

AUDIO VISUAL EDUCATION

Module IV

Duplicating Processes

Unit 1

Forms of Reproduction Processes
-----Instructional Objectives:

1. Explain the duplication processes.
2. List five methods of duplicating written instructional materials.
3. Select proper method for producing copies from original if a number of copies required are:
 - a) below ten copies.
 - b) more than ten but less than hundred copies.
 - c) more than hundred copies.
4. State three methods of preparing stencil for duplication.

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SCRIPT BOOK

Module IV

Duplicating Processes

Unit 1

Forms of Reproduction Processes

Graphic materials are reproduced and used for many instructional applications. Some are intended for limited use and hence few copies are taken. In certain situations more number of copies are required, because it is necessary for each member of a group to have copies. We show you a transparency, a visual or use any other written material, you may think, you require the same for your reference at a later date and record. Both instructors and trainees find numerous uses for duplicated materials for workbook, assignments, direction sheets, study guides, points and problem solving activities, examinations and many other activities for which duplicated materials are required from 10 copies to hundreds and thousands of copies.

Because such uses of duplicated materials are so common, Instructors should know:

1. the characteristics of different duplicating processes.
2. the special advantages of each of the processes,
3. the comparative disadvantages of each one of them,
4. which one of the processes, should be chosen for specific class room duplicated material requirements,
5. to prepare master copies for reproduction using different techniques and
6. how to duplicate materials, by operating various duplicating equipment.

The most common forms of reproducing multiple copies of various printed, typed, hand-written or hand drawn items for the classroom use are:

1. SPIRIT DUPLICATING (HECTOGRAPHING)

This is economical and simple of making upto a maximum of 100 transfer copies satisfactorily depending on the carbon used, strength of impression and condition of equipment.

2. STENCIL DUPLICATION OR MIMEOGRAPHING

Commonly known as cyclostyling is done with a stencil and ink duplicator, by typing, hand lettering, drawing or lettering with a stylus on a wax coated stencil. The ink passes through the portions from where wax has been removed by the stylus from the stencil. You can duplicate not less than 3000 copies depending on the quality of work and care taken to do the job. Modern methods in the preparation of stencils have greatly expanded the applications of this instructional processes.

3. PHOTOCOPYING

Is classified into different systems diazo, infra-red, diffusion transfer, and electrostatic. We will discuss here in this module about electrostatic process only i.e. xerography.

4. ELECTRONIC STENCIL SCANNER.

Though in existence for more than two decades in the west, it is catching up only in the recent years, in our country. For many years, stencil duplicating was limited to mostly typewriting, handwriting, hand-drawn stencils, for its text with a stylus for illustrations. But in recent years, this new 'star' has been shining in the horizon with varied plus points. This electronic stencil cutter makes only stencils for copying on a stencil duplicator and does not produce multiple copies.

5. PRINTING

From cudjan leaves, we came to printing from the Caxton days. A rapidly changing field of reproduction with numerous applications to the mounting communication needs of classroom, both for instructors and trainees.

Although there are other duplicating processes these are the most commonly encountered processes, and our discussion in this module will be limited to Spirit duplication, Stencil duplication, Stencil Scanning and Photocopying.

GENERAL POINTERS IN PREPARING MATERIALS

We will discuss later in subsequent units, the details of the specific needs of the different processes and their operation, but here in this unit, we will discuss about some general pointers, which will facilitate preparation of good masters for spirit duplicating, cyclostyling, photocopy and electronic duplicating. Though some of these may help in printing, we will leave printing for further discussion at a later stage, though it is the most important form of duplication.

A. ORGANISE MATERIALS

Write for the level of your trainees. Edit carefully. Insert headings where needed. Be consistent in your wording. Be sure your presentation clicks. Your aim is to give instruction to your trainees. The information should therefore be simple, and understandable. It should create a lasting impression in the minds of your trainees. This could be achieved by being correct and consistent, and including adequate motivating factors. You may use contrasting headings and para headings for important elements.

B. USE CLEAN AND GOOD TYPEWRITER

Use good letters that are readable. Your typewriter letters should be clean without smudges. Employ even touch. Type more slowly than normal speed to be sure you do with even touch and correctly. Brush keys carefully or clean letters using spirit. Test first by typing a few words, make sure that everything is correct and then start working.

C. DEVELOP ATTRACTIVE LAYOUT

You may well prepare a handwritten stencil or master for duplication if you do not have access to typewriter. Though ordinary typewriters are good enough electric typewriter is considered better, you can make your own stencils or masters, and yet produce good masters for duplication. Either way, your layout is the most important one. It is good practice, to plan well with a rough copy initially. Examine the draft as you make the spacing adjustments before you may make the finished version. Leave enough margins so that copy is not cropped in the duplicating process. You might have noticed this in the first post test response sheet. There, we didn't have enough around space. Also use space between blocks of copy to separate items or ideas. Where appropriate use

punctuation, capital letters, underline, vary type styles or letter styles while you write, make guide letter, lettered headings or rule boxes as we have done in Module II - to separate your heading and information. Use a ruler if you are to produce straight lines.

D. JUSTIFY MARGINS WHEN YOU TYPE:

You may sometimes wish to have your typed lines appear in 'line' on the right hand margins also, as in printing. For achieving this, as you have "spaced sentence letter writing" in Module II, you will have to space appropriately, between words. Here is an example:

Cyclostyling (Mimeograph) and spirit duplicating are the two most commonly used methods of duplicating such materials. Cyclostyling is done with a stencil and ink duplicator.

You may go through this paragraph again and make adjustments of spacing as done here below.

Cyclostyling (Mimeograph) and spirit duplicating are the two most commonly used methods of duplicating such materials. Cyclostyling is done with a stencil and ink duplicator.

You might notice the spacing now made and note for yourself the places where this has been provided. In a similar manner you can do while you write with stylus also.

E. PROOF READ as you go. You can make necessary corrections while the matter is in the typewriter. This will avoid all problems you will encounter, if you have to do the corrections after removal.

F. CHOOSE THE MOST APPROPRIATE REPRODUCTION METHOD:

It is uneconomical to resort to printing any thing, if your requirement is only 1000 copies. Do not therefore resort to costly reproduction processes, when you do not need it. A simple type written copy will be sufficient for less than eight copies. Therefore use the appropriate method, depending on the specific requirement. Photocopies usually cost more per sheet than any other form, but they are economical if you need one or two copies only and cannot be easily reproduced by other means. When cyclostyling you can go upto 3000 and about 100 when you use spirit duplicator.

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CRITERION TEST

Module IV Duplicating Processes
Unit 1 Forms of Reproduction Processes

1. Stencil duplication or cyclostyling is also known as
- a. Hectographing
 - b. Mimeographing
 - c. Duplicating
 - d. Photocopying
2. Spirit duplication is also known as
- a. Ferro printing
 - b. Mimeographing
 - c. Hectographing
 - d. Photocopying
3. The best and economical method for duplicating over hundred copies is
- a. Stencil duplication
 - b. Spirit duplication
 - c. Printing
 - d. Electronic stencil cutting.
4. State five points which you consider essential for preparing good duplicated materials:
- 1.
 - 2.
 - 3.
 - 4.
 - 5.

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KEY TO
CRITERION TEST-----
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Unit 1 Forms of Reproduction Process

1. Stencil duplication or cyclostyling is also known as
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 - b. Mimeographing
 - c. Duplicating
 - d. Photocopying
2. Spirit duplication is also known as
- a. Ferro printing
 - b. Mimeographing
 - c. Hectographing
 - d. Photocopying
3. The best and economical method for duplicating over hundred copies is
- a. Stencil duplication
 - b. Spirit duplication
 - c. Printing
 - d. Electronic stencil cutting.
4. State any five points which you consider essential for preparing good duplicated materials:.
1. Organise materials.
 2. Use clean and good typewriter
 3. Develop attractive layout
 4. Justify margins when you type
 5. Make proof reading.
 6. Choose the correct reproduction method.