

## AUDIO VISUAL EDUCATION

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Module 1	Introduction to Instructional Design
Unit 3	Media and Audio Visual Aids

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Instructional Objectives:

1. Differentiate stimulus and response.
2. Classify by definition the process of learning.
3. Define media and audio visual aids.
4. Differentiate between media and audio visual aids.
5. Distinguish between projected and non-projected aids.
6. Categorise teaching aids as aids that can be heard, seen, and heard and seen.
7. Identify and sub-classify aids as projected aids, non-projected aids with the addition of sound or without sound.
8. Classify by definition perception and relate it to the design of audio visual aids.
9. List five recognised contribution of audio visual aids to learning.
10. List three levels of audio visual aids production activity.

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Module I : INTRODUCTION TO INSTRUCTIONAL DESIGN

Unit 3 : MEDIA AND AUDIO VISUAL AIDS  
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We will now begin:

1. Module I - Unit 3 : Media and Audio Visual Aids.
2. This course is developed for making you aware of the importance of audio visual materials in the teaching - learning process and to develop skills in planning, developing and use in actual learning situations.
3. We have covered under Unit 1 and 2 of this Module, the system approach to instructional design and basic concepts on instructional technology. Selection of audio visual aids should not be considered in isolation.
4. You need not use an aid, just because you have one, if it does not fit into your system design. We are hopeful that all of you are progressing satisfactorily.
5. In Unit 2 of Module I, you have hopefully learned the basic concepts about instructional design. If you have not, you may contact your Instructor personally to get further guidance. You may need individual attention.
6. Refer work-book page - Read the objectives 21 to 30. We have designed our instruction with behavioural objectives. (STOP AND RESTART AFTER 2 MINUTES).
7. You must respond to every stimuli. The work-book provided to you contains a number of questions. You must answer each one of them, when you were

required to do so. If you are not doing so, you are not interacting to various stimuli presented.

8. This activity is active participation.
9. Learning occurs through active participation.
10. Interacting to a spoken word is a stimulus - response pattern.
11. In the same way, our question to you is a stimulus and your answer is a response.
12. A red light at any road crossing signal means STOP.
13. A green light means GO. The arrow gives direction to which side you must proceed.
14. When you stop at a red light, you are responding to the signal i.e. stimulus because you know, you are asked to stop at red signal.
15. Similarly you know that you can cross the road at green signal and that means you can GO.

Both green and red lights are stimulus and your action-crossing/not crossing - is a response.

There are many forms of stimulus. A written word, a picture, a film, a TV programme or anything that can elicit response from you can be stimulus.

16. A programmed text-book can elicit various responses to different stimuli presented therein. During reading of the text, you participate at every step, and if not mere reading may or may not be able to bring the desired changes in you. Just like programmed text-books, you can be taught through various other programmed courses. This is one such course. Active participation helps you learn better and faster.
17. Let us now define stimulus and response.

Each specific reaction is an exact response to a specific sensation or stimulus.

18. The behaviourist theory interprets man's behaviour as connections between stimuli and responses. When we modify human behaviour, we say learning has taken place, i.e. when he thinks or acts differently, when he has acquired new knowledge or skill or shows a changed attitude.
19. Refer to work-book - Module I Unit 3. Answer question 1 & 2. (STOP FOR 2 MINUTES AND THEN RESTART) Question 1. Differentiate stimulus and response.

Each specific reaction is an exact response to a specific sensation or stimulus.

Examples -

Spoken or written words, simple pictures and all audio visual aids are examples of stimuli.

Your reactions to these are responses. If your answer is in these lines you have done well.

Question 2. Learning takes place whenever an individual's behaviour is modified, i.e. when he thinks or acts differently showing he has acquired new knowledge or skill or shows a changed attitude. The process of learning is an individual's experience.

20. Conventionally you teach through a lecture or demonstration and dictate notes.
21. You may use a black-board and perhaps refer to text-books if any.
22. While this allows learning to take place, there are other methods which can improve your teaching and learning.

23. You can teach through pre-recorded tapes, film strips, slides, maps, charts, models, video tapes, or a combination of any or all of them.
24. Books, black-board, Teacher-teaching, etc. are part of traditional or conventional media, whereas
25. Sound-slide presentation, filmstrips, motion picture, TV or video tapes, work-books or similar instructional materials are called modern or new media, or a combination of any or all of these called multi-media.
26. Book, work-books, films, TV, Video, Sound-slides, records Audio, teacher's voice are all physical means of conveying instructional inputs called media.

Media are direct instructional inputs and essential ingredients in teaching-learning process. They are not mere aids. All media teach.

27. Media are determined within the instructional design by the requirements of objectives, content and method.
28. It is a part of instruction. It can present stimuli and elicit response. Stimuli is presented with or without a teacher. When the choice to proceed at his own level and pace, is given to the student, we call the learning as individualised learning.
29. A teacher for every student will be a tutorial system.
30. Individualised learning systems are good, but costly.
31. Audio visual aids can be planned and produced or even purchased as individual items,

32. by a teacher to assist him in his instruction,
33. as supplements to teaching or for enrichments to regular instruction.
34. The teacher uses A.V. aids during instruction to transmit to learners, skills, attitudes, knowledge, understanding, appreciation etc.
35. Many subjects can be effectively taught by the teacher, but careful selection and use of aids, enhance his teaching capabilities. They improve learning.
36. Refer to work-book, Module I of this unit, Answer question 3 and 4 (STOP AND RESTART AFTER ABOUT 3 MINUTES).
37. Answer to question 3 (a) would be:  
Media are direct instructional inputs and essential to teaching - learning process. All media teach and are part of instruction.
- Answer to question 3 (b) would be:  
Audio visual aids are instructional devices that are used as aids by a teacher while imparting instruction. They can be used as supplements to instruction or for enrichment purposes.
- Answers to question 4 are (a), (b) and (c). Have you ticked them? You know that audio visual aids are devices that assist an instructor.
- While media forms part of instructional design, A.V. aids forms part of instructional strategy; While media is an integral component of a system A.V. aids are used to aid the teacher, as supplements to instruction or for enrichment purposes.
38. Audio visual aids are broadly classified as projected and non-projected aids.

39. While projected aids require a projection equipment non-projected aids do not require any such equipment.

40. Projected aids can be used with or without pre-recorded sound.

41. Visual aids can be seen, but not heard when used without sound.

42. Non-projected aids can be either visuals only, or audio only.

43. Audio aids can be heard, but not seen.

44. Examples of projected visual aids are:

Actual objects	Chalk boards Bulletin boards Flannel boards	Posters Charts Maps	Photo-graphs	Models Mock-ups	Printed materials including books
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45. Examples of projected aids are:

Slides Film strips	Overhead transparencies	Motion-pictures	Television
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46. Now refer to work-book and answer questions 5,6 & 7. (STOP THE PRESENTATION FOR 5 MINUTES AND THEN START).

47. Question 5.

Non-projected aids are those that require no projection equipment and projected aids require equipment.

Examples of the former are posters, charts, maps, models, mock-ups, books etc., and the latter are filmstrips, slides, motion picture films, O.H. transparencies, television etc.

48. Question 6.

Audio aids can be heard only.

Visual aids can be seen only and

Audio visual aids can be heard and seen.

49. Question 7. You can see for yourselves the answer to question on the screen. N.P. denotes Non - projected aids, and P projected aids. Letter S is added to either P or N.P. to indicate that sound is added.
50. Audio visual aids have been produced and used for many years. Many of these materials do excellent jobs of imparting knowledge, of teaching skills, of motivating or of influencing attitudes.
51. The materials that we produce must be effective for the purpose for which they are made. How to get guidance?
52. There are three areas of particular interest. One is developing behavioural objectives, also called instructional objectives. Second one is to find the effectiveness of such materials. Third, but important step is the need to know how people communicate with each other, and how people learn.
53. Therefore you must be aware of generalization from the areas of perception, communication and learning theory.
54. Perception is the process whereby an individual becomes aware of the world around him. Our senses through the eyes, ears, nerve endings, nose, and tongue are primary means to make contacts with environment. These senses are the tools of perception.
55. Within the nervous system, the impressions received through the senses, creates an awareness of the object or event. Perception precedes communication. Communication leads to learning.

56. Any perceptual event consists of many sensory messages, that do not occur in isolation, but are related and combined into complex patterns. These become the basis of a person's knowledge of the world around him.
57. Second, an individual reacts to only a small part of all that is taking place around him at one instance. He selects the part of an event he wants to experience, that attracts attention, at any one time.
58. Hence when designing A.V. materials, one needs first to design materials that attracts the attention and hold the interest of the learner, making it certain that in this sampling procedure, he gets the right sample relevant to the learning task.
59. The experience of perception is individual and unique. It is not exactly alike for any two people. A person perceives an event in terms of his past experiences, present motivation, and present circumstances.
60. When you design audio visual materials, keep in mind the importance of providing desirable perceptual experiences in terms of the learner's experience, back-ground and present situation.
61. Refer to your work-book and answer question 8. (STOP PRESENTATION AND RESTART AFTER 2 MINUTES).
62. Question 8 A. Answer is - Perception is the process whereby an individual becomes aware of the world around him.
63. Question 8 B. We perceive an event in terms of past experiences, present motivation and circumstances.

64. Question 8 C. Any event consists of many sensory messages. An individual reacts to only a small part of all that is taking place around him at one instance. In designing audio visual aids, we keep in mind, the importance of providing desirable perceptual experiences in terms of learner's past experiences, background and present situation.
65. Anyone engaged in the planning, design, production and use of audio visual materials should recognise following broad contributions these materials have made to learning:-
- \* Make instruction more productive
  - \* Make instruction more individual
  - \* Make learning more immediate
  - \* Make access to instruction more equal for all learners
  - \* Give instruction a more scientific base.
66. Make instruction more productive through increasing the rate of learning by providing worthwhile learning experiences.
67. Make instruction more individual through providing many alternative paths with a variety of resources, so that learning can occur at learner's study preference, speed and convenience.
68. Make learning more immediate by bridging the gap between the world works inside and outside the class-room by means of worthwhile experiences.
69. Make access to instruction more equal for all learners through portability and use of A.V. materials.
70. Give instruction a more scientific base, by providing a framework for systematic instructional planning, by means of which learning can be effective and efficient.

71. Refer to work-book and answer question 9. (STOP FOR 2 MINUTES AND RESTART).

72. Your answer should be: Make instruction more productive, more individual, more immediate, more accessible and equal to all learners and more scientifically based.

73. As audio visual aids are not readily available to suit the curriculum design, it is necessary to plan and produce them locally. The local production can be divided into three levels.

Mechanical level

Creative level

Design level

74. Mechanical level. Here the concern is solely with techniques of preparation. A routine procedure is followed.

75. Creative level. One step above mechanical level. Production is implied, and is beyond planning and preparation stage. The creative level is thus the planning and production of A.V. aids.

76. Design level: The preparation of audio visual aids as separate entities are not very much in existence after the advancement of instructional systems technology. The production of A.V. materials are carefully integrated into learning activities to meet the needs of specific instructional objectives and specific group of students, at the design level. This implies both creative and mechanical level.

77. The mechanical level is further divided into imitative and adaptive levels. Copying pictures or maps or using ready made materials from the imitative level. When an existing material in its form is not suitable they can be adapted to suit local requirements. This calls for certain amount of imitation.

78. Creative level calls for ability to define and solve problem in an original way without dependence or directions of others. Production of a film and individualised training programme are examples.
79. In the design level, you design not only the A.V. aids as separate materials, but follow a comprehensive system design to design all media required to teach. A complete course for which the audio visual aids are designed as part of all instructional requirements, is an example.
80. Refer to work-book and answer question 10. (STOP FOR 1 MINUTE AND THEN PROCEED FURTHER).
- Answer is on the screen i.e.  
Mechanical level - Creative level and Design level.
81. Now we will stop this presentation and change to another mode i.e. the kind of stimulus presented to you will be different. In the next unit, you will not have any projection and commentary like this. You will go through the programmed text-book - at your speed and solve the exercise. You will read paragraph by paragraph or frame by frame. You will either fill in missing word(s), fill in the gap, select a given answer from among two, three or more or answer a question in the space provided. The answer is immediately confirmed, but do not read answers until you have responded to stimuli presented. You will have to answer a comprehensive test covering all the units of the module when you complete this module. Ensure you respond to each stimuli.
82. END.

## AUDIO VISUAL EDUCATION

## WORK BOOK

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Module I Introduction to Instructional Design

Unit 3 Media and Audio Visual Aids.  
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1. Differentiate stimulus and response.
  
2. a. Define process of learning.  
  
b. When does learning takes place ?
  
3. DEFINE:
  - a. Media.
  
  
  - b. Audio visual aids.
  
4. Tick the statements that describe the difference between media and audio visual aids.
  - \_\_\_\_\_ a. An audio visual aid is a device that assist an instructor or teacher, whereas media are physical means of conveying instructional inputs.
  
  - \_\_\_\_\_ b. An audio visual aid is used by an instructor as part of his instructional strategy or as an individual entity of his own, while media is used as inputs within an instructional design determined by the instructional design requirements.

4. \_\_\_\_\_ c. Audio visual aids are used as supplements to instruction or for enrichment purposes while media are integrated components of a system.
- \_\_\_\_\_ d. Audio visual aids help an instructor in giving instruction whereas media help trainees in understanding.
5. Distinguish between projected and non projected aids.

6. Classify following as aids that can be heard, seen and heard and seen.

1. Audio aids \_\_\_\_\_
2. Visual aids \_\_\_\_\_
3. Audio visual aids \_\_\_\_\_

7. Classify the following as projected aids (P), non-projected aids (NP), Add S to P or NP for aids that goes with sound.

- |               |       |                    |       |
|---------------|-------|--------------------|-------|
| a. Posters    | _____ | i. Television      | _____ |
| b. Charts     | _____ | j. soundslide      | _____ |
| c. Radio      | _____ | k. OH transparency | _____ |
| d. Recordings | _____ | l. Flat pictures   | _____ |
| e. Models     | _____ | m. maps, graphs    | _____ |
| f. Chalkboard | _____ | n. mock-ups        | _____ |
| g. Filmstrips | _____ | o. motion picture  | _____ |
| h. Slides     | _____ |                    |       |

8. a. What is perception ?

b. How do you perceive ?

c. How do you relate perception to the design of audio visual aids ?

9. List five recognised contributions of audio visual aids to learning.

- 1.
- 2.
- 3.
- 4.
- 5.

10. List three levels of audio visual aids production activity.

- 1.
- 2.
- 3.

## CRITERION TEST

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Module I Introduction to Instructional Design

Unit 3 Media and Audio Visual Aids.  
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1. Differentiate stimulus and response.
  
2. a. Define process of learning.  
  
b. When does learning takes place ?
  
3. DEFINE:
  - a. Media.
  
  
  - b. Audio visual aids.
  
4. Tick the statements that describe the difference between media and audio visual aids.
  - a. An audio visual aid is a device that assist an instructor or teacher, whereas media are physical means of conveying instructional inputs.
  - b. An audio visual aid is used by an instructor as part of his instructional strategy or as an individual entity of his own, while media is used as inputs within an instructional design determined by the instructional design requirements.

- 4. \_\_\_\_\_ c. Audio visual aids are used as supplements to instruction or for enrichment purposes while media are integrated components of a system.
- \_\_\_\_\_ d. Audio visual aids help an instructor in giving instruction whereas media help trainees in understanding.

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6. Classify following as aids that can be heard, seen and heard and seen.

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7. Classify the following as projected aids (P), non-projected aids (NP), Add S to P or NP for aids that goes with sound.

- |                     |                          |
|---------------------|--------------------------|
| a. Posters _____    | i. Television _____      |
| b. Charts _____     | j. soundslide _____      |
| c. Radio _____      | k. OH transparency _____ |
| d. Recordings _____ | l. Flat pictures _____   |
| e. Models _____     | m. maps, graphs _____    |
| f. Chalkboard _____ | n. mock-ups _____        |
| g. Filmstrips _____ | o. motion picture _____  |
| h. Slides _____     |                          |

8. a. What is perception ?

b. How do you perceive ?

c. How do you relate perception to the design of audio visual aids ?

9. List five recognised contributions of audio visual aids to learning.

- 1.
- 2.
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10. List three levels of audio visual aids production activity.

- 1.
- 2.
- 3.

## AUDIO VISUAL EDUCATION

KEY TO  
CRITERION TEST

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Module I Introduction to Instructional Design  
Unit 3 Media and Audio Visual Aids.  
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## 1. Differentiate stimulus and response.

Each specific reaction is an exact response to a specific sensation or stimulus. e.g., spoken or written words, simple pictures and all audio visual aids are examples of stimuli. Your reaction to these are responses.

## 2. Define process of learning.

Learning takes place whenever an individual's behaviour is modified.

## b. When does learning takes place ?

When he thinks or acts differently, showing he has acquired new knowledge or skill or shows a changed attitude. Learning process is an individual's experience.

## 3. Define:

a. Media are direct instructional inputs and essential ingredients in teaching-learning process. They are not aids. All media teach, and are part of instruction.

b. Audio Visual Aids are instructional devices that are used as aids by a teacher while imparting instruction. They are used as supplements to instruction. or for enrichment purposes.

4. Tick the statements that describe the difference between media and audio visual aids.

- \*\* a. An Audio Visual Aid is a device that assist an instructor or teacher, whereas media are physical means of conveying instructional inputs.
- \*\* b. An Audio Visual Aid, is used by an instructor as part of his instructional strategy or as an individual entity of his own, while media is used as inputs within an instructional design determined by the instructional design requirements.
- \*\* c. Audio Visual aids are used as supplements to instruction or for enrichment purposes while media are integrated components of a system.
- d. Audio visual aids help an instructor in giving instruction whereas media help trainees in understanding.

5. Distinguish between projected and non-projected aids.

Non-projected aids are those that require no projection equipment and projected aids require equipment.

Examples of the former are posters, charts, maps, models, mock-ups, books etc., and the latter are filmstrips, slides, motion pictures, films, overhead transparencies, television etc.,.

6. Classify following as aids that can be heard, seen and heard and seen.

- |                      |                       |
|----------------------|-----------------------|
| 1. Audio aids        | <u>heard</u>          |
| 2. Visual aids       | <u>seen</u>           |
| 3. Audio visual aids | <u>heard and seen</u> |

7. Classify the following as projected aids(P) , non-projected aids (NP), Add S to P or NP for aids that goes with sound.

a. Posters	<u>NP</u>	i. Television	<u>Ps</u>
b. Charts	<u>NP</u>	j. Sound slide	<u>Ps</u>
c. Radio	<u>NPs</u>	k. OH transparency	<u>P</u>
d. Recordings	<u>NPs</u>	l. Flat pictures	<u>NP</u>
e. Models	<u>NPs</u>	m. Maps, graphs	<u>NP</u>
f. chalkboard	<u>NP</u>	n. Mock-ups	<u>NP</u>
g. Filmstrips	<u>P</u>	o. Motion pictures	<u>Ps</u>
h. Slides	<u>P</u>		

8. a. What is perception ?

Perception is the process whereby an individual becomes aware of the world around him.

b. How do you perceive ?

We perceive an event in terms of past experiences, present motivation and circumstances.

c. How do you relate perception to the design of audio visual aids?

Any event consists of many sensory messages. An individual reacts only to a small part of all that is taking place around him at one instance.

In designing audio visual aids, we keep in mind the importance of providing desirable perceptual experiences in terms of learner's past experiences, background and present situation.

9. List five recognised contributions of audio visual aids to learning.

1. Make instruction more productive.
2. Make instruction more individual .
3. Make learning more immediate.
4. Make access to instruction more equal for all learners.
5. Give instruction a more scientific base.

10. List three levels of audio visual aids production activity. 75

1. Mechanical level.
2. Creative level .
3. Design level.

M I/3-4/KCT.