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# UNIT 4    DEVELOPMENT OF COURSEWARE FOR THE AUDIO MEDIUM

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## Structure

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Power and Limitations of Audio Medium
- 4.4 Planning an Audio Programme
  - 4.4.1 Knowing your Audience
  - 4.4.2 Content Selection
- 4.5 Designing Message
  - 4.5.1 How to Design Message?
  - 4.5.2 Structuring Content for Audio Programmes
- 4.6 Formats of Audio Programmes
- 4.7 Concept, Idea and Treatment
- 4.8 Script Writing
- 4.9 Production of Audio Programme
  - 4.9.1 Audio Recording
  - 4.9.2 Editing
  - 4.9.3 Pre-testing/Pre-listening
- 4.10 Delivery of Audio Programmes
  - 4.10.1 Broadcast: Internet Radio, Community Radio & Podcast
  - 4.10.2 Utilisation: Broadcast and Non-broadcast Modes
- 4.11 Evaluation
- 4.12 Summary
- 4.13 Unit End Exercises
- 4.14 References and Suggested Reading
- 4.15 Answers to Check Your Progress

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## 4.1 INTRODUCTION

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Some of us need an ‘audio’ to wake up in the morning. What is it? It is the alarm. Throughout the day we receive several such audio stimuli in the form of conversations, radio programmes and so on, and many of these help us to learn. Since the last several decades audio has been used as a powerful medium to help people learn. This implies that courseware (used synonymously with programmes in this unit) can be delivered through the audio medium. Units 1 and 2 of this course explain the basics of courseware development, while Unit 3 focuses on courseware development for the print medium. This unit will enable you to develop courseware for the audio medium.

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## 4.2 OBJECTIVES

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After reading this unit, you will be able to;

- Describe the power and limitations of audio medium;
- Design message for an audio programme;
- Develop a script for an audio programme;
- Discuss the production techniques used for developing an audio programme; and
- Describe various modes of delivery of audio programmes.

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## 4.3 POWER AND LIMITATIONS OF AUDIO MEDIUM

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Before developing courseware we need to understand the nature of the medium that will be used for delivering it. Although we have discussed this in unit 2, nevertheless, now we shall discuss it exclusively in the context of audio medium. What are the strengths of audio medium? Radio, and audio programmes (courseware) delivered through CD/DVD have three main advantages over many other electronic means of delivering instructions (Thomas, 2001). These programmes are relatively more:

- accessible to both teachers and students;
- affordable in terms of the costs of production, distribution and use;
- appropriate for a wide range of teaching and learning purposes.

The terms radio and audio are used interchangeably but every radio programme is an audio programme, while an audio programme is not necessarily a radio programme. Only when audio is broadcast on radio, it is a radio programme. A radio programme reaches large audience spread over a large geographical area and this is its major advantage over an audio programme that reaches only those who can access the CD, DVD in which it is recorded.

Although, audio medium cannot show images, still it has several benefits. For example its cost of production and distribution is considerably lower than that of video programmes. Audio technology is also simple and easier to record and share than videos. Audio is also useful when it is used to complement/supplement print medium or is integrated with it.

Even though radio is mass medium it can personalise communication through encouragement and support for learning. We can reduce the drop-out rate through timely encouragement and support provided through radio programmes (Thomas, 2001). Moreover audio programmes can provide tutorial support for explaining concepts and experts' views on an issue. Audio also provides a cost-effective alternative to text (Deakin, 2014) especially when learners (like those visually impaired; without the ability to read) cannot use printed texts. Teaching through radio is also appropriate for teaching language or music when sounds are central to the process of teaching and learning (Thomas, 2001). Therefore, radio has been used in the field of education nationally and internationally since the past several decades. In 1971, the British Open University, in partnership with the BBC, used weekly radio programmes in support of its first four Foundation Courses (Thomas, 2001). Interactive Radio Counselling (IRC) has also been used by Indira Gandhi National Open University (IGNOU) since the last two decades. However, radio as a means for delivering instructions has limitations, which as per Thomas (2001) are:

- Radio programmes are broadcast at fixed time, when learners may not be able to listen.
- Since radio is a transitory medium, its programmes can be heard only once. The pace of a radio programme is also predetermined. As a result, students cannot pause by stopping the programme and think about what they have just heard.
- Radio is essentially a one-way medium. It talks to the student but it usually does not give the opportunity to interact.
- Radio uses audio, a sound-only medium, which lacks the visual dimension necessary for learning.

However, the first two limitations are addressed by the use of audio CD/DVD, while interactive phone-in programmes can address the third one.

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#### **4.4 PLANNING AN AUDIO PROGRAMME**

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Now that you are aware of the pedagogic potential of audio medium, let us study how audio courseware is developed. You have read that audio programmes need to be planned. Before planning audio production, you should ask yourself three essential questions (Thomas, 2001) (i) what needs to be planned? (ii) who should be involved in the planning and design? and (iii) how can the process be best organised and managed? While the first question helps to visualise the step-by-step planning, the second question leads to deliberations about the professionals who could be engaged in planning and designing an audio programme. The third question makes us think about the implementation of the plan.

The planning and design of audio courseware is usually executed at three levels. According to Thomas (2001) these are- Institutional Planning, which refers to planning the allocation of resources for audio programmes and usually involves planning for staffing and budgets; Series Planning involves planning a series of programmes for radio/ audio CD/DVD; Programme planning involves detailed planning and design of one/series of radio/audio programmes. Since the first level of planning is carried out by institutions rather than individual teachers, in this unit we shall focus on programme planning.

Some basic questions, which need to be answered for planning audio courseware, are (Lal, 2008):

- Communication for whom?
- With what instructional objectives?
- By whom?
- With what advance preparation and within what organizational and administrative framework?
- What is available, in terms of time and money?

The first point pertains to the target group's learning needs, previous learning experience, age, access to broadcast and non broadcast modes of instructional delivery; the second one pertains to the content and objective of courseware. The other issues are institutional, and especially the fourth point pertains to policies and organizational structure of the institution producing the audio. Therefore while planning audio programmes, you need to consider target profile (see next section) as well as institutional policies and resources.

### 4.4.1 Knowing your Audience

You read that for planning audio programmes we need to develop target profile. Your listeners are your target audience/audience/target group. For planning an audio programme and effectively communicating the message it is essential to know those for whom you are making the programme. You have read this in Unit 2 but we shall discuss it in this unit in the context of audio. According to Thomas (2001) at least three types of information is useful for knowing our audience. These are (i) demographic data-information regarding the audiences' age, gender, education levels, occupation, environment (e.g. rural/urban), etc.(ii) Knowledge, skills and attitudes-information regarding the audience's previous knowledge as well as their expectations from the course, their expertise, and their attitudes towards the subject matter; and (iii) Access, facilities and study skills-information regarding the audience's access to equipments for accessing audio, like mobile phone, radio; electricity; quality reception of audio signals; earlier experience of learning from audio, broadcast timing, which is suitable for learners.

Obtaining the information is a challenge. To gather accurate and authentic information, you have to carry out 'Audience Research' through surveys, involving administration of questionnaires as well as interviews (see unit 2). Since surveying the needs of all listeners is time consuming and expensive, you can obtain the information in an efficient and economical way by meeting focus groups. A focus group broadly represents the target audience and serves as a sample of the target population. The information it provides helps to create the audience profile.

### 4.4.2 Content Selection

The next step in planning is selection of appropriate content for designing the intended message. You need to consider the pedagogic strengths and weaknesses of audio medium while deciding the type of content you will select. For instance, audio is useful for teaching language, pronunciation, music, themes in history that can be taught by dramatization, and so on. Quiz programmes and storytelling can help to teach certain concepts (Das, 2008). Hence, if the nature of content is such that it does not require visuals, you can teach it using audio medium. Apart from the nature of content, the instructional objectives (see unit2) you have set for a programme will also determine the content you select for a programme.

#### Activity

Listen to any five educational radio programmes and critique the appropriateness of the content selected vis a vis the strengths of audio medium.

#### Check Your Progress 1

Answer the following questions, each within 100 words:

1. Why should you carry out audience research?
2. Mention three advantages of using audio for education.

## 4.5 DESIGNING MESSAGE

Courseware delivers educational message (instructions) and you need to design the message you intend to communicate. Unit 1 describes how courseware is designed. For audio programmes too, message designing is essential. Message designing is a creative process of integrating words, images, motion, sounds into a message that can easily and clearly convey an idea to target audience (Tan, 2010). Further,

successful, well-designed messages are found to be simple, memorable, easily understood, culturally appropriate and meaningful to the audience (Compass, n.d.).

### What is Message?

What is 'Message'? The term 'message' is considered as 'information (content) conveyed from a sender to a receiver (Pettersson, 2012). For example, this unit has message pertaining to development of courseware for audio medium. Similarly, an advertisement, you watch on the television, the news you hear on radio, the content of a newspaper article have 'messages'. The message is communicated by the sender with the intent that the recipient understands it. An educational message may inform, explain, encourage thinking, teach language, cooking, singing, develop positive attitude, for example, for washing hands, immunising children. Thus the message is for learning, and pertains to a particular domain(s) of learning (see Units 1 & 2). It provides a solution that helps the audience fulfil its learning needs.

### 4.5.2 How to Design Message?

Effective messages are clear, accurate, meet audience's needs, and appeal to the audience (Compass, n.d.), and this requires you to know exactly (i) for whom are you making the audio and what are their expectations from the programme, (ii) what kind of difficulties (learning needs) your audience/learners are facing, (iii) what performance/change are you expecting from your audience after listening to the audio? The answers will help you to draft the message.

Message designing involves creation of quality messages that effectively and efficiently influence the thoughts, feelings, and behaviors of the target audience (t, Rivers, Latimer & Salovey, 2008). These authors suggest two methods for designing messages. Although their suggestion is in the context of messages for health, nevertheless, these methods are useful for designing message for audio programmes in general. These two methods are - Message Targeting and message tailoring. Message targeting customises message to the 'shared' characteristics of the target audience. For example weak foundation in math may be a shared characteristic of learners of a math remedy class. Message is hence designed in view of this. Need Survey helps us to determine the shared characteristics of the target group. Message tailoring in contrast fits messages to individual characteristics of the learners, such as an individual's inability to understand Algebra. However, personalization of messages for individual requires greater investment. Hence, usually we carry out message targeting.

While designing message we need to focus on 3Cs (Compass, n.d.):

(i) **Command Attention:** This requires attracting and holding the audience's attention (see unit 1 for techniques for making learners' interested in the content). (ii) **Clarify the Message:** to ensure that the message is clear and can be easily understood. This requires that the message is simple and direct. Avoiding difficult words, and complex sentences helps. (iii) **Call to Action:** Making the audience act in the desirable way. This means that you must tell your audience precisely what they should do after listening to the audio programme. These are the general guidelines for message designing.

Message can be designed in different ways and instructional design is one of these (Pettersson, 2012). You have studied instruction designing (Unit 1) and know that instructional objectives help us to select the message (content). According to Pettersson there are six functional principles of designing message- (i) Defining the problems (ii) Providing structure (iii) Providing clarity (iv) Providing simplicity (v) Providing emphasis and (vi) Providing unity. The message should hence define the

problem, and it should be structured (organised into sections -see unit2), stated with clarity and simplicity and have focal points that addresses your learners' problem(s) (learning gaps). The message should also have linkages among its constituent parts so as to achieve unity in the content. Read the following examples to understand this.

### **Audio programme for teachers**

Audience: Teachers of elementary level

Desired learning outcome: After listening to the audio learners (audience) will list the measures for stopping school children from experimenting with drugs.

Message: Even elementary level children can start taking drugs and, teachers need to adopt various measures to stop children from experimenting with drugs. The measures should attempt to develop the courage and conviction in children to say 'no' to drugs.

Key message: making kids stopping from experimenting with drugs.

We thus 'define' a problem ( young children experimenting with drugs). The message is clear and it will be structured into an introduction that 'commands learners' attention' by saying that even elementary level children are not too young for experimenting with drugs. Thus it contextualises the problem to school situation and teachers' role and thereby clarifies the message. By spelling out teachers' role, it 'calls them to action'. The structuring of the message thus projects 2 focal points –age of experimentation and teachers' role. The various parts of the message structure are about teachers' role and there is thus unity.

### **Audio programme for the second target group**

Audience: General Public

Audience Characteristics: Lacking information about the extent of spread of drug addiction and its consequences.

Desired learning outcome: Awareness about the spread of drug addiction and its consequences

Message: facts and figures highlighting the spread of drug addiction; consequences for society and families; key message - drug addiction is more prevalent than presumed and it has serious social consequences. The message thus identifies a problem, structures it and indicates the focal points.

### **Evaluating the message**

As a means of formative evaluation (see Unit 2), you must share the message including the key message with experts/colleagues and even a sample of the target audience and use their feedback for improving it.

### **Style**

The style of presentation depends on many factors. The target group is an important consideration. You may have listened to radio programmes for children. You may have also listened to radio programmes broadcast for teaching college students. You will find that the style of presentation varies. While for children you will not use serious lectures you may use these for college students. However it is not necessary that a lecture should not include humour. You may use interesting anecdotes and narrate these in a way that makes the discussion interesting.

### 4.5.3 Structuring Content for Audio Programmes

The content of a programme needs to be structured in such a way that it has a logical organisation (see Unit 2). Content organization involves sequencing the content (see Unit 2). Further, the structure is planned by giving due considerations to all the parts of the programme.

The structure should be such that you include at the very beginning of the programme an element to attract the audience. See the examples of messages pertaining to drugs. Both set alarm bells ringing and surprise audience with harsh truths. An interesting beginning is followed by content that tells the audience how the understanding gained from the programme is going to benefit them. After that solution for learners' problem (learning needs) and there after an ending which summarises the content and helps learners to recapitulate, could be included.

Suppose the general idea is to develop a media courseware for senior citizens, you may organize (structure) the message in the following way (Das, 2008).

- Introduce elderly guests who could talk about the joys and the problems of ageing.
- Deliberations on social, legal, transportation, and health services available for the elderly.
- Summing up

#### Check Your Progress: 2

Answer the following questions in about 100 words each.

1. How will you define message?
2. What are the principles of message designing?

#### Activity

Listen to any 10 radio programmes. Classify them under the following heads:

Suitable /not suitable for audio medium;

Suitable for target audience (Children/Young/Old/ General);

Content covered is appropriate/not appropriate.

### 4.6 FORMATS OF AUDIO PROGRAMMES

Which type of radio programmes, do you like the most? Some of you might be fond of drama, while some enjoy discussions. Discussions, drama, lecture, documentary, quiz, magazine, and the like are different formats of radio programmes. A format is a particular class / genre of programme. These formats can be used singly or in combination. Hybrid formats involve combination of any of these formats like Docu-Drama (Documentary + Drama) (Lal, 2008). For educational programmes, documentary, drama, talk, interview, story, discussion, recitation of poems are the most appropriate formats. These formats involve voice and music for emphasising the mood (Lal, 2008). Which format will you choose? Choice of format depends on several factors like audience's age, educational background, nature of content and the like. For example dramatization may work for children while 'talk' may interest adult learners.

The formats of audio programmes are the following:

- (i) **Talk:** This format is the oldest format on radio (NIOS, n.d.). It has been a tradition in countries like India and Britain to invite experts to speak on a specific topic (NOS, n.d.). But in teaching-learning scenario, you need to seriously think about this format with regard to its effectiveness. This is because talk may help to clarify concepts but it can be monotonous. Further for young children lengthy talk may not be interesting.
- (ii) **Interview:** It is a very popular format in mass media, be it newspaper, magazine, radio or television. The interviewer asks questions to interviewee(s), who may be resource persons/experts and thus elicits content for the audience. Suppose a teacher has won an award for innovations and you want to make an audio programme for communicating the innovative teaching methods, then 'Interview' format would be ideal for producing an audio programme.
- (iii) **Discussion:** This format facilitates the audience to get different perspectives pertaining to social, economic or academic issues. The moderator of the programme plays a crucial role and introduces the topic, conducts the discussion in such a way that participants get enough time to reflect and offer their views.
- (iv) **Features:** This format offers scope to integrate most of the formats, within one programme like interview, talk, drama and so on. The audio programme with this format contains real sounds, real people for example in markets, public rallies and brings their opinion and experiences.
- (v) **Drama:** It is more challenging to produce drama on audio/radio as against drama on stage or television. While a stage play has actors, stage, sets, curtains, properties movement and live action, a radio play has only 3 components-human voice, music and sound effects (NIOS, n.d.). In a Drama, voice of each actor is a character and it needs to be used effectively in order to create a visual image of the character as well as of a particular situation, so that the audience grasps these.
- (vi) **Magazine:** magazines are usually published on weekly, bi-weekly, fortnightly or monthly basis. In an audio magazine, you would find the editorial in the beginning followed by articles, reviews, interviews, discussions, talks and so on. However, magazine programmes are generally broadcast for a special or specific audience (NOS, n.d.). It is not a very common format as developing and delivering every week/fortnight/month requires sustained investment.

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## 4.7 CONCEPT, IDEA AND TREATMENT

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For producing an effective audio programme its Concept, Idea and Treatment are important. Developing a '**Concept Proposal**' is an initial step while planning the production. It involves a written proposal for the audio production. While developing the concept proposal also known as programme brief you should include short description of the subject matter, audience, objectives of the programme and other pertinent aspects. See the following example (Box 1 ) of concept proposal that reflect the plan for developing an audio programme. The proposal was developed for an audio programme developed by the Electronic Media Production Centre (EMPC), IGNOU.



### Box 1

**Title of the Programme:** Integration of Technology in the Teaching –Learning Process

**Target Audience-** Mainly the students who have enrolled in the programmes- PGDET and those who have opted for the area of specialization- Educational Technology (ET) of MA (Education). The target audience would be at least graduates.

**Medium:** English

**Instructional Objectives:** After listening to the audio programme, learners should be able to:

Explain the process through which technology can be integrated in teaching-learning processes.

**Summary of content (message):** Technology facilitate teaching and learning. Technologies are often used only by teachers for supporting teaching. However, when teachers and learners both use technology for facilitating learning, there is technology integration. This is achieved through well defined processes that integrate technology into instructional processes.

**Rationale of the Programme:** To supplement the information provided in the printed courseware **Format:** Interview

**Duration:** 15 minutes (Signature Tune and Announcement -1 minute; Introduction of the Theme -2 minutes; about 3 -4 questions and answers -10 minutes ; Summing Up-2 minutes)

**Audio-** Talk; and music at the beginning and end of the programme

**Resource Persons:** 2 Subject Experts (Interviews and Interviewee)

Production time line including schedule of recording, editing and other post production processes: 5<sup>th</sup> -19<sup>th</sup> June 2017.

### Idea

What is an Idea? Idea communicates the concept. For example for producing an audio on 'Waste Management' for the general public, you would like to communicate your "Idea" in such a way that the concept of 'Waste Management' is easily conveyed. For example you can

use the idea of 3R mantra-"Reduce, Reuse and Recycle" to communicate the concept. To develop an idea you need to read literature pertaining to the content. After forming an idea you need to reflect on its suitability for your audience? You may find alternative ideas for conveying the concept of 'Waste Management'. The proposal in Box 1 is for communicating the idea of technology integration in teaching-learning processes. The idea is to explain that technology integration means not only teachers but learners too use technology for learning.

### Treatment

Treatment contains the expanded descriptions and outlines each segment of the audio, and suggests different types of audio (narration, sound effects, music) to be used and how visual elements will be communicated through audio. For example for communicating a segment about someone waiting anxiously for a family member on a rainy night, sound effects of a clock ticking, the pendulum striking twice, rainfall,

crickets chirping, voice saying with anxiety that he has not yet come back and music that creates the mood of anxiety will make the audience understand that it is night, it is raining and make them feel the anxiety suffered by the character. On the other hand narratives about benefits of playing, sound of children shouting and laughing and suitable music can be included to make the audience visualise the situation. The content of the audio is thus expanded to show what the audience will hear, feel and think. Unlike a video, treatment for an audio programme will not include the details pertaining to visuals but communicates it verbally and through other sounds.

### **Sound effects to be used in the audio programme**

In an audio programme, apart from human voice, recorded sounds are used. These are music, sounds of nature like rainfall, birds singing, wind, breeze blowing, rustling of leaves, waves of sea, lightning; sound of vehicles, noise on the street, and so on. Sounds are inserted at appropriate points in the audio. Sound effects also known as action sounds, symbolize the atmosphere or a locale such as that of a battle field, rain, thunder, gunfire, fair, market, running train, etc. to heighten the effects of the content (Das, 2008). For instance ‘morning’ can be created by sounds of chirping of birds, crowing of roosters, etc. Sound effects of strong winds, and thunder can indicate a season or weather conditions. Background sound thus supports the programme, and enriches the experience.

Music is used for communicating different emotions like happiness, sadness, excitement, humour and so on. Similarly carefully used silence provides meaningful support to the programme. Silence when used continuously for a few moments can convey feelings like sorrow, death, tension. Sudden silence or sudden noise indicates tension in the situation. Thus sound effects are designed to serve the purpose of establishing locale, time, change of time and place, mood and so on. You can use those available in a studio or download open source sound effects.

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## **4.8 SCRIPT WRITING**

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After you have planned the audio programme and expressed your plan as a proposal, the idea of the message and its treatment, you need to write the script. The content to be communicated through an audio programme is turned into a script. However, for formats like interviews and panel discussions, the content is not scripted in advance but generated by the speakers on the spot. Nevertheless for these formats deciding an outline of what would be covered will help you in including the key points and in keeping the discussion focused. For example, for an interview on development of speaking skills, the expert (teacher) may be asked to describe the barriers to the development of speaking skills, the methods of developing speaking skill, and success stories from her/his classroom/school. However, these outlines do not comprise a script.

A script is required for formats like drama, talk, and so on. You may have listened to such audio programmes that were based on scripts. What are the features of the script? Writing for an audio script is writing for ‘hearing’ and it is referred to as ‘spoken word’ as against the ‘written word’. The spoken words are written down in the form of a script (NIOS, n.d.). You should remind yourself that *‘I am going to write for the ear, not for the eye’*. As our primary concern is that an educational audio courseware should have clarity, therefore, the content should be such that hearing clarifies it. For example, a video script does not have to mention that a character is wearing red coloured dress but an audio script needs to clarify it if the colour of the dress is significant for the programme.

The script should also be able to engage the audience and sustain their interest throughout the programme. You also need to be careful about the length of the script, especially because long duration programmes are not likely to sustain learners' interest. The script should therefore be able to clarify the concept and its key points comprehensively but without taking too much time. Hence it is better to revise the draft script and eliminate superfluous elements and repetitions.

The script is the key to any successful production and you need to consider the following elements of script writing for an effective script:

- **Hooking the Audience:** You should hook your audience (commanding attention- see the previous section on designing messages) at the beginning. It is very important how you begin the programme. It is a crucial moment as your audience will decide to listen to the radio/audio programme or turn their attention to some other activity. Hooking can be done by surprising the audience/ by creating curiosity/ by using humour and other such means suggested in Unit 1. You also need to tell the target audience what the programme is about. Therefore, in addition to drawing learners' attention, the introduction should also highlight the programme's objectives so that the audience is aware of the utility of the programme.
- **Writing as per audience profile:** When you write for the local audience/ target group known to you, you can use the language and even dialect of the locality and contextualise the script to their needs but these things are difficult while writing for a wide audience (Das, 2008). However, one major factor is age and, hence, writing style for children, adolescents and older people will be different.
- **Clarity:** It is important to have clarity in the script. You must write short simple sentence and avoid difficult words. A programme lacking clarity will not sustain learners' interest. The writer should therefore be a subject expert having thorough knowledge of the concept. Moreover when you write for the ear learners will have to understand the message after hearing it once, unlike text which they may read a few times for understanding.
- **Use active voice:** See Unit 3
- **Avoid assumptions that learners will understand:** Text often includes content within parenthesis (brackets) for linking the content to some other content, expanding abbreviations and so on but audio does not allow this. The script should clarify what the learner is expected to understand.
- **Creating pause:** Since, audio allows only transmission of information and disallows interaction, you need to make learners pause to think by asking questions like 'Do you agree with me?', 'Have you heard something like this before?', 'Listen to this speech, try to recognize the speaker'. Then you may answer 'You may not agree but it is true', 'You might have heard earlier but you might not have analysed why it is happening so frequently!', 'Could you recognise the voice? Ok! Let me you tell you... this is the voice of Netaji Subhash Chandra Bose!'
- **Reinforcement of Learning Points:** You need to reinforce the learning points by clarifying the concept (s) repeatedly so that it registers in the mind of your audience.
- **Linking all the Concepts/Learning Points:** From beginning to end, you need to link all the concepts so that these are not presented in a disjointed manner.

- **Include few concepts:** The content should not include more than a few concepts as attention span of learners, especially children is not very long. Therefore include few objectives.
- **Recapitulation/Summing-up:** The end part of the script is significant. The programme should not end abruptly. It should be smooth. It should also summarise the content and highlight the central idea or the main theme and reinforce it before the programme concludes. You can end on an inspiring note so that your audience/learner would be motivated to learn more after listening to the audio.
- **The subject matter should be thoroughly researched:** This is necessary so that it is accurate, up to date and relevant.
- **Avoid mentioning specific time and date:** The programme should not be written with specific time or date, as it is likely to be broadcast/ played repeatedly. For instance ‘good morning’ or ‘happy new year’ and the like should be avoided as the programme may be broadcast at a different timing.
- **The writing should not be the reproduction of the content from a text book/other sources:** It may be based upon the text to promote learning but it has to be adopted and rewritten for audio format.
- **Soothing music and appropriate sound effects:** These elements enhance the quality of audio programme.
- **Language:** Use language, which is easily understood and used by people in their daily life. It should not sound too formal. While writing for the audio programme, we should also address the audience directly on a one to one basis, like you know, have you heard?
- **Take care of copy right:** Content used for audio should not violate copy right laws.

Writing an audio script is thus an art that requires mastery over the content, sound knowledge of the target audience, and also requires good story telling skills (Lal, 2008). A good story captures (hooks) the listener, keeps the audience interested and presents a problem and its solution with which the listener can identify. It can also include humour. Further transition from one part to the other part should be smooth. Hence new characters and themes are not introduced abruptly. A script needs all these features. Writing such a story (script) requires skills and hence training and practice.

### Testing the script

You should show your draft script to your peers/colleagues/friends and especially to your producer to find out whether the script communicates the message clearly. You may also show it to a sample of learners. The feedback can improve the script.

Read two sample audio scripts.

**Format:** Drama

**Target Group:** Primary School Children

**Duration:** 5 minutes

**Title:** Don't Waste Water

**Characters-4** (Mother, Father and 2 Children: Rohit & Ravi)

**A Female Voice (Mother) (calling out):** ‘Rohit, Ravi, wake up, you will

be late for school. The school bus will be here soon. Get up, hurry up, brush your teeth, after taking bath get ready, fast. (**Sound Effects:** Alarm clock buzzing, birds chirping).

**Child 1** (Ravi) saying lazily: 'okay ma, getting up '

**Child 2 (Rohit):** I got up, much before Ravi'.

**Child 1:** No, I got up first

**Mother:** Stop arguing. Hurry up, both of you.

(**Sound Effect:** Water falling from a tap; water splashing; children laughing and shouting)

**Father (in an angry tone):** What are you doing? Close the tap if the bucket is full.

(**Sound Effect:** Water falling from a tap, water splashing; children laughing and shouting)

**Father and Mother (in quick sequence):** What are you doing? You seem to be playing with water.

(**Sound Effect:** Water splashing)

**Rohit:** Look I am filling up the bucket and Ravi is throwing out water.

**Ravi:** No, not I, Its Rohit who is filling the basin with water.

(**Sound Effect:** Water falling from a tap; water splashing; children laughing and shouting)

**Mother:** We shall not have any water left in the tank today. Stop, both of you. Close the tap.

(**Sound Effect:** Water falling from a tap; water splashing; children laughing and shouting)

**Father:** Open the door, let me in, oh the soaps are in the buckets. The water is all soapy. Why are all the taps in the basins open? See how much water is flowing out? Close the taps, will you? Well there is no need; the water in the tank is almost finished.

(**Sound Effect:** Knock on the door; Water trickling)

(**Music:** indicating father's tension)

**Ravi:** Papa, my eyes hurt. There is soap all over my face, give me some water, quickly, quickly, please.

(**Sound Effect:** a child crying)

**Rohit:** Even one mug of water will do, please get me some, my eyes also hurt.

(**Sound Effect:** child crying)

**Father:** The water in all the buckets is soapy. The water tank has no more water now. There is no water left for washing your face. Go to school today with soap all over your face. You will come back to a dirty house and stay hungry and thirsty. There is no water for cooking, cleaning, and even drinking.

(**Music:** somber)

**Mother:** Water is not sunshine or air that you use as much as you want to. If you waste it you won't have any left.

(**Music:** somber)

## SAMPLE AUDIO SCRIPT

### Title: World Habitat Day

**(Dramatised Sequence: Two young colleagues are discussing in their office)**

**Ragini:** What happened Sangeeta? After reaching office, you have washed your face three times. Are you ok?

**Sangeeta:** Ya! I am fine but Ragini today I was trapped in a horrible situation!

**Ragini:** What happened?

**Sangeeta:** I saw today the real face of my City... What an Ugly Face of my Metro! The main road was littered with waste. The rain brought down the waste piled by the road side to the road and the dustbins have overflowed. What a filthy smell!

**Ragini:** Ya! I have seen this happening several times. When we will be get rid of this?

### (Change over Music)

**Narration (Male Voice):** Before going for work in the morning in a metropolis, there are many concerns. Do you know that one concern is whether the person who goes door to door, collecting waste will come on time? What, if the person does not come for one day? What, if this happens for 3 days? Not knowing how to dispose of waste is an individual's concern as well as a global concern. This is due to increased consumption, increasing production of waste and ineffective waste management strategies.

**Narration (Female Voice):** Waste Management is critical for sustainable urban development. The United Nations has designated the first Monday of October of every year as World Habitat Day. The purpose of World Habitat Day is to reflect on the state of our towns and cities. It also reminds us that we all have the power and the responsibility to shape the future of our cities and towns. The theme for World Habitat Day on 1 October 2018 is "Municipal Solid Waste Management".

**Narration (Male Voice):** Cities often spend a large proportion of their budget on Municipal Solid Waste Management. Solid Waste Management is a global issue that affects everyone. The amount of waste produced by individuals is growing daily. As a result, it often costs local authorities a large proportion of their budget to manage waste. Poor solid waste collection and disposal can lead to serious health problems from uncontrolled dump sites and waste burning. It also leads to polluted air and water.

**Narration (Female Voice):** Developing countries often have inadequate waste management systems due to lack of financing, poor awareness, poor governance systems and sometimes inappropriate applications of technological solutions. Poor collection and disposal of municipal solid waste causes local flooding and water pollution and accumulated waste provides a breeding ground for rodents and insects which spread disease. Marine litter and erosion of coastal dumpsites contribute to marine pollution.

**Narration (Male Voice):** Municipalities often spend a great part of their budget on waste management. Aside from high investment costs for equipment,

a sizeable number of staff is also required. The quality of a city's waste management system is often used as a guide to the overall effectiveness of municipal management. **Narration (Male Voice)**

It is well recognised that municipal waste management needs and approaches varies. UN-Habitat thus promotes an "Integrated Solid Waste Management Framework" which envisages: good waste collection services; environmental protection through proper treatment, disposal and resource management; cost-effective, affordable, and inclusive solutions which also recognize the role of informal and micro-enterprise sectors in achieving high rates of recycling. A change in public attitudes is also essential. This would minimize waste. Sufficient funding and solid waste planning including adequate landfill sites, can also help cities to improve the current state of solid waste management and save money. Citizens also need to be encouraged to adhere to 3R strategies: Reduce, Recycle & Reuse. Cities would certainly then become 'Waste-Wise Cities'.

### Check Your Progress: 3

Answer the following questions in about 100 words each:

1. What are the various formats of audio programmes?
2. Develop the Concept Note for an audio programme on 'Donate your Eyes'. What would be your main idea to convey the concept?
3. Discuss the features of audio script.

### Activity

Critique the structure and format of a radio programme.

## 4.9 PRODUCTION OF AUDIO PROGRAMMES

After planning the audio programme is produced. The process of the production of an audio programme usually involves three stages. These are- pre-production, production and post-production stages. We have already discussed the stage of Pre-production which includes 'Knowing your Audience', 'Selecting and structuring the Content', 'Designing the Message' and 'Writing the Script'. During the production stage, the audio is recorded in the audio studio and also at outdoor locations. Recording is followed by the Post-Production stage. Editing, Mixing and adding Sound Effects are carried out at this stage.

### 4.9.1 Audio Recording

There are four basic stages in Audio Recording (Oblivion, 2015). In the first stage the recording engineer decides the type of microphone (Uni-directional or Omni-directional, Condenser or Dynamic) to be used and checks the positioning of microphones placed for the participants and musical instruments. The second stage involves editing. At this stage, the recording is edited, and it includes tuning/balancing the voice, clearing up any noise (background sound, fumbles and other unwanted sounds). The third stage involves the mixing of the tracks when various sound effects and background music are mixed. In the fourth and final stage there is mastering, which is the most important aspect of the project (Oblivion, 2015). Mastering involves preparing and transferring the audio recording from a source that has the final mix to a data storage device (the master), which is the source from which all copies will be produced for distribution. To know more and practice, visit

<https://opensource.com/article/18/2/open-source-audio-visual-production-tools>

<https://opentextbc.ca/teachinginadigitalage/chapter/9-5-2-audio/>

### 4.9.2 Editing vs. Capsuling

You know that newspapers have editors. The content you are reading has also been edited by an editor. What about audio editing? Audio editing is like editing a written document but instead of manipulating words by deleting, replacing, copying, and pasting, we manipulate sound (Agarwal, 2014). This involves manipulation of audio to alter length, speed, and volume (Media music now, 2019).

Techniques of pre-digital age editing like taping on analogue tape and splicing by razor blades are now obsolete. Now audio editing involves the use of audio editing software. Selection of audio editor software depends on factors like purpose of using the editor, your skill level, and budget position. Some audio editors are - Adobe Audition CC (macOS, Windows), Audacity (macOS, Windows, Linux), okenaudio (macOS, Windows, Linux), Acoustica Standard Edition (macOS, Windows), and so on. Audio editing is, however, different from ‘capsuling’. Capsuling is a process of joining more than one programme (which are already edited as units of programme) for broadcast purpose without much use of editing techniques.

### 4.9.3 Pre-testing/Pre-listening

Before broadcasting the audio/putting on public domain, pre-testing/pre-listening is essential. Teachers can carry out academic preview to ensure that the content and pedagogy are appropriate. You also need to check that there is no gender bias, violation of broadcast code, copy right issues, etc.

#### Check Your Progress: 4

Answer the following questions in about 100 words each:

1. What is audio editing?
2. Why pre-testing/pre-listening is important?

#### Activity

Record the opinion of your friends/family members on ‘the Importance of Yoga’. Record an introduction and a summary for the content. Add these recordings to the first one by using editing software.

## 4.10 DELIVERY OF AUDIO

After print, audio is the most flexible and user-friendly medium which allows you to teach (Rowntre, 1999) but how can you deliver audio programmes to your audience? Which mode of delivery would you like to adopt? The mode of delivery of audio programmes can be broadly divided into two categories: Broadcast and Non-broadcast. Broadcast mode of delivery uses Internet Radio, Community Radio and podcasts, non-broadcast mode of delivery includes uses CD, DVD, etc.

### 4.10.1 Broadcast: Internet Radio, Community Radio and Podcast

Besides traditional medium like Radio/FM Radio, new media like Internet Radio, Community Radio & Podcast are being used for reaching the target audience. Let us discuss these:



- (i) **Internet Radio:** Internet radio includes audio services that are transmitted via the Internet (Techopedia, n.d.). We use the word ‘webcasting’ for internet radio as it is not actually broadcast through radio signals. It is a form of streaming media and the content is usually delivered live. Mostly, a traditional radio station simply streams its content over the internet in simulcast with traditional radio signals. The internet radio can be heard anywhere in the world if there is access to Internet.
- (ii) **Community Radio:** To deliver audio programmes to audiences with varied needs Community Radio is an important medium. Community radio is usually a short-range, not-for-profit radio station or channel that caters to the information needs of people living in a particular locality, in the languages and formats that are most adapted to the local context (Endvawnow, 2012). Community radio is usually run by volunteers with low-cost technology and is believed to be an excellent way to communicate with local communities.
- (iii) **Podcast:** A podcast is a digital audio file made available on the Internet for downloading to a computer or mobile device, typically available as a series, new installments of which can be received by subscribers automatically (Winn, 2019). The term Podcast is actually a combination of iPod and Broadcast. Although, podcasting started on an individual level to build a community of people with similar interests by posting message to them but today there are also podcasts from companies (large and small), radio networks, TV networks and so on.

#### 4.10.2 Utilisation: Broadcast and Non-broadcast

As far as Broadcast is concerned, Delhi Gyan Vani, FM Radio available online ([www.ignouonline.ac.in/gyandhara](http://www.ignouonline.ac.in/gyandhara)) is used for educational broadcast from 8am to 8pm. The Interactive Radio Counselling (IRC) Sessions are being organised regularly for IGNOU’s students by various Schools and Divisions of IGNOU. Similarly, eGyanKosh, a National Digital Repository is created to store, index, preserve, distribute and share the digital learning resources developed by the Open and Distance Learning Institutions in the country (<http://egyankosh.ac.in/>). Audios are available in this repository for educational purposes and this is a non broadcast mode of delivering the program. IGNOU’s study centres also have audio CDs developed by IGNOU.

#### Check Your Progress 5

Answer the following questions in about 100 words each:

1. What do you mean by delivery of an audio programme?
2. What do you mean by Internet Radio? Give some examples.

#### Activity

Listen to Community Radio Programmes for a week. Discuss the programmes that deal with local issues.

### 4.11 EVALUATION

You have read about evaluation of courseware in Unit 2. You have also read about the tools for evaluation and about formative and summative evaluation. Hence, we shall not discuss these in detail in this unit. Right from the script to the final courseware, formative evaluation is necessary. After the production of the programme it should be previewed and content experts, media experts and representatives of the target

group should be involved in the preview. Feedback can be obtained for the following (Lal, 2008):

- How far have the objectives been achieved?
- Is the content appropriate?
- Is the language appropriate?
- Is the pacing of the programme appropriate?
- Is the background music appropriate?
- Is the programme self-contained?

Summative evaluation reveals the impact of the programme and the need for altering the inputs. We have discussed this in Unit 2.

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## 4.12 SUMMARY

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In this unit, we first discussed how audio programmes are planned in keeping with the audience profile and learning needs. We also discussed the power and limitations of the audio medium and their implications for selection of content. Next, we explained how message is designed. We have also discussed how radio programme is structured, and the types of formats of audio programmes. Further, we have described the concept note, idea and treatment that involves expansion of the concept proposal. After that we have discussed how to carry out script writing.

We have discussed the production of audio programmes and have discussed the stages of recording, the process of audio editing, and the purpose of pre-testing. After that we have discussed the various modes of courseware delivery and evaluation of courseware.

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## 4.13 UNIT END ACTIVITIES

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1. Select a topic for audio courseware and develop its programme brief.
2. Write a script for an audio programme for generating awareness about traffic rules.
3. Mention the sound effects that you would include for a busy street; a play school
4. For developing an audio courseware on stress management for board examinees, select an appropriate format and develop a script. The duration of the programme should be of ten minutes and it should address adolescent learners.

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## 4.14 ANSWERS TO CHECK YOUR PROGRESS

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### Check Your Progress: 1

1. Hint: Audience is the key element and planning of an audio programme largely depends on the need of the audience. Audience research would help us to gather reliable and relevant information about the audience.
2. Hint :
  - (i) It is easily accessible-to both teachers and students
  - (ii) It is affordable-in terms of the cost of production, distribution and use
  - (iii) It is appropriate-for a wide range of teaching and learning purposes

### Check Your Progress: 2

1. Hint: The term 'message' is considered as information i.e. content conveyed from a sender to a receiver.
2. Hint: Six Functional Principles: of message designing are-
  - (i) Defining the problems,
  - (ii) Providing structure
  - (iii) Providing clarity
  - (iv) Providing simplicity
  - (v) Providing emphasis and
  - (vi) Providing unity

### Check Your Progress: 3

1. Hint: Talk, Interview, Discussion, Features, Drama, Documentary & Magazine
2. Hint: Main idea: Convince public with logical arguments about the need to donate eyes.
3. Hint: Hooking the Audience, bringing clarity, creating pause, reinforcement of learning points, linking all the concepts/learning points & recapitulation/summing-up

### Check Your Progress: 4

1. Hint: Editing is manipulating sounds
2. Hint: It is to confirm that our programmes are having no factual mistakes and the pedagogy and other aspects are appropriate.

### Check Your Progress: 5

1. Hint: reaching audience.
2. Hint: Radio through the internet