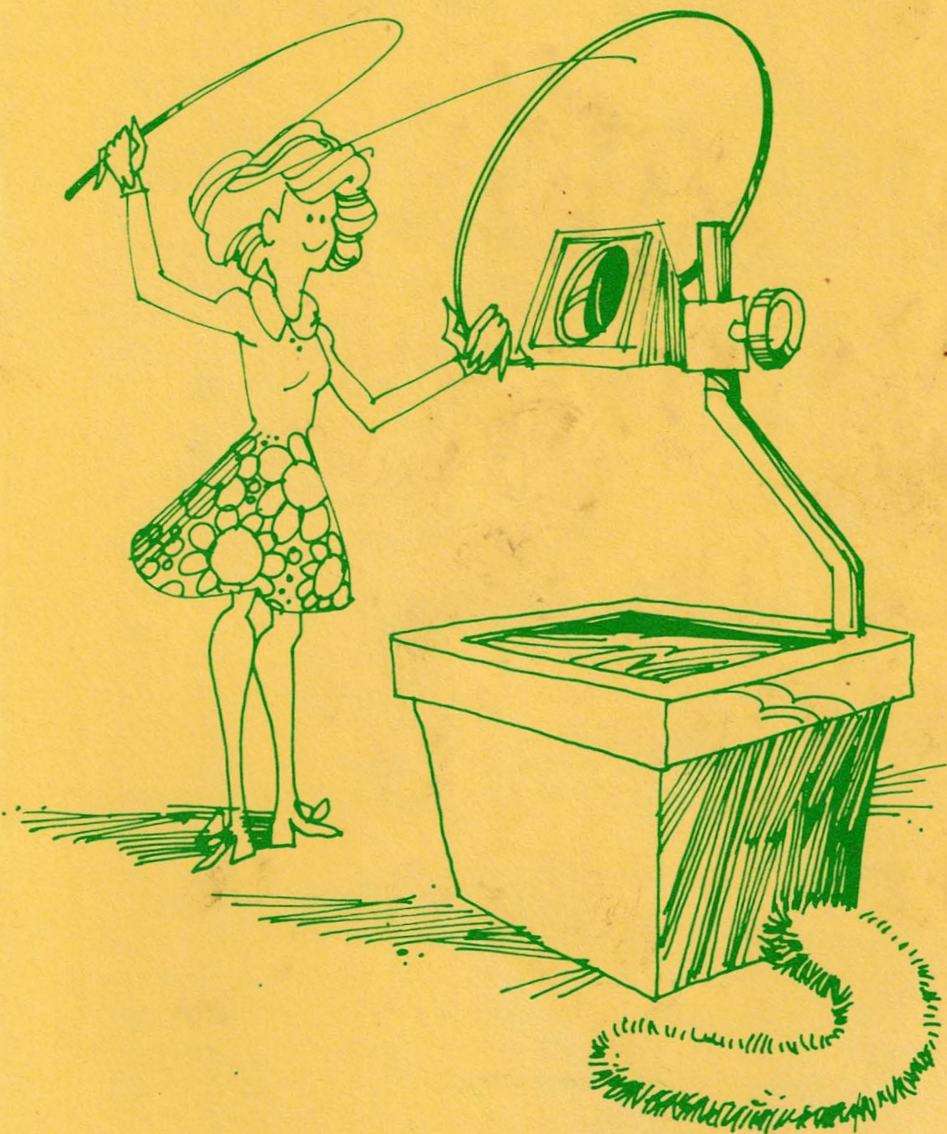
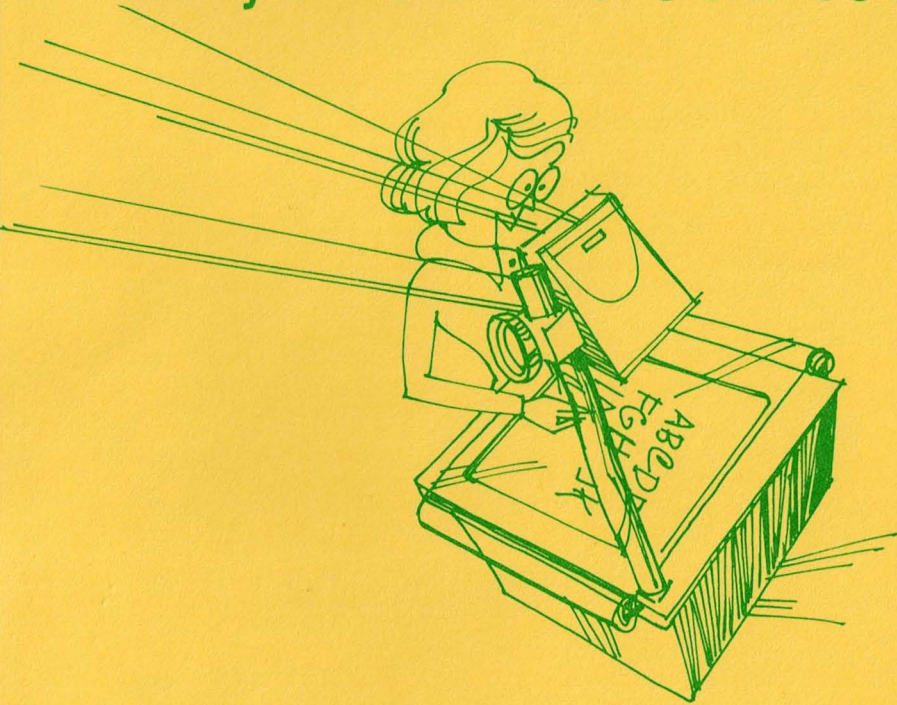


Teaching your overhead projector some new tricks



Some teachers use the Overhead Projector exclusively as a new kind of blackboard.

Well, it's a lot more than that.



The overhead projection system is one of the most-used and most popular teaching aids in education today.

But some teachers don't take full advantage of its potential. Limiting it to "electric blackboard" status doesn't make sense . . . if you know what it can do.

That's the purpose of this little booklet . . . to show you what the overhead projector can do for you. If you've been using it as a "write-on" medium only, or if you're interested in expanding your teaching techniques, read away.

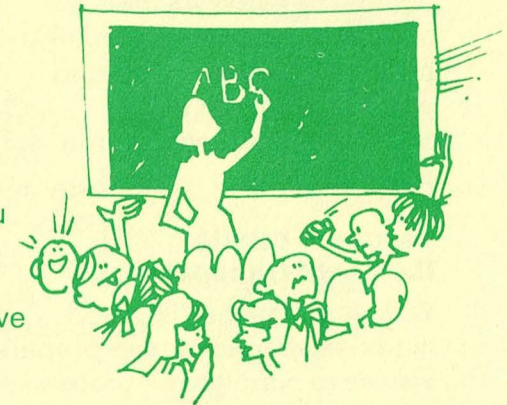
Overhead Projection and YOU make a good teaching team.

Here's why:

Overhead projectors provide teachers with some advantages other media can't match. Here are a few:

Overhead projectors go to the head of the class

The overhead is designed to be positioned in front of the class. Consequently, you face your pupils while presenting so you can maintain eye contact, observe reactions and can adjust your presentations accordingly.



You project in a fully lighted room.

Darkened rooms heighten problems of inattention, drowsiness and discipline. With overhead projection, the teacher and pupils are completely visible to each other at all times.



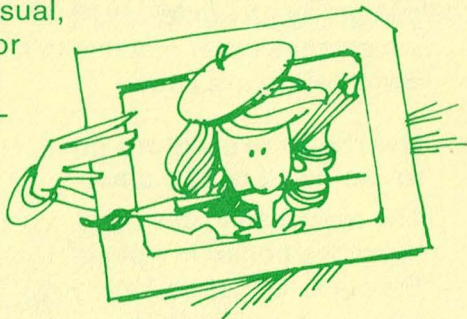
The teacher runs the whole show

An overhead projector complements a teacher. You can use it to control the pace, selection, emphasis and review of any subject. There is no need for a special audio-visual operator. Your verbalizing and the overhead's visualizing work together beautifully. Also, by turning the projector on and off, you can easily shift pupils' attention where you want it.

Teaching team

Overhead projection is a very versatile medium

You can write or draw on a visual, you can project transparent or opaque objects, you can use hand-made or professionally-prepared transparencies and you can point out details of a visual as it rests on the projector stage.

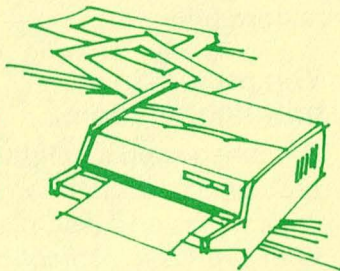


Teachers create their own transparencies

With very basic skills and materials, a teacher can prepare visuals to supplement professional ones.

Transparency-making is easy and inexpensive

Equipment and materials are simple and inexpensive. A ready-to-project transparency can be produced from an original in just seconds.

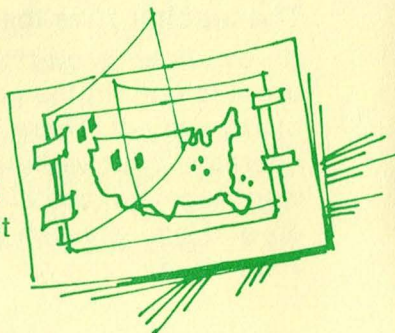


No more repetitive chalkboard work

The result is more class time available for instruction and review.

Complex subjects can be presented step-by-step

You can break down a whole into its component parts with the overhead projection techniques of overlays and masking. And then present the subject comprehensively.



Color can be used effectively and economically

Overhead transparencies lend themselves to the use of color. And color helps pupils grasp distinctions, reconstructs reality and imparts esthetic and emotional values. Incidentally, color film costs about the same as plain black film.

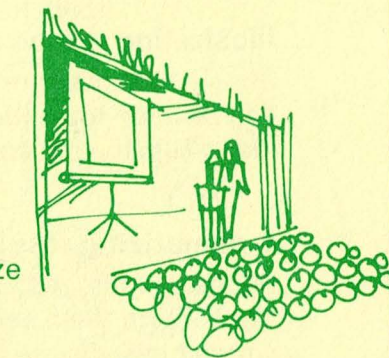
Overheads can be operated by anyone

A little time, a little practice and an overhead projector becomes an extension of a teacher. The machine is virtually damage-proof. Students can use it to present their work and to solve problems.

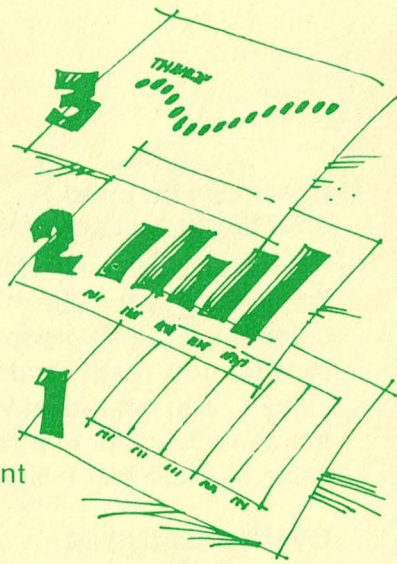
You can present to any size audience

The overhead projector's large, clear images make it adaptable to any audience. You're limited only by the size of the screen and the distance you can be from it.

Overheads combine all the best advantages of visual media. They help focus student attention, aid in comprehension and improve retention.



Does your Overhead Projector know all these tricks?



Developing charts step-by-step

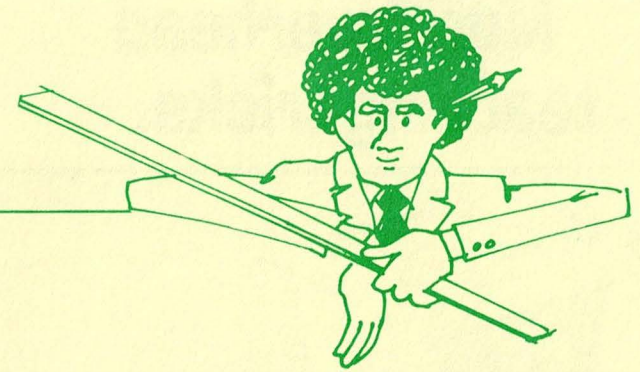
A great way to show comparisons. Develop charts progressively in front of your audience. The overlay technique works nicely here.

Illustrating lesson objects

Simple sketches and diagrams can be used to explain abstract ideas quickly and comprehensively.

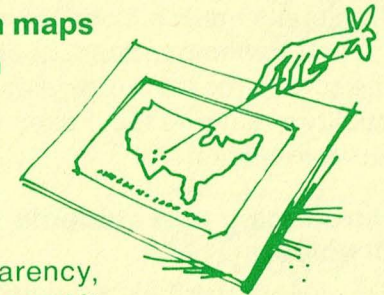
Summarizing results or responses

Record pupils' responses to a question as they come. Then weigh them and underscore right responses or erase wrong ones. Or use transparencies to summarize the results of a group discussion.



Locating places and events on maps

Using pointers to locate areas on map outlines helps pupils grasp geographical relationships and makes events more real to them.



Outlining a lesson

Put the entire outline on a transparency, cover with a sheet of paper and reveal it point-by-point to make an involved subject more logical and clear.

Giving assignments

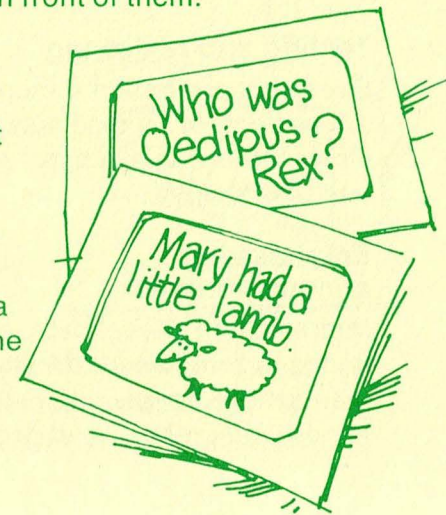
Using the overhead projector to give assignments insures that all students receive the same input. Also, homework becomes more important to students if projected on a screen in front of them.

Asking questions

Use overheads to focus thought on a particular question or subject by projecting it and leaving it on the screen.

Teaching memory verses

Reinforce a verse by putting it on a screen and erasing each part as the class learns it.



More overhead teaching tricks.

Teaching new songs

This really helps a class learn songs . . . and remember them. Looking at the screen for the words aids the quality of singing too. Faces aren't stuck in books.



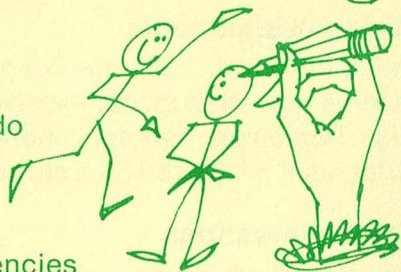
Introducing new students or visitors

This technique makes a newcomer feel welcome and helps the teacher and other students remember the name.



Telling a story

Make narratives come alive by providing your own simple-to-do illustrations on visuals.



Testing and reviewing

Overhead projection transparencies are perfect for quickie quizzes. Or for reviewing a subject at the end of the class.

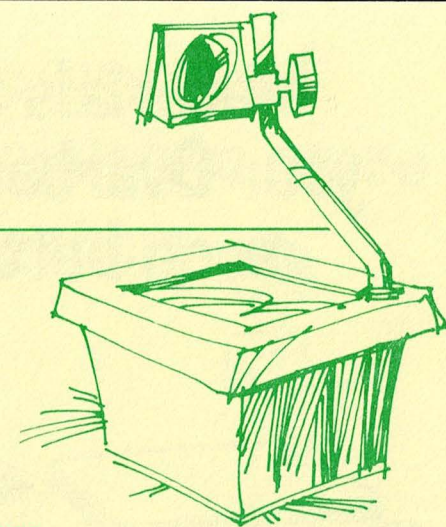


Emphasizing announcements

Impress time, place, date, cost, things to bring and other announcements more deeply upon student minds with an overhead projector.

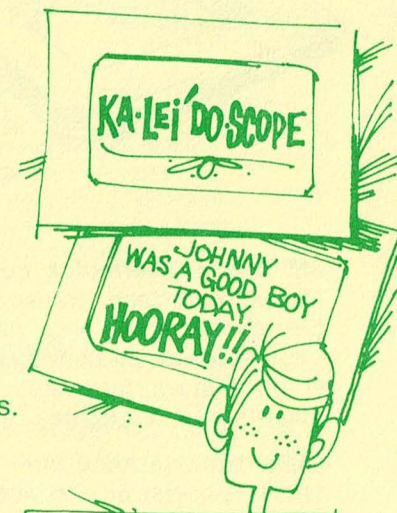
Defining difficult words

Project new words illustrating proper pronunciation and definitions. Use color for emphasis.



Keeping records and giving recognition

The overhead is a good tool to use for taking class attendance or keeping other records. It's also a good way to "put a student's name in lights" for doing good work.



Facilitating class participation

A teacher can use the overhead projector to effectively "drill" students. Students can also share their assignments with classmates by putting them in transparency form.

Capturing and focusing attention

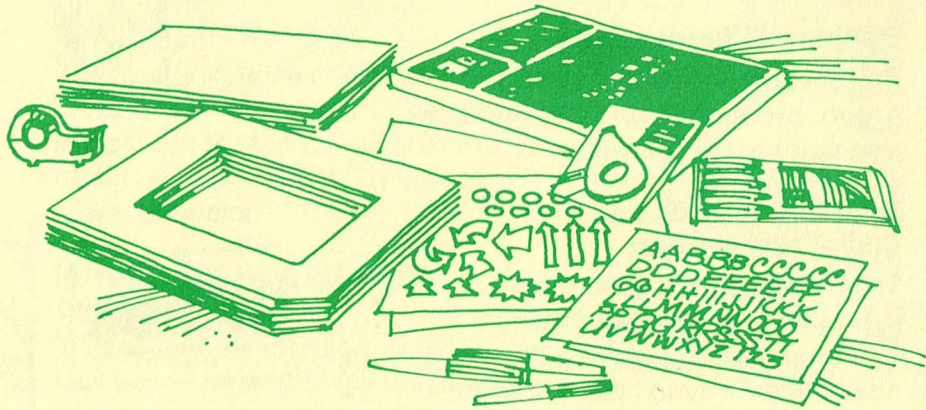
Overheads and bright, attractive visuals help capture attention and focus it where you want. The "on-off" technique is also good here.



Making all kinds of meetings more effective!

Use the overhead projector to present agendas, detail budgets or floor plans, etc., control the flow of information and maintain group attention.

Materials to make your Overhead Projector even better



3M Brand Thermofax copier. Makes overhead transparencies in seconds. Also makes paper copies, stencil masters, spirit masters, laminates documents and duplicates labels.

Clear transparency film. Individual sheets or roll attachments.

Writing instruments. Water-soluble pens or grease pencils.

Adhesive color film. Use these to shade or color all or part of a given transparency. Cut away and peel off parts you don't want covered.

Mounting frames. Use visuals over, store them.

Transfer letters and symbols. Black and colors.

Transparent tapes. Colors, lines, borders, patterns, etc.

Color image film. "Reverse" white and colors. Dramatic attention-getters.

Clippings file. Maintain your own file of words, cartoons, symbols, layout designs, etc.

Speech typewriter. Large type is good for making visual originals. "Orator" or "primary" type.

Leroy lettering set. Make professional-looking visuals.

Contact your school's Media Center, Purchasing Agent, or your local 3M Business Product Center.

Follow these overhead projection principles to more effective teaching



1 Plan ahead!

Never use the projector without a specific purpose in mind. Develop your material before the class, but be flexible as you present it. (The overhead allows for plenty of flexibility.)

Use this checklist for lesson preparation

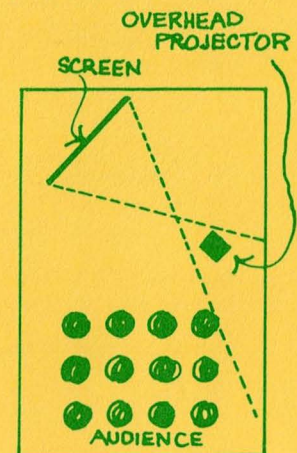
- What lesson parts are important enough to visualize?
- What aspects of the lesson may be unclear?
- How can I use diagrams or charts to explain difficult points?
- How can I use the overhead to actively involve my class?
- Would write-on techniques make some visuals more effective?
- Would some alternative medium work better than the overhead?
- Should I use other media in addition to the overhead?

2 Write legibly and large

Many presenters use letters that are too small and too weak to be effective. Letters should be approximately 2½" high for every 32 feet from the screen (check from the back of the room). Make letters strong and bold. Don't cram ideas together. Be concise. Turn the projector off when not in use and between transparencies.

3 Give everyone a "front row seat"

Locate screen so everyone in the room can see it clearly. (See diagram.) Position the screen as high as possible and tilt it forward to eliminate "keystoning" of the projected image.



More overhead projection principles

4 Use simple, graphic drawings

Simple figures that get the idea across are what you want. Don't stop teaching to put complicated illustrations on the visual. Prepare them before class.

5 Stimulate curiosity.

Use the revelation technique (covering the visual with a sheet of paper and revealing items one at a time) to avoid distractions and keep the class interested.

6 Emphasize!

Use color, capitalization, underlining, circling or boxing to make key points stand out.



Sources of other helpful overhead projection information:

TRANSPARENCY MASTER LIBRARY

3M's TRANSPARENCY MASTER LIBRARY is a collection of printed originals which are available to schools for transparency-making use. Seven major curriculum areas — math, science, vocational, language arts, social studies, home economics and miscellaneous — contain 240 titles and over 6000 printed originals. This is a great way for teachers to update their visual aid files and add impact and understanding to their teaching. Contact your local 3M Business Product Center.

How to Make More Effective Visuals (50¢ from 3M Company, 3M Center, St. Paul, Minnesota 55101. Order with booklet name and code number 78-1751-6350-6).

"Chalkboard with a Switch" (*Teach Magazine*, Winter 1970)

Low Cost Teacher Made Overhead Transparencies from Three Mil Trycite (Vocational Education Media Center, Clemson University, Clemson, South Carolina)

Visual Products Division

3M CENTER • ST. PAUL, MINNESOTA 55101

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