

PROGRAMED TEXT

LEARNING FROM A PROGRAMED
INSTRUCTION TEXT

WD-2/OD-2



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FORT WOLTERS, TEXAS

PROGRAMED TEXT

PROGRAM TEXT

FILE NO:

PROGRAM TITLE

Learning from a programed
Instruction Text

POI SCOPE:

Explain the three parts of a programed text and how they are used.

INSTRUCTOR REFERENCES:

N/A

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Learning from a Programed Instruction Text

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PREFACE

An ideal teaching situation is one in which there is one qualified instructor for each student. Of course, a one-to-one ratio of instructors to students is seldom possible, particularly when students must be taught within a limited schedule. Programed Instruction permits a student to learn a job by himself, at his own pace, and with little or no supervision from an instructor. This method simulates the one-to-one ratio.

Although most programed instruction is in the form of a text, as this one, it can take on other forms such as programed TV tapes, films, programed conferences and programed practical exercises.

Instruction at USAPHS has a standard which you will find to be specific and totally related to your purpose for being here. For this reason, you should become acquainted with the basic techniques in programed instruction, and how they will help you learn during your training period.

The purpose of this text is to teach you the three fundamental parts of a programed instruction text and how to use these parts for efficient learning. Other programed instruction media contain these basic elements.

HOW TO WORK THE TEXT

Read the performance objectives on page 1. Turn the page and read the information presented in frame 1, then answer the question asked. Go to the next page. The correct answer to frame 1 is printed above frame 2. Continue until you have finished this text.

PERFORMANCE OBJECTIVES

Upon completion of this text and without the aid of references, you will be able to:

1. Identify the purpose of the performance objectives as stated in any programed text.
2. Select the purpose of teaching "frames".
3. Identify the purpose of the Self Evaluation Exercise.

FRAME 1

The first part of a programed instruction text will be a statement or a number of statements called the PERFORMANCE OBJECTIVES. These objectives tell you the behavior expected, conditions, and standards of performance. It is called a performance objective because you will be required to perform each task as stated.

An example of a performance objective from a programed text on "The disassembly of an M-60 machine gun" would be: "Given one assembled M-60 machine gun, you will, without the aid of references or assistance, completely disassemble the weapon within 60 seconds."

Which of the following would be the best performance objective for converting Arabic numbers to Chinese numbers?

- 1. Without references, you will convert Arabic numbers 1 through 15 to their Chinese equivalent or vice versa.
- 2. Upon completion of this text, you will have a general idea of how to convert Arabic numbers 1 through 15 to Chinese numbers.

TURN TO PAGE 4 FOR FRAME 2.

"Example" Frame A

Answer: a. III b. III c. I d. II

"Example" FRAME B

By writing the Chinese character "I" below the "I" simplified combinations are formed by subtracting.

A combination of "I" equals "4".

"I" equals "9".

By using the rule, how would you write a Chinese character equal to "14"?

II
I

TURN TO PAGE 5 FOR FRAME 5.

Answer: X 1. (In this objective certain conditions existed, i.e. "Without references", and a performance was required - "will convert." Whereas number 2 only stated that you will have a general idea of how to convert.)

FRAME 2

What are the performance objectives of this text? If you do not recall them, return to page 1 and see what you are expected to do when you complete this programed instruction text.

Were the conditions of the objectives (with) (without) certain aids?

Are you going to be required to perform certain behaviors? Yes No

TURN TO PAGE 6 FOR FRAME 3.

Answer: (Remember the two basic characters and the two basic rules for converting Chinese numbers.)

FRAME 5

Now, do you understand how a frame works?

Select the statement that best describes the purpose of a teaching "frame".

1. A teaching frame is a logically sequenced increment of information used for the purpose of teaching in a programmed instruction text.
2. A teaching frame is a collection of facts presented to a student within the content of a programmed instruction text.

TURN TO PAGE 7 FOR FRAME 6.

Answer: Without, Yes

FRAME 3

In a programmed instruction text it is important that you read carefully all of the information in proper sequence exactly as it is written.

See for yourself how well you have progressed to this point by answering the question on the next page pertaining to performance objectives. (Do not look back until you have answered all of them.)

TURN TO PAGE 8 FOR TRUE-FALSE TEST.

Answer: X 1.

FRAME 6

The third part of the programed instruction text is the Self-Evaluation Exercise. This exercise provides you the opportunity of evaluating your ability to fulfill the stated requirements of the performance objective. Can you meet the requirements of the performance objective in converting Chinese numbers?

Perform the following Self-Evaluation Exercise.

Convert the following Arabic numbers to Chinese and vice versa.

a. 2 equals II

e. == equals 10

b. 7 equals ~~II~~

f. 3 equals III

c. T equals 4

g. T equals 9

d. 6 equals I

h. 8 equals III

j. 12 equals II

k. III equals 13

m. == equals 15

n. ~~T~~ equals 14

TURN TO PAGE 9 FOR FRAME 7.

TRUE or FALSE

- T 1. The performance objective tells the student what he will be able to do when he has completed a period of instruction.
- F 2. The performance objective is seldom stated in a programed text.
- F 3. The performance objective is stated in a text only to give the student a general idea of what he is expected to know upon completion of a text.
- T 4. The performance objective is always stated at the beginning of the programed text.
- T 5. The student should keep the performance objective in mind from the beginning of his period of instruction.

TURN TO PAGE 10 FOR FRAME 4.

Answers: a. 11 e. 10 j. 11
b. 11 f. 11 k. 13
c. 4 g. 9 m. 15
d. 1 h. 11 n. 14

FRAME 7

In the event that you made any incorrect entries, what should you do?

1. You have the general idea - don't worry about it.
2. Turn back to the frame or frames that teaches you how to solve that question and determine where you went astray.

TURN TO PAGE

TURN TO PAGE 11 FOR FRAME 8.

Answers: T 1., F 2., F 3., T 4., T 5.

FRAME 4

The second part of a programmed instruction text is the teaching element, which is a series of small increments of information called "frames".

For an example of how "frames" are used to teach you, we will refer again to Chinese numbers. The performance objective (restated as in frame 1) is:

Without references, you will convert Arabic numbers 1 through 15 to Chinese equivalent or vice versa.

The two following "example" frames will teach you the material required to accomplish the requirement of the performance objective.

TURN TO PAGE 12 FOR EXAMPLE FRAME 3.

Answer: 2.

FRAME 8

How would you prepare for the final examination in map reading, which covers 20 hours of programmed instruction, and is taught in eight sub-course texts?

1. Rework the entire programmed instruction text for each sub-course.

2. Rework only those Self-Evaluation Exercise which previously gave you trouble.

3. Work each Self-Evaluation Exercise from memory and review the frames pertaining to those problems you could not solve.

TURN TO PAGE 13 FOR FRAME 9.

"Example" FRAME A

All Chinese Numbers are formed by the basic stems "1" and "5".

The Chinese character "1" equals Arabic #1.

The Chinese character "5" equals Arabic #5.

By using combinations of these basic stems, numbers can be formed.

A combination of: "11" equals "2".

"11" equals "7".

"5" equals "10".

Note that by writing "11" above "5" we add two to five and we get seven.

How would you write Chinese equivalents to the following Arabic numbers?

a. "3" 111, b. "8" 111, c. "6" 1, d. "12" 11

TURN BACK TO PAGE 3 FOR EXAMPLE FRAME B.

Answer: 3.

FRAME 9. Information Frame.

All programed texts that you will encounter at USAPHS will have the same sequence as this text has had; that of Performance Objectives followed by Frames and finally the Self Evaluation Exercise.

Now complete the Self Evaluation Exercise.

LEARNING FROM A PROGRAMED INSTRUCTION TEXT
SELF EVALUATION EXERCISE

1. Which statement best describes the purpose of the Performance Objective?

- A. The performance objective introduces information for the use of the instructor to measure effective teaching.
- B. The performance objective states exactly that which the student should be able to do when he has completed a textual study.
- C. The performance objective eliminates response from the student which may be required of him at a later examination period.
- D. The performance objective presents a broad outline of general information which the student should learn.

2. Select one that best states the purpose of a teaching "frame":

- A. Teaching frames are a series of logically related small increments of information.
- B. A teaching "frame" includes a major division in a programed instruction text.
- C. A teaching "frame" should not include a challenge or require response from the student.
- D. A teaching "frame" presents unrelated but helpful increments of information as directed by the performance objective.

3. Identify the statement that best describes the self evaluation exercise.

- A. The self evaluation exercises are used in determining the student graded averages.
- B. The self evaluation exercise cannot be depended upon by the student to provide the information necessary for preparing for final examinations.
- C. The self evaluation exercise confirms knowledges or skills gained from the teaching elements of the programed text.
- D. The self evaluation exercise offers no opportunity for student review except when he is preparing for final examinations.

ANSWERS TO SELF EVALUATION EXERCISE

1. B. A. C. D.
 2. A. B. C. D.
 3. C. A. B. D.
1. Which statement best describes the purpose of the performance objective?
- A. The performance objective introduces information for the instructor to measure effective teaching.
- B. The performance objective states exactly that which the student should be able to do when he has completed a textual study.
- C. The performance objective eliminates response from the student which may be required of him at a later examination period.
- D. The performance objective presents a broad outline of general information which the student should learn.
2. Which statement best states the purpose of a teaching "frame"?
- A. Teaching frames are a series of logically related small increments of information.
- B. A teaching "frame" includes a major division in a programmed instruction text.
- C. A teaching "frame" should not include a challenge or require response from the student.
- D. A teaching "frame" presents unrelated but helpful increments of information as directed by the performance objective.
3. Which statement best describes the self evaluation exercise?
- A. The self evaluation exercises are used in determining the student's grades.
- B. The self evaluation exercise cannot be depended upon by the student to provide the information necessary for preparing for final examinations.
- C. The self evaluation exercise confirms knowledge or skills gained from the teaching elements of the programmed text.
- D. The self evaluation exercise offers no opportunity for student review except when he is preparing for final examinations.