**Elements of Radio Production**

You have already studied about the ingredients of a radio format. Can you recall them? They are:

Human voice or spoken word.

Music

Sound effects

The various elements of radio production flow from the above ingredients of a radio format.

So let us look at the main elements of radio production.

1. **Studio :** In the previous lesson, you have learnt that the radio studio is a room where radio programmes are recorded. For producing a radio programme, you need a ‘sound proof’ studio where human voice can be recorded or broadcast in the best manner.
2. **Microphones:** For our voice to be recorded in a studio, we use a microphone. You might have used or at least seen microphones. They amplify or in other words ,increase the volume of your voice. When you speak before a microphone, you don’t have to shout. You speak normally and it will be made louder if you use a loudspeaker to listen to. When we think of radio, the microphone is the most important element using which you present your programme.

There are basically three types of microphones and they are known by their directivity. As you go through the following text, you will understand the term ‘directivity’.

1. **Uni-directional microphone : As** the name suggests, this microphone picks up sound from one direction. As you speak in front of it, your voice is picked up. If you speak from the other side of the microphone, your voice will not be picked up properly. In a radio studio, the announcers, presenters and newsreaders use this type of a microphone.

A microphone is very sensitive and you need to use it carefully. You should be at the right distance from it when you speak. Otherwise, your voice will not sound good. Even if you turn a paper or breathe heavily, the microphone will pick up that sound and your programme or your voice will be affected.

**Bi-directional microphone:-** Here again as the name (bi) suggests, the voice or sound is picked up from two directions. If you are recording an interview in a radio studio, you may use this type of a microphone.

**Omni-directional microphone:** You may be familiar with the word omni. We say god is omnipresent, which means ‘present everywhere’. In the case of an omni-directional microphone, it picks up sound from all directions. This type of microphone is used when a number of voices are used in a single programme like a radio discussion or a radio drama.

There are many other types of microphones which come in different sizes and lengths. If you watch television programmes, you may find a small microphone clipped on the collar. This is called a ***lapel microphone*** which is actually a uni-directional microphone. These microphones are not normally used in radio. Then there are long microphones called ***gun microphones*** used in sports production. These microphones are often omni directional ones. There are also ***cordless microphones.*** You might have seen them being used in stage shows. They do not have any cables or wires attached to them. They have a small transmitter in them which can send the sounds to an amplifier.

**Sound effects :** Sound effects in a radio programme give meaning and sense of location. It adds realism to a programme and helps a listener to use imagination.

Think of a crowded market or temple. If you are creating that scene in a radio programme, you do not have to go to a crowded market or temple to record. Well, you can record those sounds and use them. But in most cases, you use sound effects which are already recorded. Sound effects can be used in two ways:

spot effects or effects that are created as we speak and

recorded sound effects. If you are recording a radio programme in which someone knocks at the door, you can make a knocking sound either on a door or a wooden partition. Or you want to show that someone is pouring water from a bottle into a glass; here again you can use the actual sounds produced on the spot. But if you want a lion roaring or a dog barking, you probably cannot bring a lion or a dog to the studios! Here we use recorded sounds which are kept on tapes or discs. Almost all sounds are available on CDs which you can try and use. There are also certain types of computer software available for this.

You can also create sound effects.

You can use two coconut shells to produce the sound effects of the sounds of horses’ hooves.

Take a piece of cellophine paper or aluminum wrapper and crush them in front of a microphone. Record the sound and hear. It will sound as if fire is raging. You can think and create many such sound effects.

However, there is a word of caution. If you record an actual door opening, you many not get the real feeling of a door opening when you record it. What matters is what it sounds like and not what it is.

**Music :** Music is the soul of radio. It is used in different ways on radio as already discussed in the earlier lesson. Film songs and classical music programmes are independent programmes on radio. Music is also used as signature tunes or theme music of various radio programmes.

Let us see what music does to any programme.

Music adds colour and life to any spoken word programme.

Music can break monotony.

Music is used to give the desired effect of happy or unhappy situations, fear or joy.

Music can suggest scenes and locations. For example, you have to create a bright early morning situation. This can be done by playing a pleasing note on the flute along with the sound of chirping birds.

**Artificial echo:-** If you enter an empty building or fort and shout, your voice will come back to you. This is called on echo. An echo is used in radio programmes. This is a technical input.

**Filter or distort:** If you listen to someone speaking to you on phone, the voice would not sound normal. This sort of effect called distort is produced using technology. Some times distort is used along with echo. Think of someone speaking from a mine 100 feet below the earth. To make it realisitic, distort and echo are used.

**Human voice:** The main stay in any radio programme is the human voice. Think of the voice of an announcer or newsreader on radio. You often find them very pleasant and nice to listen to. That is because of the quality of their voice and the proper use of it. There are two aspects of the use of human voice in radio production. Firstly, there has to be a well written script to be spoken and then someone has to speak or read it before a microphone in a studio.