format' we mean the different ways in which these forms can be combined, to communicate with your students

Detailed decisions about form and format are usually made at a later stage, when individual programmes or audio sequences are being developed. But even at an early stage of planning, it's necessary to think in general terms about the type of audio material you're likely to use, since this will have important implications in terms of the resources you'll need (human, technical, financial) and the time it will take you to develop and produce the audio materials.

Just as ideas for subject matter grow out of your thinking about aims and objectives, so ideas for form and format need to emerge from decisions made about content. Content should dictate form and format; not the other way around.

The range of audio forms is extensive. The table below gives an idea of the main types of audio material that can be used in distance and open learning.

Some basic audio forms

Types of audio material	Brief explanation	Main uses in distance education
Scripted talks	Carefully planned and structured communication, written down, rehearsed, and presented at the microphone	Talks are particularly suitable for considered presentations by teachers, audio tutors and presenters, subject specialists, and others with particular experience or expertise.
Unscripted interviews	Carefully planned (but preferably not rehearsed) question and answer sessions, designed to obtain lively spontaneous material from people with particular knowledge, experience or skills	Interviews offer an effective and convenient alternative to scripted talks, when the interviewee (the person being interviewed) doesn't have the time or skill to prepare and present a scripted talk. They also have the added advantage

		of sounding informal and natural; and therefore offer an attractive contrast to more formal scripted speech.
Discussions	Carefully planned dialogues or debates, preferably unscripted, and usually involving two or three participants with a chairperson	Discussions are a useful way of exposing students to contrasting views and opinions on subjects on which there are legitimately differing viewpoints. They can also provide students with resource material for analysis and comment, and help them sort out their own views on disputed questions and issues.
Actuality and commentary	Material recorded on location (i.e. outside the studio) and designed to convey a sense of place and atmosphere	Very useful for giving students the vicarious experience of field trips and visits to places of interest and relevance to what they're studying
Archive material	Recorded material, usually of historic or academic interest, most commonly held in collections by broadcasting organisations	This material can be used as evidence or illustration in audio materials. It offers access to people and events in the past, which are of interest and relevance to present learning needs

<p>Music</p>	<p>Instrumental and/or vocal material, which can be used to add to the attractiveness of audio presentation, as a way of indicating the structure of programmes, or as an alternative to speech as a memorable way of communicating ideas and information</p>	<p>Music can be used in a variety of ways to enhance the experience of using audio. It is routinely used to indicate the beginning and end of programmes (signature tunes), and also to signal activities (e.g. stop the cassette). It can also be used effectively (mainly in non-formal education) to support and reinforce key learning messages</p>
<p>Drama/simulation</p>	<p>A narrative presentation, using actors and sound effects, reflecting real or imagined people and events, and usually involving a process of conflict and conflict resolution</p>	<p>This is a form which is widely used in both formal and non-formal education, as a way of handling inaccessible or sensitive areas of experience. It allows the audio producer to convey real or imagined situations and events, in an interesting and involving way, and can provide a rich source of stimulus material for students at a distance.</p>

These forms can either be used on their own – talks, interviews, discussion, drama – or they can be combined into various formats. The range of formats is only limited by the imagination and creativity of the scriptwriters and audio producers. Some of the more common formats are illustrated below.

Some common formats for audio

- **Documentaries:** Factual reports on past or present questions, issues, situations or events, incorporating narrative, description and analysis, and usually combining several of the following elements – scripted talk, interviews, discussion, actuality and/or archive material.
- **Features:** Audio material dealing with similar factual themes to documentaries, but approaching them in a more imaginative, creative and artistic way, often incorporating elements of music and drama.
- **Magazines:** A popular and widely used format; usually broadcast on a regular basis (daily, weekly, monthly); dealing with a number of different topics, linked by a common theme; using a range of different audio forms; and usually presented (in distance education) by an audio teacher or tutor.
- **Drama with tutorial commentary:** Audio material relying mainly on drama to communicate with students; but including tutorial commentary, usually offering introduction, interpretation and reinforcement of the themes explored in the drama.

There are no rules and regulations that govern the choice of forms and formats. This is essentially a creative and imaginative task. However, we can offer some general guidelines and some practical tips.

- First, you need to think about the subject matter – What type of audio material will communicate the content most effectively?
- But you also need to think about your audience – What types of audio material are they likely to find interesting, involving, stimulating, thought-provoking, challenging, understandable?

The list of adjectives could go on! Perhaps the most useful thing would be to offer some practical tips drawn from experience.

Forms and formats – some practical tips

- Keep your radio programmes and audio cassette sequences fairly short. Fifteen to 20 minutes is probably the maximum length for concentrated listening. And you can cover a good deal of ground in five to ten minute audio slots.

- If you're planning to use scripted talks, keep them short as well. You can cover a lot in five minutes. Unless the speaker is very skilled, it's difficult to hold the listener's attention for as long as ten minutes, and almost impossible for 15 or more.
- The same goes for interviews and discussions. Try to keep interviews down to five minutes. Discussions will probably need to be a bit longer (depending on the number of participants). But again you can cover a great deal in ten to 15 minutes.
- Try to vary the forms and formats as much as you can. This will add variety and pace to the students' listening experience. It will also help to keep them interested and involved. Don't get into a rut. Keep surprising your students. And remember, there's no reason why educational audio material shouldn't also be interesting, entertaining and enjoyable!

This list of practical hints could of course be extended. But that would be moving away from planning and design, and into the development and production of audio materials, which is the main focus of the next chapter. At this stage, what's important is to start thinking about the type of audio material you're likely to be developing. The following checklist is intended to help you in this.

Checklist on audio forms and formats

- Are you proposing to use radio or audio cassettes for your course?
- In terms of form and format, what types of audio material is your course likely to require – talks, interviews, discussion, actuality and archive material, drama and music?
- What resources – human, technical, financial – do you think you will need to develop and produce these materials?
- How long will the process take? How will the schedule for audio relate to that for other media – e.g. print and other visual media?
- Given the resources and time available, are the emerging plans for audio realistic? Or do they need to be revised and modified to take account of what is practically possible?

Some of the questions in the checklist above will be dealt with in more detail in the next chapter. But it's important to be aware of them – and to start thinking about them – at this stage. So, if you're preparing a

series outline, you can now add your ideas about form and format to the topics you have listed under content and structure.

5. Support material and activities

It was suggested in Chapter 1 that the educational impact and effectiveness of audio can be substantially increased by combining audio media with specially prepared visual materials. Combining and integrating audio with visual elements – i.e. creating audio-vision – encourages the active involvement and participation in the process of listening and learning. You may find it useful to think about the combination of audio and visual materials in terms of a ‘before-during-after’ sequence.

Combining audio and visual materials – before, during and after listening

Before listening: Visual material can help prepare students for listening.

- What would it be useful for students to read, look at, think about or investigate, before they start listening to a particular piece of audio?
- What activities and preparations would help them get the most out of the audio material they’ll be listening to?

During listening: Having something relevant to look at while you are listening helps concentration and promotes active learning. In addition, by combining sound with appropriate visual images, it’s possible to extend the range of subject matter that audio can deal with. Audio-vision is a relatively low cost but potentially very powerful educational technology.

- What would it be useful for students to look at while they are listening? How could visual material enhance or extend the experience of listening and learning?
- Are there other things that students could usefully do while listening to audio – e.g. examining objects, carrying out tasks, reacting on paper to what they’re listening to?
- In the case of cassettes, are there exercises and activities that students could usefully do when the tape is stopped? How could you use printed/visual materials to offer students opportunities to apply knowledge, practise skills and reflect on attitudes and values, and generally to support and reinforce their learning from audio?

After listening: Here visual material can be used for a range of follow-up, reinforcement and revision exercises and activities.

- What would it be useful for students to do after they have listened to a piece of audio material? How can print encourage and support such activities?
- How can support materials encourage the application of newly acquired knowledge, the practice and development of skills and the further exploration of attitudes and values?
- How can support materials promote the longer term impact and influence of audio in distance and open learning?

So what are the key questions you need to think about and answer in relation to support material? You may find the following checklist useful.

Checklist of key questions on support material and activities

- Would it be useful to support the audio material with specially designed and carefully integrated printed and/or other visual material?
- If so, how should this material be presented to the students? Can it be included – e.g. in a print-led course – in the main teaching text(s)? Or would it be better to prepare a separate booklet or pack of printed materials to accompany the audio?
- What would be the implications of the different options in terms of resources and scheduling? Are either or both practically feasible? Which option is likely to be most beneficial for the students?

So far, in developing a series outline, we've gone through the first four steps. We have:

- Identified and characterised the target audience
- Spelled out our main aims and objectives in using audio
- Listed the main content in order of presentation
- Considered the type of audio material that would be most appropriate and started to think about the implications of this in terms of resources and scheduling

Now you can complete the process by adding your ideas on the type of support material and learning activities that would be useful to your students.

Presenting series outlines

It was suggested earlier that preparing series outlines is useful because it helps you communicate more effectively with colleagues and others who are interested in how you are planning to use audio. This raises the question of presentation. How can you present your series outline in such a way that it communicates the essential ideas effectively?

There's no standard format for this document. But one way of presenting your ideas would be to identify the target audience and the general aims at the start of the document; and then to organise the rest of the more detailed information in four related columns, along the lines suggested below.

Specific objectives	Content and structure	Form and format	Support materials and study activities
[Here you can list the specific objectives which you are seeking to achieve through audio.]	[You can then connect each of the programmes / topics in the series to one or more of the specific objectives.]	[For each of the programmes / topics you can indicate the type of audio material that you expect to use.]	[Similarly, here you can show what type of support material and study activities you would suggest for each programme or topic.]

This is just one simple example of how you might present the information. There are many other ways in which you could do it. You could, of course, also add other material to the outline. For instance, in a print-led course, you could indicate how the audio material relates to the printed components of the course. The important thing is to present your thinking in a way that is clear, and allows you to communicate effectively with your colleagues and others who need to know about your audio plans.

Resources, scheduling, monitoring and evaluation

As we suggested earlier, although resources, scheduling, and monitoring and evaluation are important aspects of series planning, we'll delay our discussion of them until we've looked more closely at who should be involved in planning, and how it should be organised and managed; and also until we've considered what is involved in the development and production of audio materials (Chapter 3). Once we've covered these topics, you should be fully equipped to complete and finalise your series outlines.

Who should be involved in planning?

So far in this chapter we have tended to discuss planning and design as though it was the individual responsibility of a single person. The main reason for this has been to encourage you to think through the various issues involved in the planning and design of audio. However, in practice, this activity is usually – or at least should be – undertaken by a group of people, each with particular knowledge and professional skills, working together as a team.

There are at least two key roles that need to be involved in the planning and design of audio for most types of distance and open learning:

- **Subject specialists** – preferably with knowledge and experience, not only of teaching the subject at an appropriate level, but also of the particular audience for whom the audio materials are intended
- **Audio producers** – preferably with professional experience of educational broadcasting and/or audio cassette production in areas close to the subject matter of the course, and again familiar with the target audience

There are also a number of other professional skills that can make a useful contribution to the planning and design of audio and its supporting materials. Among the more important are the following:

- **Educational technologists/instructional designers** – with a particular interest in how adults learn at a distance, and skills in designing adult learning materials
- **Local tutorial staff** – who are familiar with the target audience and can advise on their particular learning needs and the type of study materials that are likely to be most useful to them
- **Print specialists and graphic designers** – who can advise on the design and layout of printed and visual support materials
- **Evaluation specialists** – who can investigate and advise on the impact and effectiveness of audio and printed support materials as they are being developed and when they are being used by students

The contributions of the first two professional roles are fairly self-evident:

- **Subject specialists** – provide knowledge of the subject you want to teach. They normally determine what the content of the audio material will be. So it's important that their knowledge is accurate and up-to-date; and that they also have experience in teaching the subject to the type of target audience you're aiming at.

- **Audio producers** – bring knowledge and skills in how to communicate effectively using sound. They should be able to suggest the subject matter that can best be dealt with through audio; the forms and formats that are available; and how they can be used most effectively. At a later stage, audio producers will also play a key role in realising the ideas that emerge from the planning stage in the form of radio programmes and audio cassettes that the students listen to.

The contributions of the other three professional roles are perhaps less immediately self-evident:

- **Educational technologists/instructional designers** – have expertise in the dynamics of the teaching and learning process. They should therefore be able to advise on the structuring of the audio material, the design of visual support and audio-based learning activities, and the relationship of audio to other components of a course.
- **Local tutors** – will bring to planning and design their knowledge and experience, not only of the students, but also of the environments in which they live and work: the facilities available to them, the particular problems they face and the type of support they need. For this reason, they will be especially useful in advising on whether to use radio or audio cassettes; whether audio should be used individually or in groups; and what type of support material would be most helpful.
- **Print specialists and graphic designers** – will be able to contribute in the design and layout of printed and other visual materials developed in support of audio. They will also have a particular role to play, working closely with educational technologists/instructional designers, in advising on the effective integration of audio materials and the printed components of a course, and later in implementing decisions in this area in the development and production process.
- **Evaluation specialists** – will probably not have a major role in the early stages of planning. But it's important that they should be involved from the start, so that they have a clear idea of what the course is trying to achieve, and the evolving logic of the approach adopted. In this way, they'll be in a better position to advise those involved in developing the audio and support material during the process of formative evaluation.

Two further points need to be made before we move on – which will lead us into our final question:

- First, not all of these professionals need to be involved in all stages of the planning and design process. As we move from institutional

to series and programme planning, the degree and type of involvement of the different roles will change.

- Secondly, in multi-media distance education, those involved in the planning and design of audio (and other media) tend to be a sub-group in a larger course planning and development team, which involves other specialists and probably also needs administrative and managerial support.

These two points raise a number of important questions about the organisation and management of the planning process, which is the final question we consider in this chapter.

How should planning be organised and managed?

We now turn to the question of how the different professional roles outlined above can be organised and managed to plan and produce effective audio materials for distance and open learning. The question is not an easy one, since the different roles are drawn from very different professional backgrounds.

- **Subject specialists** – usually come from academic and teaching backgrounds. They often tend to be more concerned with the content of their subject than with the different ways it can be communicated. They may have some experience of communicating through print; but often they have little or no experience of electronic media, including radio and audio cassettes.
- **Audio producers** – will usually have come from a broadcasting background, and will have professional experience in communicating through electronic media. As a result, their main interest is likely to be in the medium; and they may have little or no knowledge or experience of the academic discipline or subject area on which they are working.

Similarly, educational technologists/instructional designers, local tutorial staff and evaluation specialists will all approach planning from a particular professional perspective. In addition, the different backgrounds may also raise questions of relative status and seniority. Moulding this type of diverse group into a coherent planning team may not be easy.

What kind of problems are likely to arise within multi-disciplinary planning teams? What particular problems might arise between subject specialists and media personnel? How do you think these problems might be resolved?

In fact, it's fairly common in distance and open learning institutions for there to be some degree of conflict and tension between subject specialists and media staff.

Subject specialists sometimes regard media producers as focusing too much on the process of 'communication' and not being sufficiently concerned with content. They see them as being more concerned with the 'medium' than with the 'message'.

Media producers tend to see subject specialists as being too narrowly concerned with questions of 'content', and not paying sufficient attention to the way in which the content is communicated. At its worst, this type of tension can lead to conflict between the two groups. And if the conflict is not resolved, it can lead to a breakdown in communication, to the detriment of the learning materials being planned and designed. Often the situation is made more difficult by status differences between subject specialists and media staff within an institution.

A possible solution – the OU course team

Perhaps the best known solution to this type of problem is that developed by the British Open University in the early 1970s, and later adopted and modified by a number of other distance teaching institutions – i.e. that of the 'course team'.

Essentially, the approach involves setting up a multi-disciplinary team – including subject specialists, media personnel and other professionals – who meet together on a regular basis, and take collective responsibility for the planning, design and development of a distance education course.

The great strength of this approach is that, at its best, it can produce a mutually inter-dependent group of professionals, with a shared ideology, and developed skills in producing high quality and carefully integrated distance and open learning materials.

The main disadvantages of the course team approach are that:

- It tends to be very demanding and expensive in terms of staff time
- It requires a capacity for long term planning which many institutions (especially new ones) find difficult to establish
- It involves an open and democratic style of management which for some participants may be unfamiliar and uncomfortable

In practice, relatively few institutions operate a fully developed course team model. In most, the design and development of courses is the responsibility of a relatively small group of people (usually subject specialists), who may from time to time call on others (e.g. media producers) to assist them. In this context, there is relatively little opportunity to develop a shared professional outlook. Management tends to be hierarchical; the potential for conflict between different specialists is increased; and the degree of integration between different media tends to be reduced.

In this type of situation, the opportunity to realise the full potential of audio is limited. In print-led courses – mainly in formal education – ideas for print are usually developed first, with audio being planned later. Audio producers are not usually involved in the initial planning; and there's little opportunity to develop the collaborative approach mentioned above. As a result, the potential for conflict between audio producers and subject specialists in the planning and development of audio material is increased. The unique strengths of audio tend not to be exploited. And audio is often grafted on, as a supplementary component, which is peripheral to the main body of the teaching system.

For these reasons, there is a strong case for having some sort of course team, with collective responsibility for the planning and design of audio materials, in conjunction with other teaching and learning materials. The essential members of such a team are subject specialists and audio producers. If it's possible to include educational technologists, instructional designers, tutorial staff, evaluators and administrative support, so much the better. But if not, don't worry. Even without these additional specialisms, it's still possible to make good quality audio materials – as you'll discover as you continue to read the handbook.

Checklist on the planning and design of audio

This chapter should have enabled you to do the following things:

- Distinguish between different types or levels of planning
- Identify the main questions that need to be asked and answered in the planning and design of an audio series
- Identify the key people involved in planning and design, and outline their main contributions to the process
- Recognise some of the problems you're likely to encounter in the organisation and management of planning and design, and suggest some possible ways of solving them

By the end of this chapter, you should have a fairly good idea of what is involved in the planning and design of audio materials. The outcome of this activity is a series outline – which sets out what you're planning to do with audio for your distance or open learning students. However, before you can do this, the audio material and supporting print/visuals need to be developed and produced – translated from ideas in your head and on paper, into actual radio programmes or audio cassettes. It's to this activity that we turn in the next chapter.