AUDIO VISUAL EDUCATION

Module I: Introduction to Instructional Design

Guidelines to the Instructor:

1. Introduction:

This module consists of the following five units:

a) Systems Approach to Instructional Design: Sound-slide system with work-book.

b) Basic concepts of Instructional Technology: " " "

c) Media and Audio visual aids: " " "

d) Learning and communication: Programmed text

e) Learning and visual aids - A supplementary Programmed text

The basic programmed instructional techniques and systems approach to instructional design has been adopted for preparation of these modules. For better results, the learner has to be an active participant, interaction is very important. Remember, you must have conducted a pretest on the subject matter before you start. Look for the pretest if it was not given.

2. Purpose of Module-I.

a) The purpose of this module is to provide a device to develop elementary psychological concepts in relation to the design of instructional materials and selection and use of audio visual aids in the teaching - learning process.

b) To create an awareness about the possibilities offered by audio visual aids and media for making learning more effective and efficient.

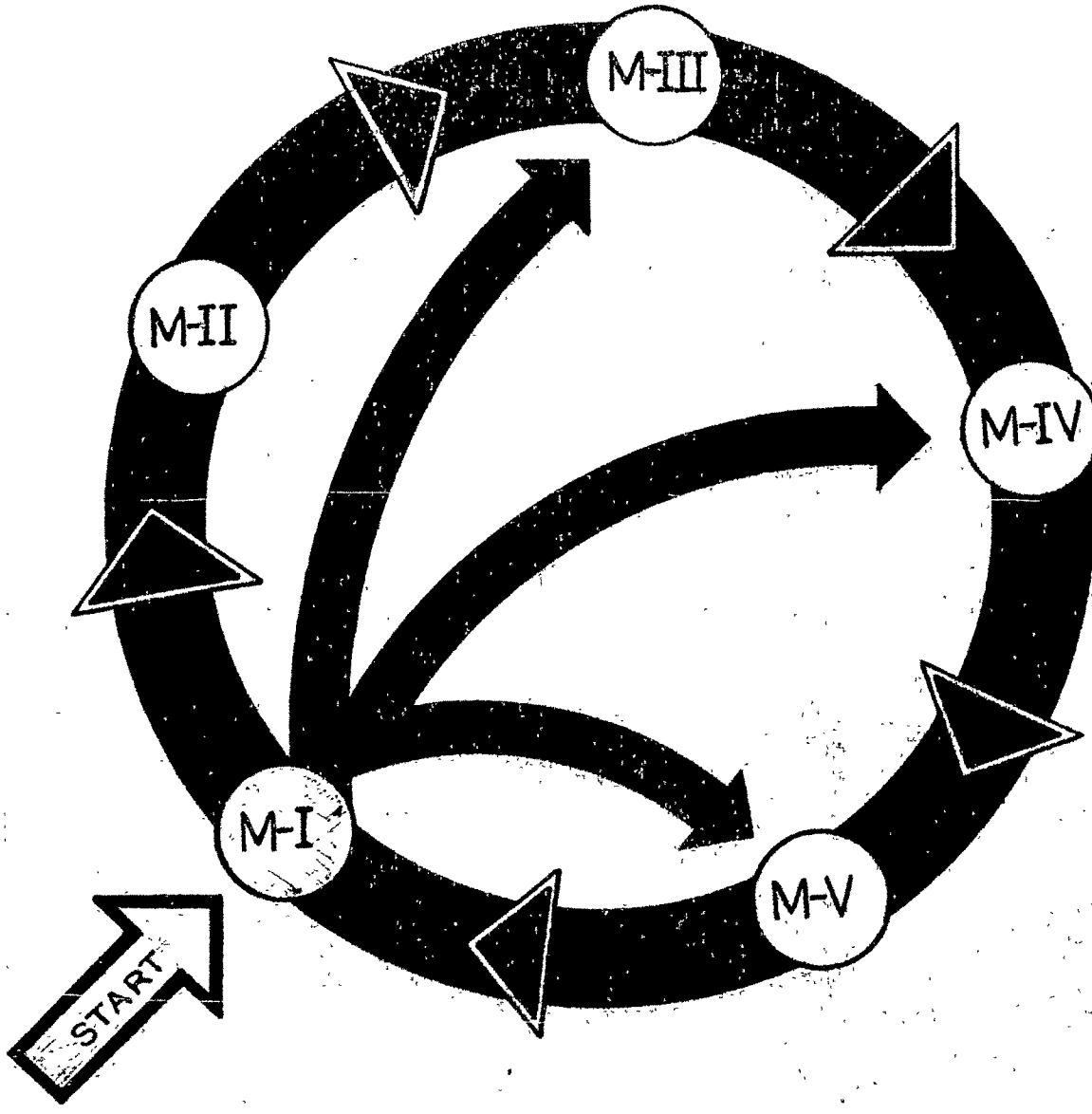
3. Contents of Module-I.

1. 260 colour slides.
2. 2 cassettes for 3 presentations, each 45 mts.
3. Guidelines to the instructor.

...2/-

AUDIO VISUAL EDUCATION

MODULE -



KRISHNAN.

4. Guidelines to the Instructor-trainees.
5. Overview, course objectives and goals.
6. Instructional objectives for Module-I.
7. Scripts for the taped commentary for units 1-3.
8. Programmed texts for Units 4 & 5.
9. Work book for Units 1-3.
10. Unit tests 1-3, and quiz for Unit 4 & 5.
11. Answer keys to Unit tests and quiz for Units 1-5.
12. Module Test, criterion referenced, objective basedtest.
13. Answer keys and evaluation template for module test.

4. Equipment needed:

1. Slide projector
2. Projection screen
3. Cassette tape recorder

Tapes are provided with inaudible pulses for use with an automatic tape-slide synchroniser, if available. Otherwise record tone signals on tapes, if you so desire, to enable you change slides.

5. Preparation for presentation:

A. Your tasks prior to session.

1. Familiarise with these guidelines.
2. Familiarise with the subject matter.
3. Preview the sound-slide presentation before showing to the gro
   a) load slides properly on trays-you may require more than 1 t
   b) set the first slide to focus,
   c) start the tape recorder and listen for audible signal,
   d) synchronise the tape with first slide - sound & visual,
   e) complete each unit and work workbook yourself, and take tes
   f) when completed, rewind tape and pack slides,
   g) repeat the units 2 and 3 likewise,
   h) go through programmed texts and take the quiz,
   i) evaluate your performance on the tests and quiz,

.....3/-

j) take module test and evaluate yourself,

k) discuss with faculty leader for any doubts or inadquacies.

B. Prepare the instructor trainees for the session.

1. Hand over to the instructor trainees, package consisting of

a) the overview,

b) the course objectives,

c) Goals,

d) behavioural objectives,

e) guidelines to the instructor trainees,

f) instructional objectives,

g) scripts for units 1-3 and programmed texts for units 4&5.

2. Guidelines for classroom seating and situations if any;

C. At the session.

a) Make the presentation.

b) After completion of each unit, give the unit test.

c) Evaluate tests and intimate scores to the instructor trainees.

d) Hand over proper test answers as feed back to them.

e) Give quiz at the end of unit 4 and 5.

f) Collect and retain the unit test answer and test papers.

g) Arrange discussion session for unit 5 if required.

h) Administer module test, and collect the test paper and answers

i) Score the test using keys and template and record in the evaluation sheet provided.

j) Remember to follow all instructions given in the commentary.

k) Use remote control, if your presentation is not automatic.

l) Locate projection screen to enable all to see complete visual.

m) Provide good lighting conditions while using workbook.

n) Encourage interaction with workbook, and record difficulties, if any.

o) Allow participants to retain workbook.

p) Arrange for discussion session if necessary after every unit test.

q) Encourage active participation during discussion.

.....4/-

6. Tips for discussion:

The doubts if any of the students must be discussed and cleared as discussion method is considered to be immensely successful in getting people personally involved more than anything else in the issues. The discussion leader (yourself) can divide the class into small groups of not more than 15 in each. Few tips for effective discussions are:

1) Remain as a resource person.

2) Study all scripts, tests and answers.

3) View visuals carefully before and after presentation.

4) Allow 10-20 secs. pause between two topics and also before redirecting the same questions to others in the class.

5) Clear doubts.

6) Clarify facts by relation to situations that the participant is conversant with.

7) Isolate points of concern for the larger group and deal with it at one time.

8) Give individualised attention where necessary and feasible.

9) Make notes of all salient points of the discussion.

7. Following guidelines are offered for the follow up activities:

a) Give points of importance to participants.

b) Encourage application of the concepts learned in the module in actual situations.

c) Accept criticism

d) Discuss with other concerned faculty members regarding problems if any.

e) Bring to the notice of the instructional designer all important factors.

GUIDELINES TO THE INSTRUCTOR TRAINEES:

Welcome to the course on audio visual education. As instructors, you are charged with the responsibility of craft training in various fields and uptill now, we in India have not been able to produce quality text-books suiting our conditions for the full course. Even where some materials are produced, a piecemeal approach have been adopted. Whatever be the situation for years to come, you will be required to produce your own instructional materials, design instructional strategies and implement decisions taken, as unlike the west, we are far away from commercial production of instructional materials of quality, for craftsmen training programme.

Your training for an year in the Central Training Institute hopefully will provide such competencies as are required for you to serve your trainees better. Among the various courses offered to you at the CTI, Principles of Teaching/Training methodology is one that will help you in improving your training methodology. You have already learned the basic principles of learning and teaching, psychological foundation, preparing lesson plans and demonstration plans in the Phase I (Semester I). In the latter half of your course you will have to produce teaching materials and use them in teaching practice both in the class-room and shopfloor. This course is designed to apply your skills in your instructional assignments both during the course and thereafter on the job. Stress is laid to make you more versatile not only in the immediate future but the approach followed using the systems approach to instructional design, will provide you a model for developing your own course materials.

...2/-

Audio Visual Education: This course will help you to learn how to produce audio visual aids, why you produce them, and what for you should produce them. The theory portion has been limited to essentials. We are providing you with behavioural objectives, which will help you to plan your learning activities in a precise manner. You will have new experiences in this course and the entire course is structured. So far, we have not given you such structured course in any of our Central Training Institutes.

This course is divided into five modules, each one following different strategies. The first module is Introduction to instructional design, having five units-systems approach to instructional design, basic concepts on instructional technology, media and audio visual aids, learning and communication, and learning visual aids. The first three units will be programmed sound slide materials with workbook, while the 4 & 5 units will be in programmed text format.

The second module is "Non Projected Visual Aids" consisting of nine units - graphic design, lettering, graphs and charts, posters and cartoons, chalkboard, bulletin board, flannel and magnetic boards, enlarging and reducing visuals and objects, models and mock ups. We intend to give you this module as self-instructional, self-pacing, and semi-programmed instructional materials, designed for self study. You will have 34 practical exercises for module-II, which will of course cover application of the principles and concepts learned in this as well as earlier module.

The third module is on "Projected Aids" consisting 10 units - Kinds of projected aids, Projection systems, Filmstrip projector, Slides and slide projector, Motion picture projector, Overhead projector, Opaque projector, Television, Multi-Imagery and Multi-Media, Physical facilities and projected aids. There are seven practical exercises to be done. We propose to give you in this module also sound-slide presentation with workbook, followed by performance check lists for the equipment operation.

---3/-

The fourth module is on "Duplicating Processes" consisting of four units -- forms of reproduction processes, spirit duplication, stencil duplication, electronic stencil scanner and photo copier. The methodology and strategy are similar to Module II. The study materials will be issued in advance. Here again there will be six practical exercises which must be done only at the Institute.

The fifth module is on "Audio Aids" consists of 5 units. The 5 units are -- teaching with audio aids, principles of audio equipment, tape recorders, sound recording principles and record players. There are four practical exercises. The information sheets are going to be presented to you with check lists and guide lines for the practical exercises. We intend to give you directions through audio for the practical exercises in this module.

You will be required to take few tests, before the programme, module tests before and after every module. At the end of each unit you have unit tests which will enable you to apply immediately how far you have progressed and lastly after the whole course. All these tests are achievement tests, based on objective based criterions, except the two - before the course and at the end of the course - which willbe summative tests, checking sample objectives. All your practicals will also be graded objectively, as we do your graded exercises on the shopfloor. These gradings will form the basis for your sessional work. We will also provide you a retention test at the end after one month of your completing final course test to judge how far you retain the learning. Your co-operation and active participation will help us to get your feedback to find out pit falls in our learning package, and enable us to make suitable modifications and revisions. We will introduce discussion sessions wherever there is demand, or when found necessary by the instructor trainees. Here again we will use overhead transparencies and if essential repeat sound-slide presentation on selected segments. You may if required meet individually the Training Officer and arrange repeat presentation or discussion of a segment of a unit or a complete unit.

.....4/-

In the beginning you must have taken the following tests. Ensure that you take these tests, if you have not taken them already. They are:

1. English language test.
2. A test on motivation - JIM.
3. Attitude questionnaire towards the multi-media package.
4. Pre-test for the course - Audio visual education.
5. Pre-test for Modules I to V.

It is proposed to give you all learning materials for every module in advance. We have scheduled the programme for the sound-slide presentations, which is exhibited in the Visual aids workshop and you may adhere to the timings for our convenience. Those who find it difficult due to reasons beyond control to adhere to the dates fixed, may fix up suitable timings with the Training Officer, Visual Aids workshop.

Module II, IV and V may be taken as per your convenience, except that, wherever you are required to operate or use an equipment, you may fix suitable time with the Visual Aid workshop Training Officer. We are fixing schedules on holidays too, to suit your convenience. Similarly, for practical exercises, we have scheduled the classes in the Visual Aids Workshop and you are requested to check up with the instructor every week for the assignment schedule. Discussions on each unit and module are arranged after each unit and module test.

Any difficulty you are facing including non-receipt of learning packages, scheduling for the practical exercises, or other facilities, may be brought to the personal notice of Prof. S.S.KRISHNAN.

GOOD LUCK !

-: :-

AUDIO VISUAL EDUCATION

MODULE I

INTRODUCTION TO INSTRUCTIONAL DESIGN

Unit 1 - Systems Approach to Instructional Design.

Unit 2 - Basic concepts on Instructional Technology

Unit 3 - Media and Audio Visual Aids

Unit 4 - Learning theory & communication

Unit 5 - Learning & Visual Aids.

Overview.

This course offered to the Instructor trainees is intended to

a) make the Instructor trainees aware of the importance of different indigeneously available audio visual materials and equipment and

b) to develop skills for planning, preparation and use of audio visual aids in their teaching-learning situations.

The main course objectives are:-

1) To develop elementary theoretical psychological concepts in relation to the design of instructional materials and use of audio visual aids in the teaching-learning process.

2) To create an awareness about the possibilities offered by audio visual aids and media for making learning more effective and efficient.

3) To develop professional skills to design and make simple inexpensive audio visual aids for use in the Instructional process.

4) To develop skills in the operation and maintenance of selected indigeneous audio visual equipment such as epidiascope, over-head projector, filmstrip and slide projectors, 16 mm movie projector, tape recorder, duplicating machine, photocopier, electronic scanner.

5) To develop professional competence in the use of selected audio visual aids in a meaningful way for specific instructional tasks to improve learning.

GOALS:

Module I. Introduction to Instructional design.

1. To define and distinguish between Instructional Technology Instructional Goal, Behavioural objectives.

2. To understand the concept System Approach to Instructional design

3. To introduce new concepts:
interactive instruction, job performance requirements, task analysis, criterion test, achievement test, job aid, validation, follow up data and to
explain their purposes and processes.

4. To relate selection of media and the instructional design model.

5. To define and distinguish between audio visual aids and media and to high light the importance of media and audio visual aids in the process of learning and teaching.

6. To identify the kinds of audio visual aids and classify them as projected, non-projected and aids with or without sound.

7. To present the three basic characteristics of media production-imitative, adaptive and creative.

8. To introduce the learner to the three categories of Bloom's texonomy of instructional objectives -- cognitive, affective and psychomotor domains.

9. To present basic ideas on the three taxonomic classifications of the three domains of Bloom, made by Bloom, Krauthwohl, Kibler and Dave.

10. To present the basic communication model of Berlo.

11. To acquaint with the Dale's Cones of Experiences and relate it to the Bruner's modes of learning.

12. To present basic ideas of perception, communication and learning theories.

13. To introduce to the stimulus-response pattern of learning theories.

AUDIO VISUAL EDUCATION

Module I — Introduction to Instructional Design

Unit 1 — Systems Approach to Instructional Design

Instructional Objectives:

1. Classify by definition the terms:-
   a) instructional technology
   b) instructional goal
   c) behavioural objective
2. Defferentiate between instructional goal and behavioural objectives.
3. Discriminate the statement which best describes the purpose of writing behavioural objectives.
4. Label statements that are instructional goals and behavioural objectives.
5. List three advantages of interactive instruction.
6. Explain the purpose of validation.
7. Describe why interactive instruction is easy to validate.
8. State the three key components of interactive instruction.
9. Classify by definition, 'Systems approach to instructional design'.

AUDIO VISUAL EDUCATION SCRIPT BOOK 13

Time : 45 Minutes.

Module I : INTRODUCTION TO INSTRUCTIONAL DESIGN

Unit 1 : SYSTEMS APPROACH TO INSTRUCTIONAL DESIGN

1. The purpose of this course is to guide you to be aware of the importance of audio visual materials and techniques in learning and teaching and help you to develop the skills for planning, design, preparation and use of inexpensive audio visual aids. The course is divided into Modules and Modules sub-divided into units. There are five Modules.

2. Module I is an introductory Module on Instructional Design and Unit I is on 'SYSTEMS APPROACH TO INSTRUCTIONAL DESIGN'. This unit deals with basic idea about approach to Instructional design in a systematic way.

3. We intend to give you a programmed self study course. You have the sound-slide system and a work book for Module I, for units 1 to 3. Unit 4 is a self study programmed instruction. Unit 5 is a supplementary unit also in programmed instructional format. The work book has the instructional objectives to start with. If you have not received the work-book, do ask for it. Pay particular attention to these objectives.

4. The work-book is designed for interaction. As you proceed you will be directed to go through the work book and answer question given therein carefully. Answer all questions and do as directed. You have also blank sheets to take notes. You will be told of the correct answers immediately after you have answered, so that you can correct yourself. You will take tests for each unit.

5. After unit 4 & 5 you will answer the questions. After you have completed the whole Module, you will have to answer a Module test, and hand over to your Instructor.

You will get the correct answers to the tests, along with evaluation. All your tests and practical exercises are graded.

6. Open your work-book page and read the objectives, for Module 1 - Unit 1 (STOP. RESTART AFTER 2 MINUTES). There are nine objectives, for this unit. Have you read them.

7. If so we will start with the concepts -
   INSTRUCTIONAL TECHNOLOGY.
   INSTRUCTIONAL GOAL.
   INSTRUCTIONAL OBJECTIVES.

8. What is INSTRUCTIONAL TECHNOLOGY?

9. A definition would be "It is a set of principles and procedures used to analyse training needs, design instruction, instruct and provide quality control".

10. What does all this mean to an INSTRUCTOR?

    We ask "What do you do?". You may reply 'I teach'. But this statement does not describe how you teach, how you provide effective instruction that produce learning?

11. When someone comes to you for training or education they have certain behaviours. The purpose of your instruction is to change them in a specific manner to enable them to do something they could not do before. Producing this change is a kind of processing.

12. Manufacturing is a process. You change raw materials into finished products according to detailed specifications.

13. You face a number of problems in the manufacturing process. In many ways these problems,

14. are no more complex than those in the design and development of effective instruction.

15. We are involved in the production of trained men - i.e. to provide instruction that will adequately train a large number of people, all at the same time.

16. Even when you handle a group you deal with individuals, for learning is an individual process.

17. You may present a number of topics or points to a group of trainees. Say A,B,C,D and E. Let us see.

18. One fellow learned all of them and did so with confidence.

19. A second learned only a portion say C and D.

20. A third learned something else say X,Y & Z, unrelated to what you have taught.

21. Providing instruction and presenting information are two different things. When you present information, you cannot predict with certainty what the trainees are going to learn.

22. An Instructor wants the students learn the errors in computing.

23. He presents a mass of information.

24. He then tests the students, if he finds on the basis of test, that all of them seem to understand the causes of errors, he would take the credit.

25. Those who did not pass, fail in the test? They get a 'D'. But as Instructors, it is our responsibility to produce learning. If we don't succeed, we need some corrections in the process.

26. This cannot be done by magic.

27. We need something more than that.

28. Can we identify any of the problems? Is there anything wrong with the Instructional design?

29. The Instructor wanted the students learn the errors in computing. He stated an <u>Instructional goal,</u> a broad topic without specificity.

30. An Instructional goal is a statement of instructional intent.

31. Instructional goals are usually stated with verbs like - Understand theory, appreciate the importance ..... know the fundamentals .... etc.

32. These are all good phrases to indicate general instructional goals. But what is the criteria for understanding?

33. When you ask your student, 'Do you understand' and he replies 'yes' is it the evidence of his understanding? No, we need something more reliable than that.

34. When designing instruction, you have to go beyond instructional goals - i.e. you need precise description that exactly specifies what the student must do or show by understanding something. You have now identified one of the key-points in the design of effective instruction.

35. Behavioural objectives. We should aim our instruction at objectives, that can measure behavioural changes. We should specify the trainee or student behaviour in concrete terms. A behavioural objective is a description of performance, the instruction is to produce - stated in terms of what the trainee is able to do?

36. Some call this as Instructional objective. Behavioural objectives means exactly, the same as instructional objectives. These are interchangeable terms.

37. Refer to your work-book. Look at Module-I Unit-I Questions 1 - 3. Answer them. (STOP PRESENTATION FOR 3 MINUTES AND THEN RE-START).

38. For each question we will immediately give you the correct answers. Take question 1.

38 a. 1-a. Instructional technology is defined as a set of principles and procedures used to analyse training needs, design instruction, instruct and provide quality control.

38 b. 1-b. Instructional goal is a statement of instructional intent stated in a broad term.

38 c. 1-c. Instructional Objective is a description of performance the instruction is to produce.

39. For question No.2, answer is (a) An Instructional goal is a statement of instructional intent and is a broad general term.

40. We write behavioural objectives to specify what the trainee is able to do. That means answer to question 3 is (b).

41. Let us return to our original topic - Instructional goal - Students learn the errors in computing. Objectives stated in behavioural terms are needed to specify the goal.

42. The trainees will list three problems on grinding a tool. Specific performance referred to is LIST.

43. Refer to your Work-Book. Look at question 4. You know to differentiate between instructional goal and behavioural objective. Read each statement, then label it in the space provided as (i) for instructional goal and (B) for Instructional Objective. (STOP. RESTART AFTER 2 MINUTES).

44. Three of the statements specify trainee's performance i.e. explain, construct and describe, MARK (B) (C) and (E) as B.

A & D are Instructional goals. If you have marked (i), they are correct. Know and learn tells us nothing. D might appear, to be specific, but it is not when you change it to, "The trainee will use a slide rule", it appear more specific, but still it is not. How many scales he must use,

should he do only multiplication and division or take square roots?

45. Objective must be stated very precisely.

46. Objectives stated in behavioural terms must be stated in terms of trainee's performance for basing our instruction.

47. Is there anything else that might interfere with our success as an instructor? Let us examine.

48. Suppose you have <u>one trainee</u> and your salary say Rs.1,000/- depends on his success or failure.

49. How would you maximise his chance of success?

50. You could repeat lectures on same topic. The trouble with a lecture is, you don't know what exactly is happening?

51. You can't say whether the trainee is learning or not, until you test him.

52. What you need is a complete and continuous position or view of the trainee, every step of the way,

53. and you can get this view by asking him to tell you what he can do,

54. and giving him additional help and clarification immediately if he needs it.

55. You can check on the progress constantly to see how well you and the trainee are doing,

56. and provide remedial instruction, correcting errors,

57. and you can tell him he's right, <u>when he is right.</u>

58. We have been discussing one trainee one instructor a tutorial situation. The tutorial system allows you to communicate constantly back and forth - interact - and keeps the trainee as active as yourself.

59. A tutorial can be paced by the trainee, at his speed.

60. The trainee can proceed as rapidly as he is able or as slow as necessary.

61. And when he is having difficulty both trainee and instructor will know it, at once.

62. But is it possible for our country to provide one to one ratio? Certainly not, due to economic and other conditions. Still we know that trainees learn better if they interact with the subject matter. Here is the second key in our approach.

63. Interactive instruction. We need to build interaction into our instructional design to keep the trainee active, so we can check on the trainees' progress and adopt to his needs accordingly.

64. The Instructor cannot interact with all trainees at the same time, but it is possible to give interactive instruction to a group.

65. Now answer Question 5. (STOP. RESTART AFTER 2 MINUTES).

66. The advantages can be:-

    a. interactive instruction keep the trainee active.

    b, both instructor and trainees can determine progress at all times;

    c. it allows instructor to adapt to trainee's needs.

    d. the instructor can give immediate corrections.

67. Let us now review:

    We begin by stating objectives stated in behavioural terms that specify what the trainee must do, under what circumstances, and with what degree of skill.

68. Then we design interactive instruction to achieve those objectives.

69. Can you fail a trainee who does not reach the objective?

70. Our success depends on the trainee's success, if he is not successful, we too are not.

71. Can we forget everything, if he failed?

72. We must look at the trainee and the instruction to find out what went wrong and where, so that we can correct it. How?

73. Validation: To modify inadequate or inefficient instruction and to make sure that effective instruction is given, we need to validate our instruction.

74. We evaluate our instruction by comparing the objective with the trainee's actual ability to perform. If instruction is effective, the trainee will reach the objectives.

75. If it is inadequate, we re-design the instruction to remove that.

76. The validation process is a two step process - test - revision - test - revision cycle. We test the instruction by trying it out. If it does not work, we revise it. Then test again.

77. The cycle is repeated until it does work. Then only we can say we have validated our instruction.

78. It is easier to validate if we have built interaction into it, because we can measure the trainees success at each step in the instructional sequence, and we can revise it immediately if need be.

79. Answer questions 6 & 7 on your work book (STOP. RESTART PRESENTATION AFTER 2 MINUTES).

80. First Question 6. Purpose of validation is to make our instruction more effective. Validation is a two-step process and we can repeat these steps as often as necessary, i.e. Test - Revision - Test cycle.

We evaluate - or test - the instruction by comparing the objectives with what the trainees actually do. If we find inadequacies we revise and test it again. This cycle is continued until we reach the objectives.

81. Question 7. It is easier to validate interactive instruction because we can check continually the trainees' progress. We can detect inadequacies in the instruction more quickly and can revise it immediately.

82. There are three key components in the basic systems approach to Instructional design. Objectives - interactive Instruction - Validation.

83. We should aim our instruction at specific objectives. Instructional goal is too broad. We need objectives stated in measurable terms to specify what the trainee must be able to do - under what circumstances and with what degree of skill?

84. We should provide interactive instruction. Presenting information is not enough. The trainee should be active. We must have two-way communication to check the progress and our effectiveness.

85. We should validate our instruction. We set the objectives. If the trainee does not reach them, we revise the instruction.

86. As an instructor trainee you are going to plan and design instruction along with behavioural objectives, audio visual aids, provide interactive instruction and validate your instruction and this basic approach to instruction is the SYSTEMS APPROACH TO INSTRUCTIONAL DESIGN.

87. We may define systems approach to Instructional design as a process which increases efficiency of the instructional system, that is designing and evaluating the total process of learning and

instruction in terms of objectives, stated in behavioural terms.

88. Now answer question 8 & 9 (STOP. RESTART AFTER 3 MINUTES).

89. You see your answer on the screen for question 8. Effective instruction requires specific objectives, interactive instruction and validation.

90. Question 9. Systems approach to instructional design is a process which increases efficiency of the instructional system, by designing and evaluating the total process of learning and instruction in terms of objectives, stated in behavioural terms.

91. This course is developed to instruct the instructor or teacher trainees by using systems approach. The course is divided into - Modules and each module into units. Instructional objectives have been prepared using behavioural terms that can be measured precisely and interactive instruction has been incorporated. Media has been selected for each Module and Unit depending on the objectives and content. One more point about interactive instruction. Although one can watch trainee's progress, we should like to give you tests at the end of each Module. These can measure effectiveness of our course based on your performance.

The objectives at the beginning of each Module will tell you what we expect you to learn and post test will validate our Instruction. There are 40 objectives in this module and each objective will have test items.
We have already done the process of testing - revising, cycle for this module earlier with different instructional staff and trainees.

You will take the test for this Unit now and hand over to your Training Officer.

M I/1-11 SB.

AUDIO VISUAL EDUCATION

WORK BOOK

Module I Introduction to Instructional Design

Unit 1 Systems Approach to Instructional Design

---

1. DEFINE:

a. Instructional Technology.

b. Instructional Goal.

C. Behavioural Objectives.

2. What is the difference between Instructional Goal and behavioural objectives ? (Select correct answer)

_____ a. Instructional goals are stated in more general terms than instructional objectives.

_____ b. Instructional goals are stated in more precise terms than Instructional objectives.

_____ c. There is no difference.

3. Why do we write behavioural objectives ?

_____ a. To prepare the ground work for writing Instructional goals.

_____ b. To describe behaviour in terms of trainee performance.

_____ c. To describe behaviour in terms of instructor performance.

4. Label each of the following statements 'I' for Instructioial goal and 'B' for behavioural objectives.

_____ A. The trainee will know Sine∅

_____ B. The trainee will explain the difference between Sine ∅ and Cos ∅.

_____ C. The trainee will construct a triangle and and mark Sine ∅ and Cos ∅

_____ D. The trainee will learn to use a slide rule.

_____ E. The trainee will write the procedures for cleaning a carburattor.

5. What are the three advantages to be gained from interactive instruction ?

a.

b.

c.

d.

6. What is the purpose of validation ?

Describe the validation process.

7. Is it easier, or more difficult to validate interactive instruction ?

Why ?

8. Instructional design is based on three-key components. What are they ?

a.

b.

c.

9. Define briefly systems approach to Instructional Design ?

AUDIO VISUAL EDUCATION

CRITERION TEST

Module I Introduction to Instructional Design

Unit 1 Systems Approach to Instructional Design

1. DEFINE:

a. Instructional Technology.

b. Instructional Goal.

C. Behavioural Objectives.

2. What is the difference between Instructional Goal and behavioural objectives ? (Select correct answer)

_____ a. Instructional goals are stated in more general terms than instructional objectives.

_____ b. Instructional goals are stated in more precise terms than Instructional objectives.

_____ c. There is no difference.

3. Why do we write behavioural objectives ?

_____ a. To prepare the ground work for writing Instructional goals.

_____ b. To describe behaviour in terms of trainee performance.

_____ c. To describe behaviour in terms of instructor performance.

4. Label each of the following statements 'I' for Instructioial goal and 'B' for behavioural objectives.

_____ A. The trainee will know Sine∅

_____ B. The trainee will explain the difference between Sine ∅ and Cos ∅.

_____ C. The trainee will construct a triangle and and mark Sine ∅ and Cos ∅

_____ D. The trainee will learn to use a slide rule.

_____ E. The trainee will write the procedures for cleaning a carburattor.

5. What are the three advantages to be gained from interactive instruction ?

a.

b.

c.

d.

6. What is the purpose of validation ?

Describe the validation process.

7. Is it easier, or more difficult to validate interactive instruction ?

Why ?

8. Instructional design is based on three-key components. What are they ?

a.

b.

c.

9. Define briefly systems approach to Instructional Design ?

AUDIO VISUAL EDUCATION

KEY TO CRITERION TEST

Module I Introduction to Instructional Design

Unit 1 Systems Approach to Instructional Design

1. Define:

   a. Instructional Technology.
   It is a set of principles and procedures used to analyse training needs, design instruction, instruct and provide quality control.

   b. Instructional goal.
   Instructional goal is a statement of instructional intent stated in a broad term.

   c. Behavioural objectives.
   Instructional objective is a description of performance the instruction is to produce.

2. What is the difference between Instructional Goal and behavioural objectives ? (Select correct answer)

   ** a. Instructional goals are stated in more general terms than instructional objectives.

   ____ b. Instructional goals are stated in more precise terms than instructional objectives.

   ____ c. There is no difference.

3. Why do we write behavioural objectives ?

   ____ a. To prepare the ground work for writing instructional goals.

   ** b. To describe behaviour in terms of trainee performance.

   ____ c. To describe behaviour in terms of instructor performance.

4. Label each of the following statements 'I' for Instructional goal and 'B' for Behavioural objectives.

I A. The trainee will know sine Ø

B B. The trainee will explain the difference between Sine Ø and Cos Ø

B C. The Trainee will construct a triangle and mark Sine Ø and Cos Ø

I D. The trainee will learn to use a slide rule

B E. The trainee will write the procedures for cleaning a carburattor.

5. What are the three advantages to be gained from interactive instruction ?

a. interactive instruction keep the trainee active

b. instructor and trainees can determine progress at all times.

c. It allows instructor to adapt to trainee's needs.

d. the instructor can give immediate corrections.

6. What is the purpose of validation ?

It is to make our instruction more effective.

Describe the validation process.

Validation is a two-step process and we can repeat these steps as often as necessary, i.e., test-revision -test cycle.

7. Is it easier, or more difficult to validate interactive instruction ?

It is easier.

Why ?

We can detect inadequacies more quickly and can revise instruction immediately, We can also check continuously trainees' progress.

8. Instructional design is based on three-key components. What are they ?

   a. specific objectives

   b. interactive instruction

   c. validation

9. Define briefly systems approach to Instructional Design.

   Systems approach to instructional design is a process which increases efficiency of the instructional system by designing and evaluating the total process of learning and instruction in terms of objectives stated in behavioural terms.