The general format of a representative learning module is presented to provide a guide for teachers attempting to construct their own modules. A statement of need for such a project is followed by an examination of the individual components making up most learning modules: (1) organizational numbering system; (2) general statement; (3) task statement; (4) learning activities; (5) self-assessment; (6) answer key; (7) remediation activities. A sample module, "Mounting a Picture with Straight Edges," is given as a demonstration of these principles. Also discussed is the possible requirement for a teacher assessment and the relationship of the individual learning module to module clusters and general competency modules. (MB)
DESIGNING A MICRO-UNIT-LEARNING-MODULE

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All over the United States and throughout the world today, there are workshops, seminars, and conferences being planned to acquaint teachers, professors, and anybody involved in the teaching-learning process how to construct and design Instructional Modules.

Modular Instruction is probably not a very new idea, but "an idea whose time has come" as the age of accountability is being pressed in our society today. Accountability, of course, says that the Instructor is responsible for what the student learns, and that the Student is responsible to provide evidence through performance (performance based instruction) that he has learned something. This has taken the "by-guess" and "by-gosh" out of pupil evaluation, and has forced instructors to provide some alternate learning activities for children by planning multiple modes of instruction for those learners who are unable to learn through the abstract and traditional approaches of teaching that involve only "reading" and "telling".

An Instructional Module is a blueprint for learning that focuses in on Student Behavior (what EXACTLY is the student expected to DO, or to KNOW as stated in behavioral terms), on Teacher Behavior (what EXACTLY must the teacher do to help the learner reach this objective), and on Teacher and Learner Evaluation (what behavior must be evidenced to prove that the learner attained the stated objective?...)

In the past, a teacher may have thought he was using an eclectic approach when he adopted several texts, offered a choice of topics for reports, or assigned various experiences all related to reading. But he must not stop there. The Instructional Module says, "You must provide alternate learning activities and utilize a wider base of media so that every learner in the class will be able to choose the instructional mode that will fit his individual needs." In other words, if the learner is a poor reader, then perhaps he can thread the projector and view a film that covers much the same content that's in the book. Or if he doesn't express himself well in writing, he can put his thoughts on tape. Or if he can't comprehend what's written in the text, he can listen to an explanation on tape.

Modular Instruction is probably the first really valid wholesale attempt by teachers to individualize instruction through the use of technology and associate media. And it's such a fascinating new facet of education that it's catching and spreading like wild fire.

It is not difficult to write a module, once you get the knack and understand the format. It's actually very exciting. It may take a little research to dig up the resources, to become familiar with the related audio-visual materials available in the media centers, or to create materials that will be needed for various learning activities, but a good module, one that is worthy of being written in the first place, can be used from year after year, with class after class, and only requires a minimum of revision.
Because Instructional Modules are new on the scene, writing and designing them are still in their infancy. As yet, there is no universal agreement on the "proper" format. So that leaves everybody "doing their own thing", which really shouldn't matter that much. As long as we all follow the basic form, and include the essential steps, we'll probably all get where we're headed just as we do when we travel cross-country using a variety of road-maps, each made by a different map maker.

So keeping the learner in mind, and writing for him, (because modules are self-instructional by nature), let's explore a module together.
The number "1" denotes that this is the first of several modules that will be designed to acquaint the student with dry mounting procedures. Other subjects could be included such as:

MULM 2 Mounting a Cut-Cut Picture
MULM 3 Laminating
MULM 4 Backing with Chertex
MULM 5 LIFTING with Transpara Film
MULM 6 Mounting a two-page Picture

The general statement is called the "instructional set". It gets the learner all "set" for the task. It may be a motivating statement to get him enthusiastic or it could be some background information to "set the stage".

The task statement is explicit in nature, written in behavioral terms so that both teacher and student knows exactly what it is that is expected of him.

Learning Activities offer alternatives (options) that allow for variance in learning styles and instructional models.

These must include many modes of instruction . . . films, tapes, pictures, listening, reading, role-playing, demonstration, real-life experiences, etc.

Subject: Mounting a Picture with Straight Edges

General Statement

Did you know that you can mount pictures so that they will look as though they were done by a professional? Well, you can! And today you're going to find out HOW!

Task Statement

You will choose a magazine picture that you especially like, and use the dry mount press and the dry mounting tissue to mount the picture on a piece of 11" x 14" railroad board.

Learning Activities

a. Look at the film loop on "The Dry Mount Press"

b. Read the hand-out, II-1 "You TOO can Mount Beautiful Pictures"

c. Look at the sequence pictures on pages 27-28 of the A-V book on the teacher's shelf:

d. Look at the slides in the projector tray labeled "Kid's Dry-Mounted Pictures", slides 1-17.

e. Watch someone who knows what he is doing and see how he uses the press to mount pictures.
The self-assessment must be specifically related to developing the learner's capability to perform the task as stated in the Task Statement.

The Key, of course, gives the learner the answer to the self-assessment. This may or may not be a part of each MULM. If it is included, then follow-up activities and remediation experiences must be suggested so that the student will not be left with a feeling of hopelessness.

Remediation Activities may or may not be a part of the MULM. If they are, then new kinds of learner activities must be suggested as well as a couple of the old.

Learner's Self-Assessment

1. Is the picture smooth, free from wrinkles and creases?

2. Is the picture free from bubbles?

3. Is the tissue trimmed so none is showing beyond the picture?

4. Is the entire picture, even the edges and corners, stuck tightly to the board?

5. Did you clean up your scraps?

The Key

If you could answer "yes" to the questions above, you have done better than most people when they mounted pictures the first time. So congratulations! If you answered "no" on a couple, read on below.

Remediation Activity

a. If there are bubbles in your picture, look at the film loop that says, "Overcoming Dry Mounting Problems".

b. If the picture doesn't seem to be sticking, return it to the press and cook it a few seconds longer.

c. If there are wrinkles, or if the tissue is sticking out from around the edges review the loop again on "The Dry Mount Press".

d. Ask a friend what he thinks you did wrong.

e. As a last resort, see if the teacher can diagnose your problem.

f. If you left your scraps on the floor or table, please leave $1.00 for maid service.
Of course, sometimes Teacher Assessment is required, especially if the MULM represents a summation of several concepts or skills developed over the space of several MULM's.

When this MULM, "Mounting a Picture With Straight Edges" is completed, it is grouped with several other related MULM's such as those suggested, and then they are clustered together to become a Module Cluster. This Module Cluster could be given a number and a title, which in this case would be "Using the Dry Mount Press". When this Module Cluster is grouped with other clusters, they become a part of a Competency Module which could be titled, "Educational Technology".

Each MULM (Micro-Unit-Learning-Module) has a title page that includes the following information:

MULM 1

Name of MULM Mounting a Picture With Straight Edges

Name of teacher and school for which it was developed

Virginia Teacher Corps Interns, Virginia State College

Name and number of the Competency Module of which the Module Cluster and this MULM are a part

Mod. Clus. 6 - Using the Dry Mount Press, Com. Mod. - Educational Technology

Name and Address and title of person responsible for development

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Date of Development January, 1972

Comments of the developer, field test data, etc. To be field tested at an Intern Seminar, February 10, 1972.

Results will be entered then.