Plunge into the Fun World of Local Production. Media Production for the Classroom Teacher.

Designed to assist teachers and media professionals in the development of media presentations that can creatively capture learner attention, this manual provides step-by-step instructions for preparing materials using a dry mount press, copy machines, and cassette tape recordings. Sources of visual materials are suggested, the equipment needed, and general instructions for using the dry mount press are given, as well as the purpose, specific instructions, evaluation, and ideas for projects using dry mounting tissue, chartex, fotoflat, laminating, and lifting. General information on copy machines is followed by specific instructions for paper copies, transparencies, spirit duplication, mimeographic duplication, and laminating original materials; evaluation criteria are given. Guidelines for taping using a microphone include the selection of a recording location, placement of the microphone, making the recording, adding music, patch cord recording, playback, and recording topics and ideas. (MER)
PLUNGE INTO THE
FUN WORLD OF LOCAL
PRODUCTION

MEDIA PRODUCTION
FOR THE
CLASSROOM TEACHER

August, 1977

"PERMISSION TO REPRODUCE THIS
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TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."
Teachers frequently are required to develop learning materials for classes without proper training to accomplish this task. The brief directions that appear on media center equipment do not offer sufficient guidance in the creation of media presentations that really capture the attention of learners. Therefore, we are grateful to Dr. Hans Moll, Associate Professor of Learning Resources at Western Illinois University, who has prepared and developed this brochure on media production for the Illinois Office of Education and the teachers and media professionals of Illinois.

Joseph M. Cronin
State Superintendent of Education
The material contained herein was contributed by Dr. Hans Moll. It represents the author's view and does not necessarily reflect the position and policies of the State Board of Education and the Illinois Office of Education.
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THE DRY MOUNT PRESS

1. Introduction

Since we accept the old adage that one picture is worth a thousand words* we try to provide a learning environment rich in visual materials. To this end the educational publishing industry has made available thousands of visual items for our purchase and use. In the main, these illustrations are good, accurate and useful. However, it is not always possible to buy the right picture, have the resources to buy the right visual or the ability to preserve the material once we have it.

The dry mount press is one tool which can provide you with just the right visual for your objective and your class, the price is one you and your school can afford, and the press can be used to preserve and extend the life of existing material.

Three elements are involved in the production of your own visual material. These are:

1. The visual material people with art ability are frequently able to draw their own original visual materials. The remaining 99 percent of us, however, need to select our visuals from existing material. Good sources of inexpensive material include:

   magazines
   old books
   calendars
   posters
   advertising materials from stores, etc.
   post cards and greeting cards
   students' work

2. The equipment. For best results, the following is the minimum equipment needed:

   dry mount press
   tacking iron
   single edge razor blades
   ruler
   scissors
   newsprint
   a cardboard covered cutting surface

3. The time. The mounting process itself is rapid, but for good results, work with deliberate haste.

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*One word is also worth a thousand pictures. It just depends on the word, the picture and the person.
2. General Instruction

The function of the press is to provide heat and pressure.

Materials used in the press call for temperatures of 180°F., 225°F., or 270°F. These materials can be used in combination, but in general, the highest temperature material should be used first.

Cleanliness of the press heating plate is important for proper heat distribution and for the protection of the visual. Always place visuals between sheets of clean newsprint before placing into the press. The press heating plate can be cleaned but do NOT scratch the surface as each scratch will be reproduced on future visuals.

Humidity causes a problem with all materials. When the material has any moisture in it the press turns it into steam and prevents proper bonding. Pin holes can remove the steam and help bonding, but the best answer to moisture is to preheat all of the non-seal materials before working with them. To absorb the moisture, cover the item with several layers of newsprint before placing into the press.

Proper temperature is important to good bonding. Allow sufficient time for the correct temperature to be reached. (There are too many variables to give a time reference, but this is one case where more is better.)

The foam pad will become worn and crushed with use. When the pad is worn, a 1/4 inch sheet of masonite placed under the pad will extend its useful life.

The tacking iron should be kept clean. Always use the tip of the iron and keep it moving to prevent sticking. When touching the iron to the face of a visual, place a small piece of clean newsprint between the visual and the iron.

Eleven inch by fourteen inch poster board has been found to be a good size board for general use.

Protect finished visuals by storing in file drawers, boxes, or any covered location. Keep out of hot areas or direct sunlight to keep the colors bright.

3. MT5 Dry Mounting Tissue

3.1. Purpose - A permanent method of bonding paper to paper or other hard surface. MT5 is a sheet of tissue covered with a thermoplastic dry glue.

3.2. Specific Instruction

3.2.1. Set press at 225°F. (note general instruction above).
3.2.2. Place visual to be mounted face down on the work table.
3.2.3. Cover with MT5 and tack to the center of the visual.
3.2.4. Trim the visual to proper size using the razor blade or scissors. Be certain MT5 does not stick out past the edge of the visual.
3.2.5. Position the visual on the cardboard.
3.2.6. Lift two corners of the visual and tack the MT5 to the cardboard.
3.2.7. Place the entire piece between newsprint and insert into the press.
3.2.8. Close press so that pressure is placed on the visual and leave for 20-30 seconds.
3.2.9. Remove from the press and allow to cool.

3.3. Evaluation - A good mount does not have MT5 showing or any blisters
3.3.1. Small amounts of MT5 can be removed with a razor blade.
3.3.2. Blisters can be pierced with a pin and replaced in the press for an additional 20-30 seconds.

3.4. Ideas
3.4.1. Mount visuals from all sources listed above.
3.4.2. Cut out one part of a picture, i.e., a house, horse, child, etc.
3.4.3. Combine parts of several visuals to produce a new picture.
3.4.4. Use construction paper to give a colored highlight to the picture - use formal or free-form shapes.
3.4.5. Tack MT5 to construction paper and cut out letters to add words to the visual.
3.4.6. Add words by rubber stamps, Wrico, Leroy, rub down letters, etc.
3.4.7. Use colored tape to frame the cardboard mount.
3.4.8. Tape several visuals together for free standing displays.
3.4.9. The process can be used to remove unwanted materials from the back sides of visuals.
3.4.10. Use the finished product:
         on the bulletin board
         standing on the chalk rail
         in the opaque projector
         pass around the class.
3.4.11. Save larger scraps of MT5 and use several of these to mount a picture. Caution: Do not overlap the MT5 as overlap will show as a bump in the finished visual.

4. - Chartex

4.1. Purpose - Reinforce and protect material with a cloth backing. Chartex is cloth with one side coated with thermo glue.
4.2. Specific Instructions

4.2.1. Set press at 180°F. (note general instructions above).

4.2.2. Place visual to be mounted face down on the work table.

4.2.3. Cover with Chartex, glue side toward visual, and tack to the center of the visual.

4.2.4. Place the entire piece between newsprint and place into the press.

4.2.5. Close the press so that pressure is placed on the visual and leave for 15 to 20 seconds.

4.2.6. Remove from the press and allow to cool.

4.2.7. Trim the visual with a single edged razor blade or scissors.

4.3. Evaluation - The finished product will not have any blisters.

4.4. Ideas

4.4.1. Use visuals on the felt/flannel board (not as good as the Fotoflat process).

4.4.2. Sew several pages together to create a book.

4.4.3. Give new life to old maps or other folded materials that wear out on the folds - roll the new item.

4.4.4. Make study prints for children without fine motor skills.

4.4.5. Create game boards.

5. Fotoflat

5.1. Purpose - A temporary method of bonding paper to paper or other hard surfaces. A permanent method of bonding paper to cloth. Fotoflat is a sheet of tissue covered with a non-greasy wax.

5.2. Specific Instructions

5.2.1. Set press at 180°F. (note general instructions above).

5.2.2. As a temporary mount of paper to paper or other hard surface, follow the specific instructions under MT5.

5.2.3. Select a good grade of felt and place in the press to remove moisture and wrinkles.

5.2.4. Place the felt on the table. Place a piece of Fotoflat on the felt and place the visual over the Fotoflat. (Since felt is expensive, rough trim the visual and get as close to the edge of the felt as possible.)

5.2.5. Place the entire piece between newsprint and place into the press.

5.2.6. Close the press so that pressure is placed on the visual and leave for 15 to 20 seconds.
5.2.7. Remove from the press and allow to cool.
5.2.8. Cut out the visual with a new single edge razor blade. Undercut slightly for best appearance.

5.3. Evaluation - The finished product will not show any felt or have any blisters.

5.4. Ideas

5.4.1. Use finished product on the felt/flannel board.
5.4.2. Have children create the characters for story time.
5.4.3. Save larger scraps of Fotoflat and use several of these to work with a visual. Caution: Do not overlap the Fotoflat as overlap will show a bump in the finished product.

6. Laminating

6.1. Purpose - A permanent cover for protection against stain, dirt and moisture. Seal-lamin is Mylar plastic with one side coated with thermo glue.

6.2. Specific Instructions

6.2.2. Heat material to be laminated several times to remove all moisture.
6.2.3. Insert material to be laminated between a "C" shaped piece of seal-lamin with the glue side toward the material. (It is best to cover both sides of the material to prevent warping.)
6.2.4. Rub lightly to create a static cling.
6.2.5. Close the press so that pressure is placed on the visual and leave for 50-60 seconds.
6.2.6. Remove from the press carefully as it may be hot enough to burn your fingers.
6.2.7. Trim off excess lamin with the razor blade or scissors.

6.3. Evaluation - A good lamination does not have blisters or a stretched film between several thicknesses.

6.3.1. Small blisters can be pierced with a pin - large blisters can be cut with a razor blade. Replace in the press for an additional 50-60 seconds.
6.3.2. Use the edge of the tacking iron to adhere the stretched material.

6.4. Ideas

6.4.1. Preserve newspapers.
6.4.2. Protect frequently handled material.
6.4.3. Cover the finished product described under MT5.
6.4.4. Cover one side of material before using the technique listed under Chartex or Fotoflat.
6.4.5. Make a montage of real items.
6.4.6. Dry leaves, etc., in the press - use several layers of newsprint and repeat until the specimen has a "parchment" feel. Arrange on posterboard and cover with seal-lamin.
6.4.7. Write on the finished product with china markers, overhead pens, etc.
6.4.8. Crumple the seal-lamin in a ball before placing over the visual for a 3D effect.
6.4.9. Protect shop instructions from greasy hands.
6.4.10. Protect cooking recipes from greasy hands.
6.4.11. Protect notes, instructions, etc., from moisture.
6.4.12. Use cloth, lace, and other sewing items to create people, dolls, animals, etc.

7. Lifting
7.1. Purpose - Remove ink from paper to preserve on plastic. Use seal-lamin or transparafilm.

7.2. Specific Instructions
7.2.1. Set press at 270°F. (note general instructions above).
7.2.2. Select a visual printed on clay-based paper. To test, moisten your finger and rub on an unprinted edge of the paper. Your finger should have a chalky white look (the clay). Ebony, U. S. News and World Report, Time and Newsweek are some magazines printed on clay-based paper.
7.2.3. Heat material to be lifted several times to remove all moisture.
7.2.4. Place picture face up on the table.
7.2.5. Cover with seal-lamin (Note - transparafilm has a different layering technique. Follow the specific instructions that come with the materials).
7.2.6. Place the entire piece between newsprint and insert into the press.
7.2.7. Close the press so that pressure is placed on the visual and leave for 50 or 60 seconds.
7.2.8. Remove from the press carefully as it may be hot enough to burn your fingers.
7.2.9. Allow to cool.
7.2.10. Drop into a pan of water - a small amount of soap may be added.
7.2.11. Patiently wait for the water to soak into the paper. With luck the whole sheet will slide off the plastic, leaving the ink and some clay.
7.2.12. Gently wash the clay off the plastic using a soft sponge or your finger tips. Running water is helpful.
7.2.13. Allow to dry.
7.2.14. Spray with acrylic spray or laminate the dull side of the transparency.
7.3. Evaluation - A good lift has bright colors, all clay removed and no ink rubbed off.

7.4. Uses

7.4.1. Mount in frames and use on the overhead projector.
7.4.2. Mount in 2 x 2 frames and use in a slide projector.
7.4.3. Tape on windows for a stained glass effect.
COPY MACHINES

1. General Information

Materials such as 3M, Labelon, etc., are sensitive to small changes in temperature. When the material to be copied is heated, there is a small difference between the temperature of the paper and carbon based written material (i.e., Number 2 pencils, India ink, printers black ink, Xerox copies, etc.).

Copy machines such as the 3M secretary are a source of heat. The amount of heat applied to a given area is determined by the time the material is in contact with the heat source. The dial on the machine controls the speed of a belt, hence the amount of heat.

Specific dial settings will not be recommended in this pamphlet as variation in the age of the machine, electrical current flow, the brand of the copy material, etc., all are factors which influence the final product. Try various settings on your machine until consistently good copies are obtained. Tape the appropriate dial setting to a visible spot on the machine.

When the machine has not been used for a while (overnight or after a week-end) hold a piece of paper into the slot so that it will warm up for 15 to 20 seconds.

2. Specific Instructions

2.1. Paper Copies

2.1.1. Place copy paper over material to be copied with the notched corner at the upper right hand corner.
2.1.2. Set dial at the setting found to be correct for your machine.
2.1.3. Insert between guidelines on the machine.

2.2. Transparencies

2.2.1. Place transparency film over material to be copied with the notched corner at the upper right hand corner.
2.2.2. Set dial at the setting found to be correct for your machine.
2.2.3. Insert between guidelines on the machine.
2.2.4. Transparency may be mounted on a cardboard frame for protection, labeling, and storage.
2.2.5. Color can be added with adhesive transparent color sheets, and liquid or wax overhead projector pens.
2.2.6. Words can be added with rub down letters.
2.3. Spirit Duplication

2.3.1. Place original material to be copied in the location suggested by the manufacturer.
2.3.2. Set dial at the setting found to be correct for your material.
2.3.3. Insert between guidelines on the machine.
2.3.4. Run copies on any standard spirit duplicating machine.
2.3.5. Uses
   Type test on paper - easier to correct than on a spirit master.
   Give each learner a copy of transparencies used in class.
   Add complex line drawings easily to duplicated material.

2.4. Mimeographic Duplication

2.4.1. Place original material to be copied in the location suggested by the manufacturer.
2.4.2. Set dial at the setting found to be correct for your machine.
2.4.3. Insert between guidelines on the machine.
2.4.4. Run copies on any standard mimeograph machine.
2.4.5. Uses
   Type test on paper - easier to correct than on a mimeo stencil.
   Give each learner a copy of transparencies used in class.
   Add complex line drawings easily to duplicated material.

2.5. Laminating

2.5.1. Place original material to be copied in the location suggested by the manufacturer.
2.5.2. Set dial at the slowest (i.e., hottest) setting.
2.5.3. Insert a corner of the material so the machine heats up 15 to 20 seconds.
2.5.4. Insert between guidelines on the machine.
2.5.5. Trim excess lamin with razor blade or scissors.
2.5.6. Uses
   See ideas under Laminating above.
   Use clay-based paper and follow lifting instructions above.

3. Evaluation

3.1. All lines should be completely copied - If lines are only partially copied, run them through at a slower setting or retrace the lines with a #2 pencil.
3.2. Copy should be centered - If not move the original till it lines up properly.
3.3. Background should be clean of black dots. If black dots appear, run through at a faster setting or clean the belt as suggested by the manufacturer or use a higher quality paper for the original (mimeo paper is one of the worst producers of the black dot problem).
CASSETTE TAPE RECORDING

1. Taping Procedure - Microphone Recording

1.1. Selection of a recording location

The acoustical characteristics of a room determine the basic quality of a recording. These characteristics are the result of sound reflection from smooth, hard surfaces within the room as well as the size and shape of the room. Sound absorbing quality of the materials within the room alter these characteristics.

Extraneous noise such as phones, playgrounds, school bells, talking, running water, fans, etc., can intrude on any recording and lower its value.

To combat these problems, the teacher can construct a "sound proof" booth within the classroom. This booth can help in two ways. First it cuts down the size of the recording area and secondly, it provides sound-absorbing, rather than sound-reflecting walls.

The sound booth can be made in any area of the room as long as most surfaces are covered with sound-absorbing materials. These materials can be rugs, cork boards, drapes, blankets, coats, or any other soft cloth. They can be draped over chairs, music stands, etc.

1.2. Placement of the Microphone

Under good recording conditions, the microphone can be placed 18-24 inches from the speaker. But in a normal classroom, the microphone needs to be placed close to the mouth to permit a lower recording volume. This makes the recorder much less sensitive to extraneous noises and sound reverberations within the room.

When the microphone is placed close to the mouth, the speaker should speak past the microphone, rather than directly into it. This eliminates the hissing "s" and reduces the popping "p," "b," and "t" sounds.

There are several ways to use the close-to-the-mouth techniques with groups. One way is to pass the microphone from speaker to speaker (remove rings to reduce handling noise). A second way is to use several microphones and feed them into a mixer. These can be purchased from most electronics stores.

A single microphone can also serve several speakers by adjusting the height of the microphone to the shortest person, with the taller person bending slightly when speaking.
1.3. Making the Recording

1.3.1. Select a quality tape with sufficient playing time for your program.
1.3.2. Place into the tape recorder.
1.3.3. Press both buttons for recording.
1.3.4. Speak in a normal voice for a few moments.
1.3.5. Rewind and play - check for background noises, volume levels, hissing "s" and popping "p," "b" and "t," etc.
1.3.6. Repeat 1.3.4. and 1.3.5. until you are making a quality recording.
1.3.7. Tape a full program.

1.4. Adding Music

1.4.1. Select a non-vocal recording.
1.4.2. Play on a tape or record player with volume low.
1.4.3. For music during a verbal pause, bring the microphone close to the speaker and raise the player volume.
1.4.4. Practice before making the final recording.

2. Taping Procedure - Patch Cord Recording

2.1. Make or purchase a patch cord that fits your tape recorder and the originating tape recorder, record player or radio.
2.2. Set the player at a normal volume.
2.3. Make a test recording as before. Check for distortions of sound or fading.
2.4. Tape the full session.

3. Playback

3.1. Have the speaker above and facing the audience.
3.2. For a large group, use a large external speaker if possible.
3.3. Play at as low a volume as needed for the class to hear comfortably.

4. Recording Topics and Ideas

4.1. Student reports can be made at home and used in class. Examples might be "The Bells of My Life," "My House in Sound."
4.2. Lessons can be recorded and sent to absent students.
4.3. Teachers can read a student's written work aloud and comment on the content, form, spelling, etc.

4.4. Students can write and act out "radio" plays complete with sound effects.

4.5. A teacher who cannot play the piano can ask a teacher, student, or parent who can play to make a recording for use in the classroom.

4.6. Classroom "pen" pals can exchange tapes with classes in other schools, cities, or countries.

4.7. Student reading progress can be documented. Early in the term a student can read a selection. Later in the term, the student can read the same selection on the same tape. These back-to-back recordings can be used for evaluation or in parent conferences to show student progress.

4.8. Students can interview people about current events, professions, job descriptions, etc.

4.9. While on a study trip, students or teachers can record observations, the sounds of the location, or interview people involved at the site.

4.10. Record oral histories of teachers, local citizens, or past students.

4.11. Student speeches, solos, or other performances can be recorded and played back for correction or comment.

4.12. Comments can be made for silent filmstrips, 8mm loops, or slide sets permitting the same information to be given to several classes.

4.13. Birds, animals, city sounds, home sounds, etc., can be identified.