

AUDIO VISUAL EDUCATION

Module II

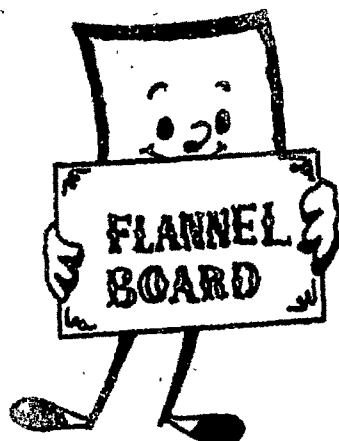
Non Projected Visual Aids

Unit 7

Flannel and Magnetic Boards.
-----Instructional Objectives:

1. Classify by definition a Flannel board.
2. Name the materials used for Flannel board.
3. Distinguish the materials suitable for Flannel board cut outs.
4. Explain the features of a magnetic board.
5. Name the materials used for making magnetic boards.
6. List five follow up actions suggested to ensure the value of presentation using.
 - a) Flannel boards
 - b) Magnetic boards.
7. Organise and display a concept on
 - a) Flannel board
 - b) Magnetic board.

What is a flannel board?



A flannel board is a non projected visual aids, which utilises the adhering qualities of certain materials to support vertically, illustrative flat work which is also adhesive or which is backed with an adhesive material.

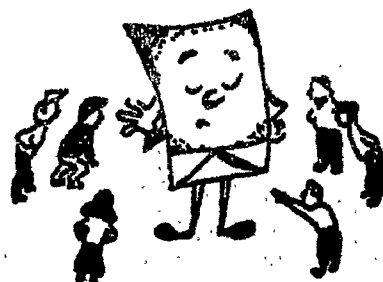
The flannel board is a stationary or portable surface covered with a rough flannel-line cloth, usually grey, black, blue or orange colour.

Various objects such as pictures, magazines or newspaper "cutouts", graphs, text materials, drawings and other illustrations with similar rough "flannel like" backing are placed on the board as the presentation is developed by an instructor. These objects adhere to the surface on the board without the use of pins, thumb sticks or tape. It is possible to develop an idea step-by-step in a dramatic and impressive manner.

What are its characteristics?

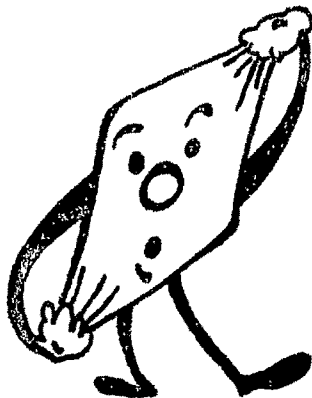
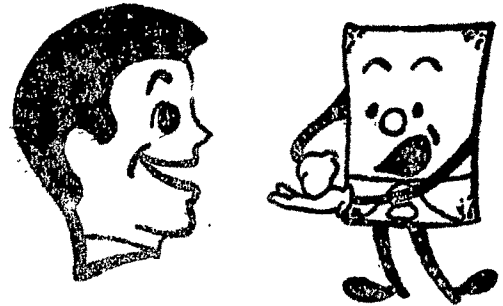
1. It attracts attention.

Because of its eye catching quality, and unique appearance, flannel-board attracts the attention of the viewer in a positive way.



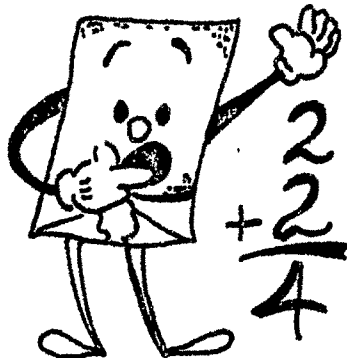
2. It stimulates interest.

Being different from other forms of visual aid, it arouses interest through activities centered around its colour and novelty. It has good motivational qualities. The key points should be made particularly attractive and stress important points.



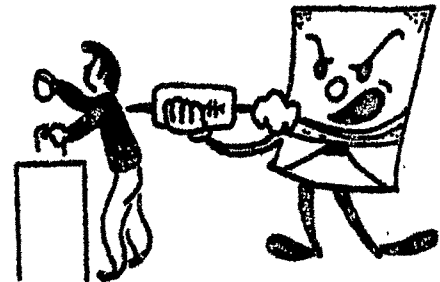
4. It vitalises demonstrations.

Lessons become more exciting and meaningful to instructor and trainee with flannel board. Water for thirst like need required in many learning situations is often provided.



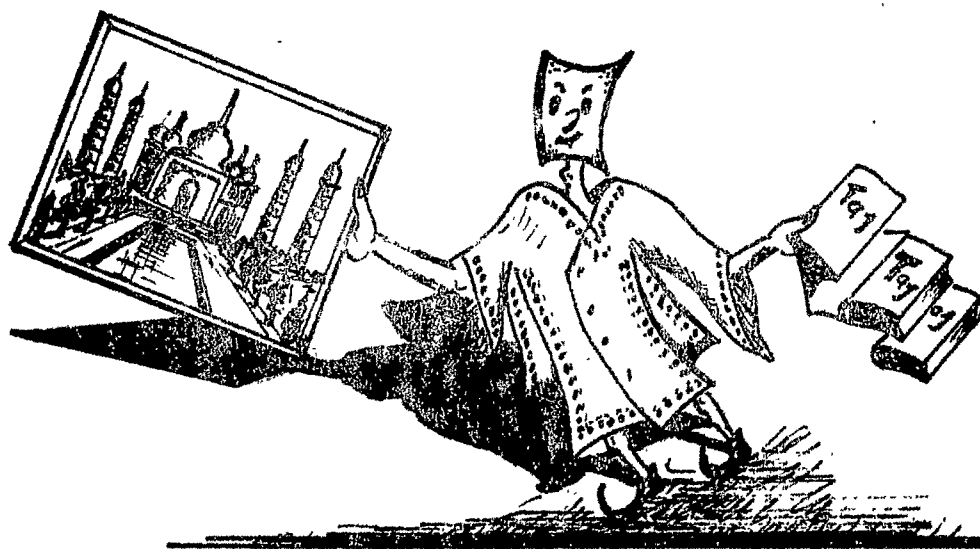
3. It is flexible in use.

These visuals can be produced in a variety of shapes, colour and sizes and may be adapted to many subject matter areas and teaching levels.

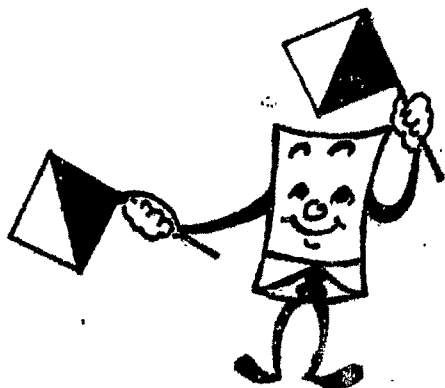


5. It dramatises concepts.

Ideas difficult to comprehend may be easily understood through the wise use of flannel board, because it requires simplicity of presentation.



A PICTURE IS WORTH A THOUSAND WORDS

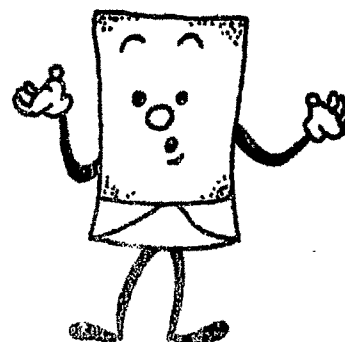
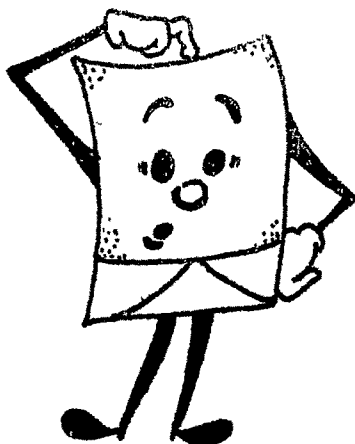


6. It improves communication

Many barriers to communications are often removed by using a flannel board. The famous proverb, "A picture is worth a thousand words" can be applied while using flannel boards.

7. It is easily made and stored.

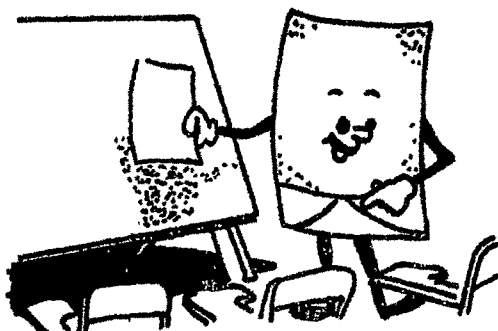
The board is simple in construction, flat in shape and utilises little storage space. Similarly the objects required for display are also small, flat, and require little storage space.



8. It is flexible in design.

Presentations can be designed around any size of board, or audience. It can be developed adding or deleting materials, and revised on the spot.

HOW DO YOU MAKE A FLANNEL BOARD? PLANNING AND PREPARATION

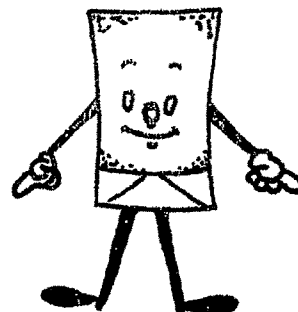


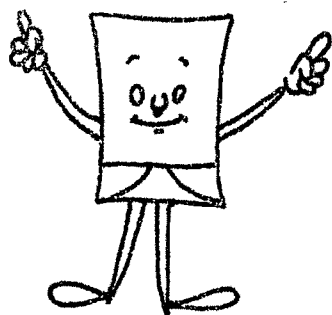
Flannel boards are available with local dealers, in major cities and towns. Making it is easy and can be done by you in your school or institute. Following suggestions will assist you in preparing a flannel board.

1. Recommended materials.

a. Base.

Plywood or other hardboards are good bases. Cellotext and any other type of particle boards also make excellent bases. They can be easily cut as they are light.

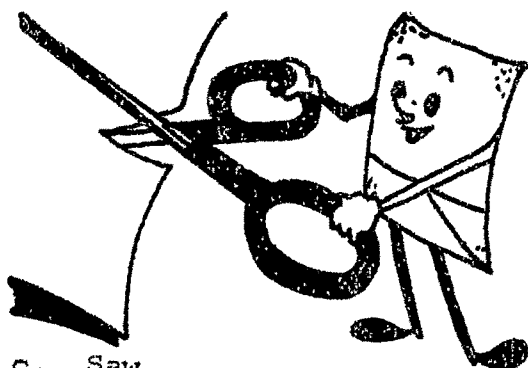
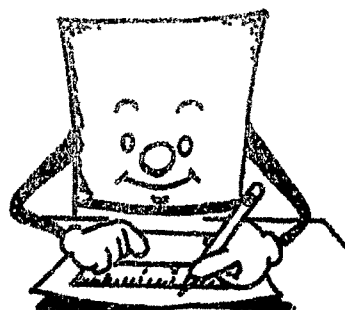




2. Equipment and tools required.

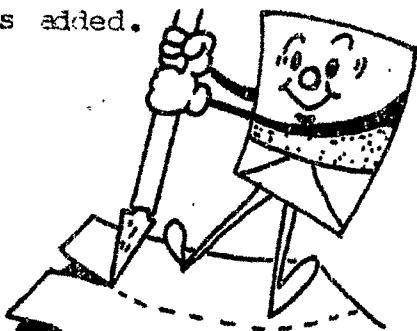
a. Ruler and Pencil.

A straight metal edged or metal ruler and soft sharp pencil are required for marking and ruling.



c. Saw.

A sharp saw is needed for cutting base materials, to which the flannel, felt or any other similar material is added.

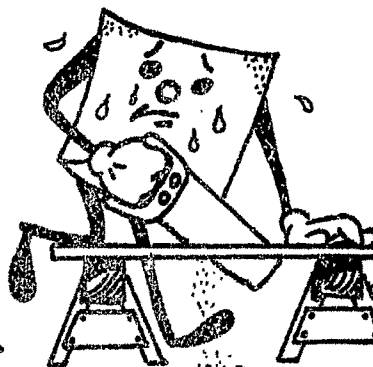


b. Covering.

Flannel cloth is the best material. It has excellent adhering qualities and relatively less costly. Felt, although little more costly is often used with good results. Both these materials are colourful and fine.

b. Scissors.

Sharp scissors are a must for the cutting of covering materials, illustrations and taking other cutouts. Remember the scissors must always be sharp.

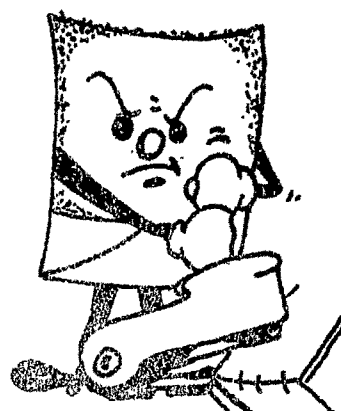
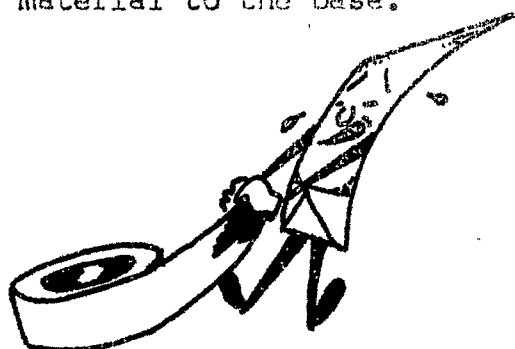


d. Knife.

A sharp and pointed knife is a handy tool for cutting small areas which are often inaccessible to ordinary scissors.

e. Stapler.

A large stapler which may be opened is the best tool for tacking the covering material to the base.



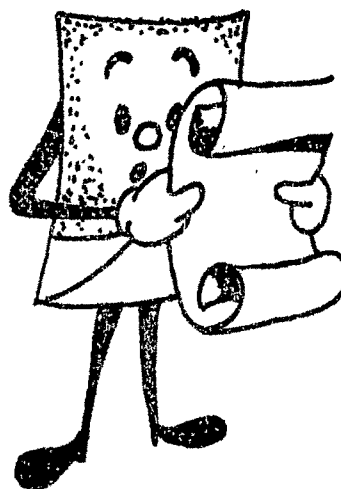
f. Adhesive tapes.

Sticking tapes of any types and sizes are very useful. One must be able to procure good tapes from any stationery shops. It is easy to locate this low cost material.

Sticking tapes of many types are useful.

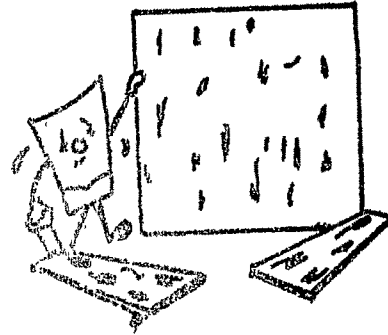
Recommended Procedure.

There are a number of ways and methods of making flannel boards. We present here one or two most common methods of making flannel boards. Each type has its advantages for use in particular learning situations. You may use your own methods and skills for making a variety of flannel boards. You can make flannel boards either for fixing on a wall, or make portable boards to be placed on an easel or even on a blackboard.



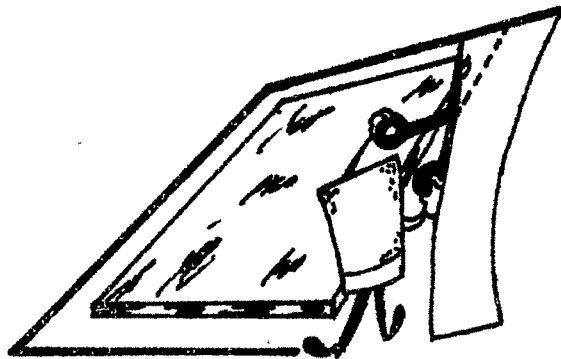
Item 1. Select and cut base.

You can order and get a pre cut base material from the shop. You can also obtain base material from the shop and cut to suit your own requirements. In order to prevent wrinkles, be sure that all corners are square before sawing. A carpenter's square may be useful here.



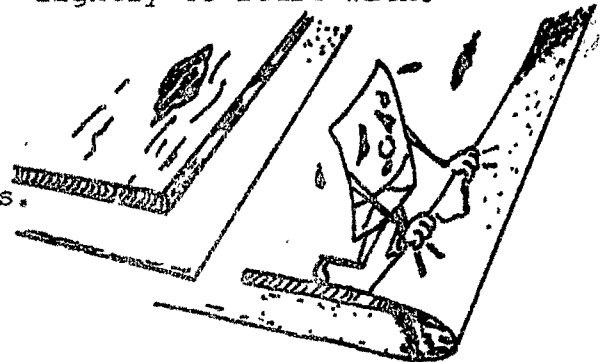
Item 2. Select and prepare covering.

Covering material should be placed upon a smooth, flat surface, adhesive side down. Allow five or ten centimetres of extra material on all sides to attach to the base. Sand paper the edges of the base lightly to start with.



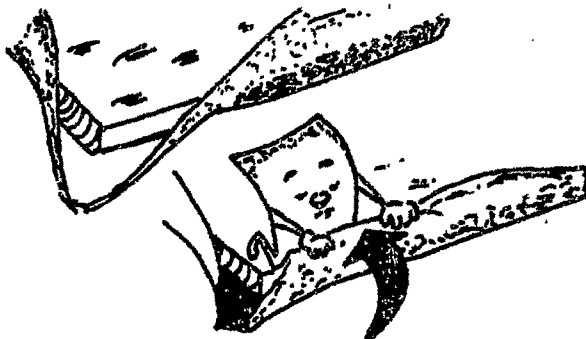
Step 3. Attach covering to the base.

Pull tight all edges and compare on the underside to prevent wrinkles. Take care in the tightening process to avoid tearing of the material at the corners. Staple midway between the corners on each.



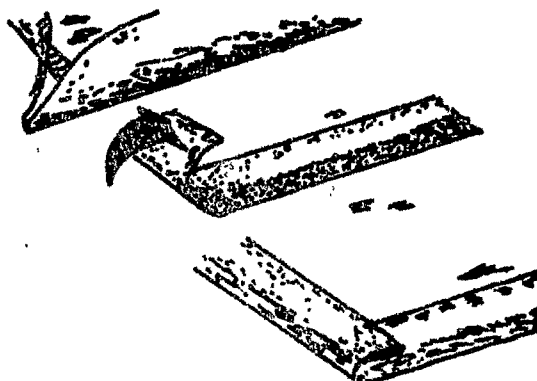
Step 4. Secure corners carefully.

Be sure to follow the procedure to prepare the corners. While tacking pull the material diagonally towards the corner.



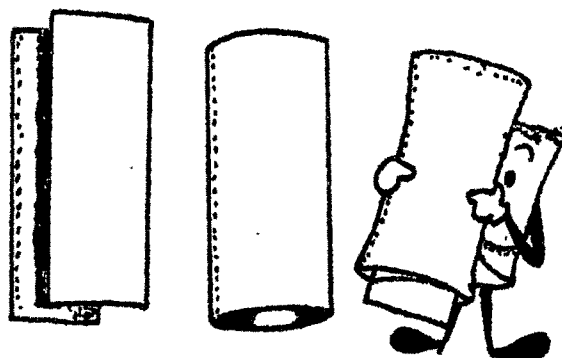
Ensure that you check for the tightness.

When the desired tightness is achieved staple each side and corner as shown. It is best to complete one side and corner before moving on to the next. Remember that you must maintain tightness in this manner.



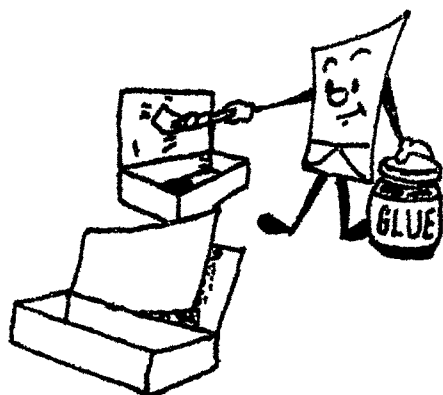
OTHER METHODS

A light weight wall board of the required size may be obtained and cut as before for the base material. The flannel or felt may be made to the size of a pillow cover to slip over the base cut. Two sides are cut together a little bigger than the base; with adhesive sides facing each other. They are stitched and taken inside out.



Slip the flannel over the base board. To prevent tearing of edges, they should be sand prepared. Two other methods for preparing flannel boards are :

1. With tape fasten a piece of flannel to the chalkboard in display area.
2. Drape a piece of felt over each side of a double board art easel, and attach temporarily with pins or tape.





As almost unlimited variety of illustrative material for use with flannel board activities can be had easily and inexpensively. Most of the materials are available at many shops, and can be got with minimum of effort. One list given below provides information relative to the most commonly used items.

SELF ADHERING MATERIALS.

Sand paper

Emery paper

Felt

Flannel

Corduroy

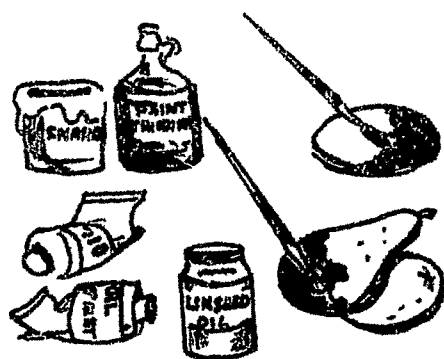
Blanket

When selecting materials to be used for flannel boards, it is important to be sure that the adhesive quality of the material is great enough to support, its own weight of the item to which it will be attached.

PAINTING TECHNIQUES

Water based paints.

Water colours, tubes and poster colours may be used on most surfaces. Camo colours and paints are heavy and can be applied to most cloth surfaces.



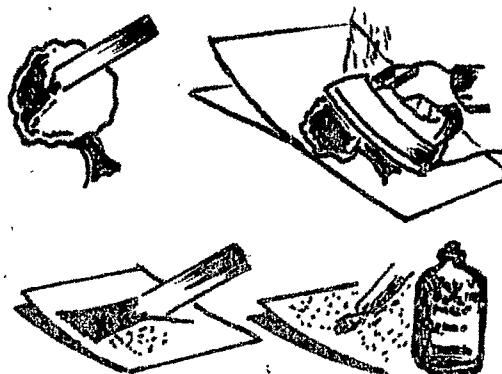
Oil based Paints.

Ordinary enamel and other oil colours are best adapted to rough surfaces. Brush lightly over background areas in order to retain the adhesive quality.

CRAYONS AND CHALKS.

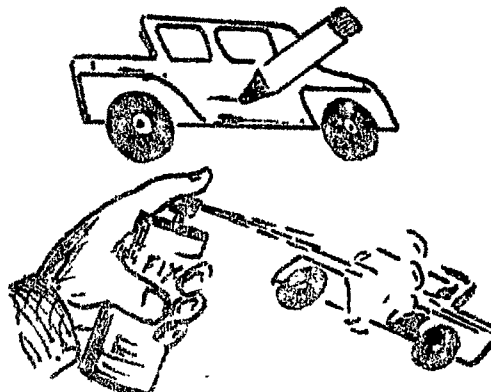
Wax and crayons.

Wax or crayons renderings may be ironed between two sheets of glazed paper for permanence. Another method is to brush lightly with cleaning fluid.



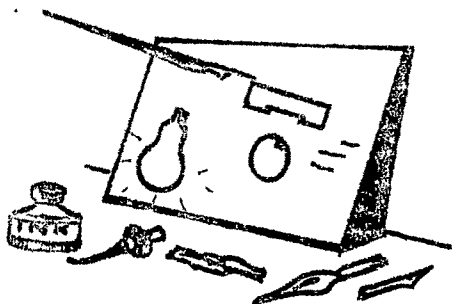
Chalks and Pastels.

When these materials are used they may easily rub off it not securely fixed with a commercial fixer, with spirit, which creates a film over the chalk, and easily dries.



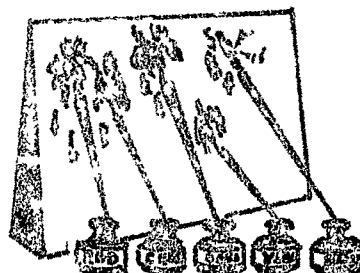
Black Indian Ink.

This permanent ink, which is opaque is useful on many surfaces where sharp outlines or solid black areas are desired. Certain cloths may be too absorbent. If so, don't use this.



Coloured ink.

We get camel ink, of different colours and other poster colours which are excellent for tinting large areas or for staining purposes. Paper or cardboard usually present the best surfaces. There are many varieties of coloured ink available in the market. Use them after experimenting. You can choose from a wide range of inks.



Learner Activities:

1. What is a flannel board?
2. Examine the flannel board in the visual aid workshop and say the materials used for the board.
3. What is meant by the term, flannel board cutout, and what importance should be given for the preparation of the flannel board cutouts.
4. From your experience, in the use of flannel board and chalk board, list three advantages of using flannel board over chalkboard and
5. List one disadvantage of flannel board over the chalkboard.
6. Design a presentation for a portion of a lesson, such as explaining a concept or a demonstration showing how some device operates. Construct the cutout materials in a form appropriate for the board you use.
7. Make at least 5 symbols that you can use, while using flannel board.
8. Which of the following materials can be used as cut out material for the flannel board? Tick them.
 - a. Sand paper
 - b. Emery paper
 - c. Plain paper
 - d. Blanket
 - e. Velvet
9. How will you back an illustration on paper, with felt?
10. Make a pie graph, on the topic given to you by your instructor, for flannel board presentation.

Magnetic Board

Many of the instructional values that can be attributed to the Flannel Board apply to the Magnetic Board as well. The only difference between the two lies in the method of adhesion--magnetism rather than friction is the adhesive force. Magnets will adhere to any iron-base surface. The magnets will be small--extremely small - and can be glued to any material that is to be displayed on the magnetic board. Of late chalk boards are made of steel instead of wood or other composition material. The magnetic chalk board can serve a dual role. We have white enamelled magnetic board in our institute. These are still new to most of us; most of those in use are comparatively small and portable.

What is a magnetic board?

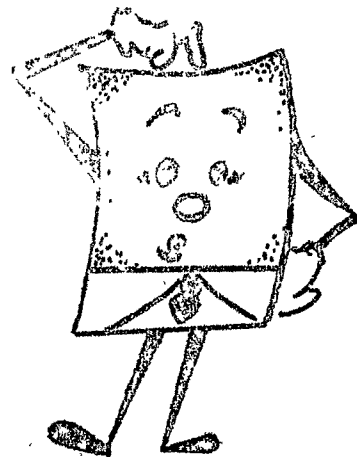
A magnetic board is a visual aid primarily used for instruction, and supports illustrative materials, in vertical position.

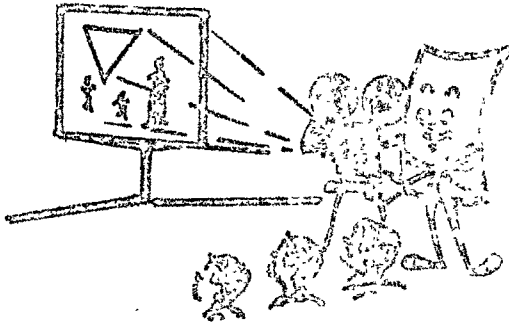
The base of the magnetic board is steel, which makes it possible to display small three or two dimensional (flat) materials with magnets attached.

What are its characteristics?

1. It is versatile.

As a chalkboard it can be used for writing on it. With a magnetic base, any small object can be placed on the magnetic board.



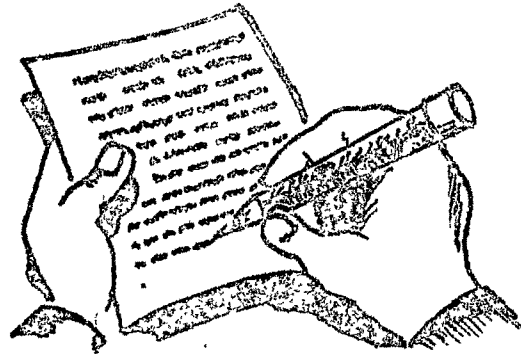


2. It can be used as a projection screen.

We can get enamelled white steel surface, which will form a good projection surface, thus serving all purposes. There will be no necessity for making separate arrangements for projection.

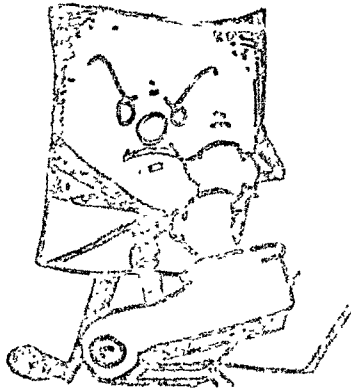
3. Coloured felt pen can be used.

We normally write on white paper. We can write with coloured felt pen on white surface. Any colour can be used on white surface. Smooth enamel surface permits easy and quick erasing quality.



4. It allows three dimensional display.

Objects can be moved on the magnetic board. Because of the adhering quality of the visual based with magnets, shop layouts, floor plans, building design, etc. can be visualised with relationship, better.



MAKING MAGNETIC BOARDS:

Inexpensive magnetic boards can be prepared with galvanised iron sheets. The edges can be rolled and bent to be sufficiently rigid so that further backing becomes unnecessary.

In case you are using thin sheets, a fibreboard of the size can be used as backing. Edges are finished as before. If necessary, we can make on the backside, a feltboard surface, or use it as any display surface as per requirements.

You may use the same board as ordinary chalkboard and also magnetic board. First clean the metal surface with vinegar, then wash it thoroughly with water. After the surface is completely dry, spray or brush on several coats of chalkboard paint. A light coat of sanding between coats of paint is desirable. Use fine sandpaper or steel wool. Finally thoroughly chalk the surfaces to ensure smooth writing and easy erasure of chalk marks. Be sure the board is completely dry before chalking, and do not write on the board until it is completely chalked.

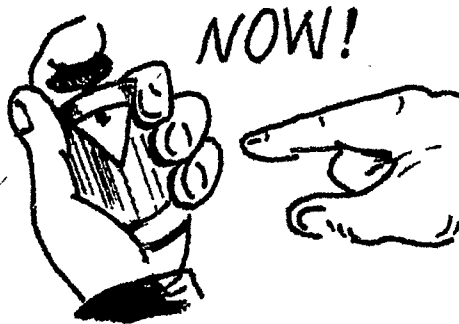
You may use the same as a projection surface, and use all coloured felt pens. For this purpose, you have to use white enamel paint, and give the surface glazed finish or a mat finish, according to taste.

PREPARING MATERIALS FOR MAGNETIC BOARDS:

Inexpensive small magnetic strips can be purchased in bulk 6 mm x 3mm strips or 6 mm x 20mm dia. pieces can serve many purposes. Rubberfeed magnetic strips are also available and are convenient for many applications. The discarded strips from the refrigerator door are very good. Magnets glued

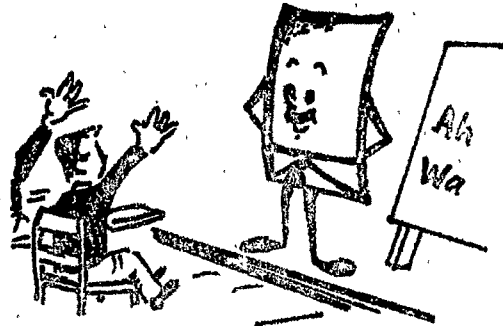
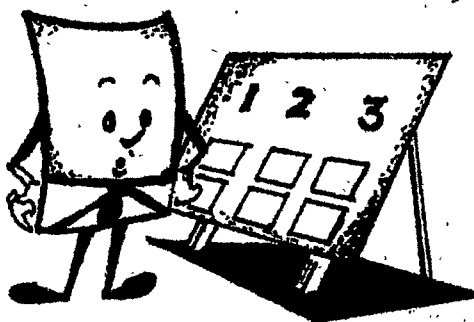
5. It stimulates interest.

It can arouse interest through many different activities centered around manipulations, colour, rearranging of displays, parts of presentations of all quality, within a matter of seconds. It has good motivational qualities.



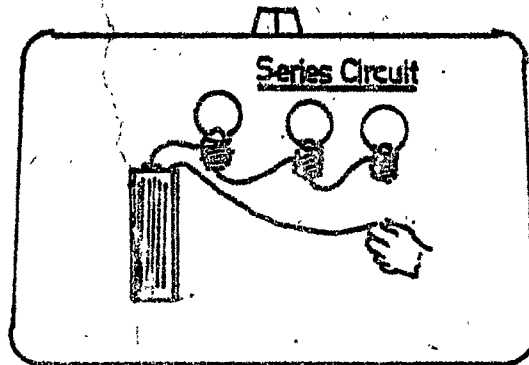
7. It can create reality.

Even simple experiments can be shown on magnetic board. Here is a series circuit. Bulbs and batteries are arranged, and with a switch you can bring reality in your presentation.



6. It dramatises presentation.

Ideas difficult to understand can easily be communicated through the simple and wise fast moving presentations, which can be easily understood by the trainees. Presentations can be exciting.

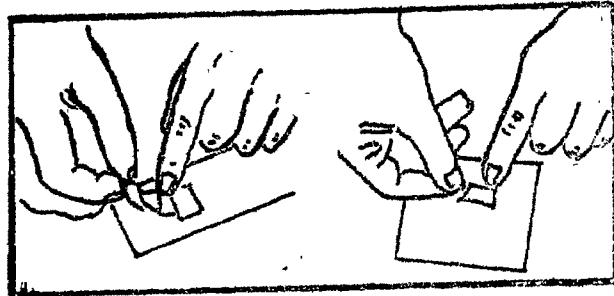


8. It permits easy repetition.

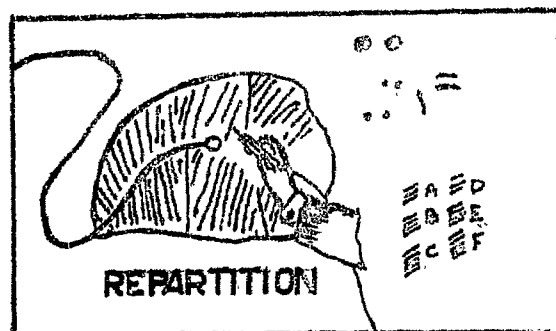
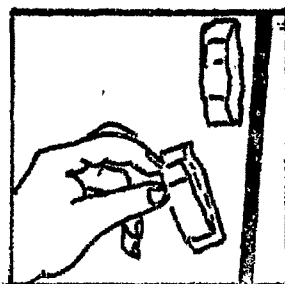
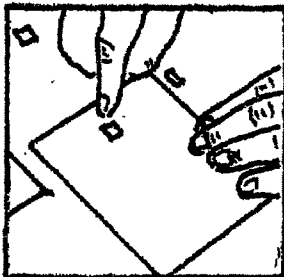
Some of the subject matter requires repetitions. A number of situations can be created by using parts of a micrometer, or other measuring instruments.

Repeated problems can be solved and shown to the whole class.

or taped to the back of the item, cause it to stand out slightly from the surface of the board, giving additional emphasis to the display.

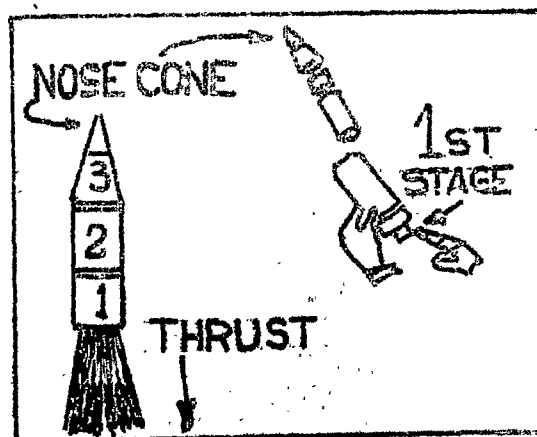


Strong magnets can also be used on top of sheets of the display paper - say a chart or poster - kept over the magnetic board, to hold the paper on the surface of the board.



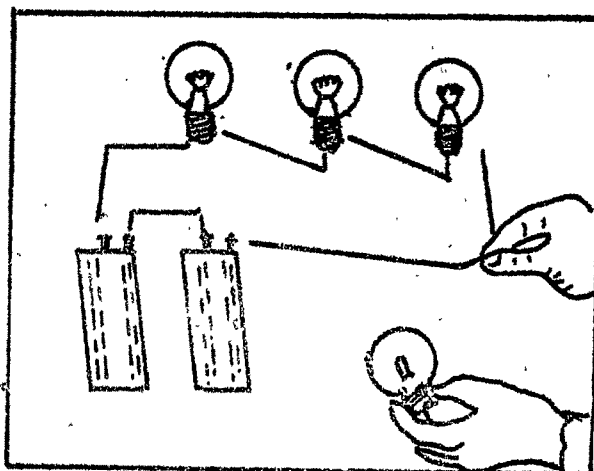
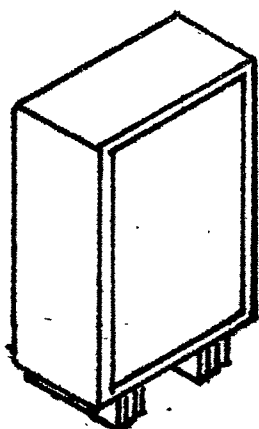
You may insert magnets into small objects and use them on the board. Taping of magnets on the backside of the display material is preferred to glue, to permit removal of the magnets easily. The tape also will protect the surface of the chalkboard or magnetic board from scratches, that are likely to be made.

The objects, that are fixed to the magnets can be moved on the surface of the magnetic board. While conducting some experiments on the magnetic board, this will enable the instructor to make a number of series or parallel circuits. Many similar innovations can be done.



SOME PRACTICAL HINTS:

The magnetic chalkboard, adhesives, magnets, etc., are tools with which imaginative teachers and pupils can create fascinating and highly useful aids to the realisation of learning goals.



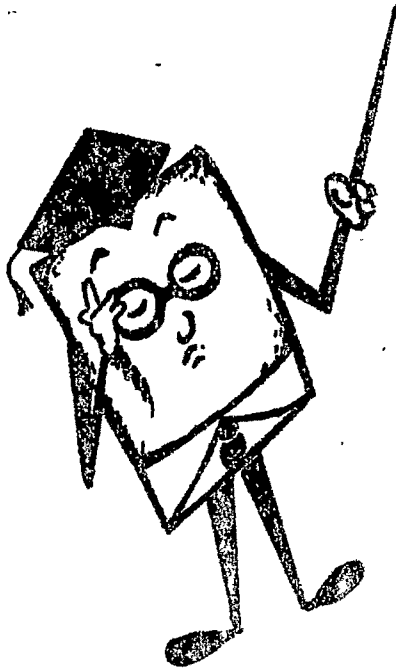
For occasional use, the back of the steel cupboards, can serve as a magnetic chalkboard. This will be another indication that ingenuity can lead to the discovery of useful resources, which are often close at hand.

Learner activities:

1. Prepare a magnetic board presentation on a subject of your choice. Include the following techniques to demonstrate your competency and creativity. Use pictures, real objects and lettered captions. Use magnets to mount them on to the board. Submit the plan.
2. Prepare a magnetic board presentation on a subject that will require opportunities to manipulate visuals and real objects. Plan for using white or coloured chalk and/or felt pen. Submit the plan.
3. When you have completed Module III on Projected Aids plan, prepare and present an overhead projection for still visuals, use felt pen to add information on the screen, and on the transparency that you use. Supplement the information with magnetic backed objects or

pictorial or printed material. Prepare a complete plan and submit it. Target date 23rd May.

INSTRUCTIONAL FUNCTION OF FLANNEL AND MAGNETIC BOARD:



In order to achieve maximum effectiveness with the flannel or magnetic board, basic preparation of materials for their use is essential. The following considerations are vital to the proper use of these visual aids. The instructional use can be divided into five stages.

- A. Instructor preparation.
- B. Trainee preparation.
- C. Classroom preparation.
- D. Follow up.
- E. Evaluation.

Teaching depends to a great extent on the effective preparation of the instructor, but all points are equally important.

A. INSTRUCTOR PREPARATION:

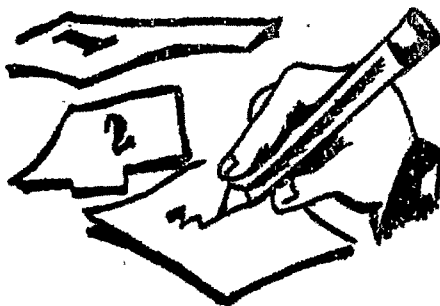
1. Prepare all written materials.

It is very essential that we must prepare information sheets with the learner activities and assignment sheets in advance and distribute to the trainees.



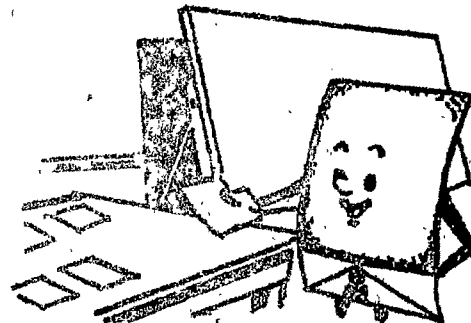
2. Identify each display item.

It is advisable to number each cutout or illustration in advance of the presentation in order to prevent any mix-up in their sequence of use. You may adopt suitable method either by numbering or identifying with an alphabet. You may even write on the object in one corner.



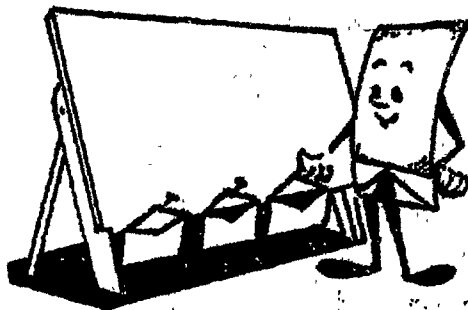
3. Arrange illustrations on table:

It will be helpful to arrange these numbered materials on a table near the board, so that the sequence of their use may be easily followed.



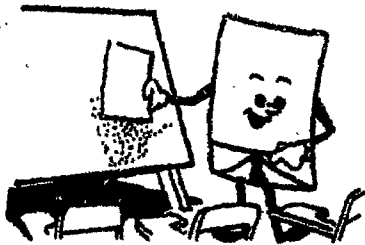
4. Arrange illustrations in envelopes:

When the presentation consists of several parts, arrange each section in order, in its own envelope and attach it to the base of the board for easy access. For big sized illustrations, use boxes.



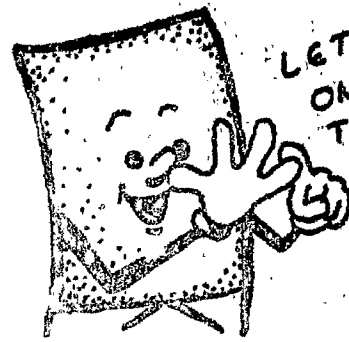
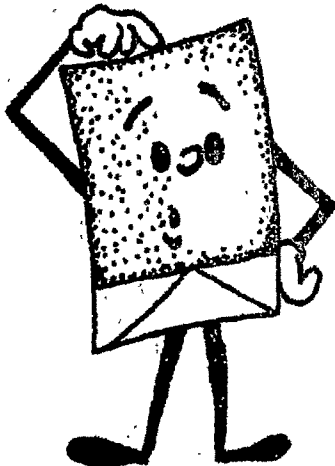
5. Plan each step carefully:

Each step of the presentation should be planned carefully in advance for best results. Go over every step immediately prior to the lesson to gain confidence.



7. Ensure maximum viewing:

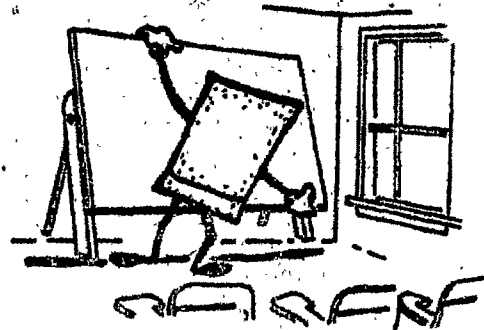
Before the trainees enter the room, make sure that the board is in a position which makes best use of lighting, and which offers a clear view to all.



LET'S SEE
ONE, TWO
THREE

6. Rehearse the presentation.

Many new instructors will find it helpful to rehearse before the class begins. This will serve to check proper timing, errors in placement, and adherence of the illustrations.

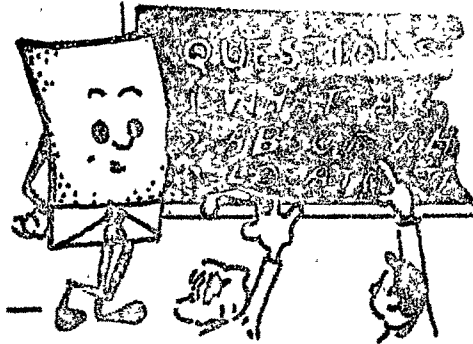


B. TRAINEE PREPARATION:

As with the use of other visual aids, psychological preparation of the trainees for the flannel and magnetic board presentation deserves careful consideration. For maximum motivation, stimulation, and learning, some thought should be directed to the following activities.

1. Distribute written materials:

Information sheets which have been prepared beforehand may be distributed to the trainees prior to the lesson.

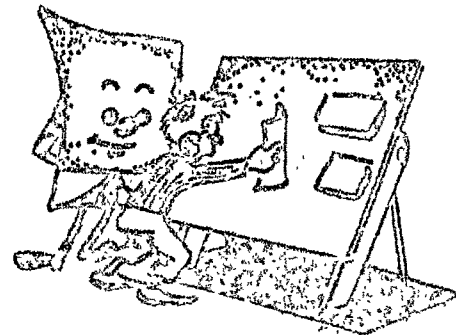


2. Pose questions on chalk boards:

Questions concerning difficult points of the presentation may be written on the chalkboard to direct attention of the trainees towards finding the answers.

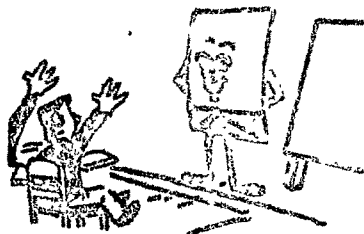
3. Assign preparatory projects:

Homework or follow up classroom projects may be arranged before the presentation to provide added stimulation, and better attention to the presentation.



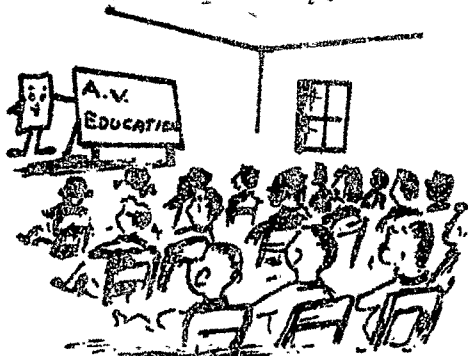
4. Ask questions to arouse interest:

Trainee interest can be aroused by questions asked orally and directed toward certain aspects of the subject. If these questions are raised by the trainees, it has greater value.



5. Create curiosity toward the flannel/magnetic board:

The flannel or magnetic board may be a source of motivation if their novelty is exploited to some extent. The wise instructor will not over-emphasize this quality.

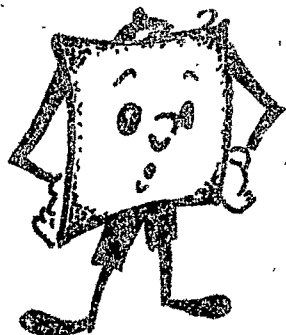


7. Plan to face the class.

Plan ahead to face toward the class as much as possible during the presentation. One may become too easily involved in talking to the magnetic (flannel) board.

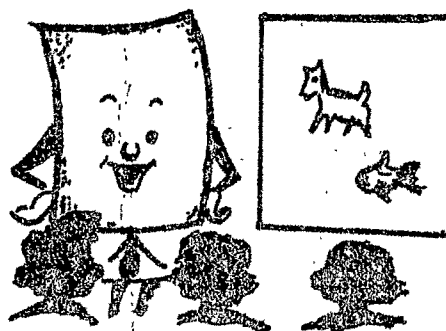
The resourceful teacher usually accomplishes most of these things without too much effort, though the element of time occasionally makes it impossible to be prepared for everything.

CLASSROOM PRESENTATION:



6. Be sure all can see:

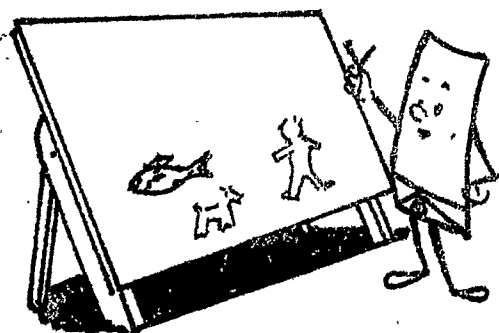
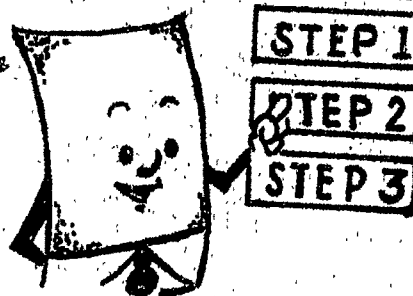
The trainees' view should not be objected in any way. Be sure that all can see clearly, and that the trainees in the back rows are not far away.



During the actual presentation with the magnetic (flannel) board, certain considerations may be applied for best results. Proceed with the presentation in a logical manner. This will result in positive learning and favourable reaction.

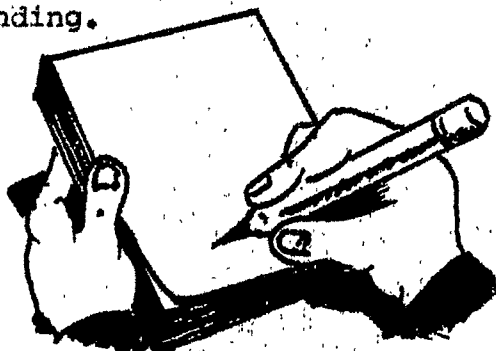
1. Present material in logical sequences

The appeal of a logical sequence will result from following the pre-planned arrangement. Complete each step before going on to the next.



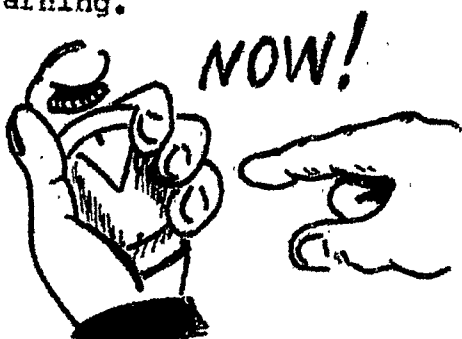
2. Keep presentation simple:

If simplicity is always the keynote of any presentation, concepts will be grasped and quick understanding will be the result. Concise presentation makes for clear understanding.



3. Check for understanding:

Continued checking for understanding will prove helpful. A check list which specifies desired results may be referred to during the lesson to ascertain learning.

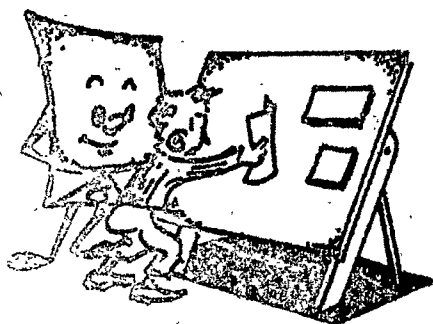
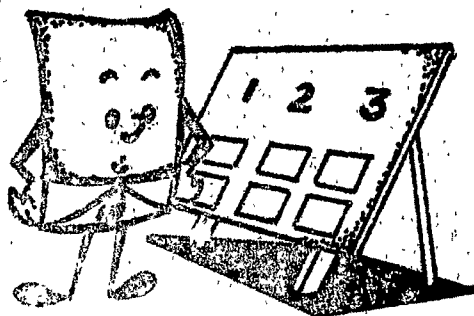


4. Time the presentation:

Check progress carefully by following the pre-planned timing. This will prevent moving too quickly through the information, or making the lesson lag unnecessary.

5. Summarise when necessary:

It is very important to summarise each point of the presentation in order to ensure that all concepts and ideas are completely understood by every trainee.

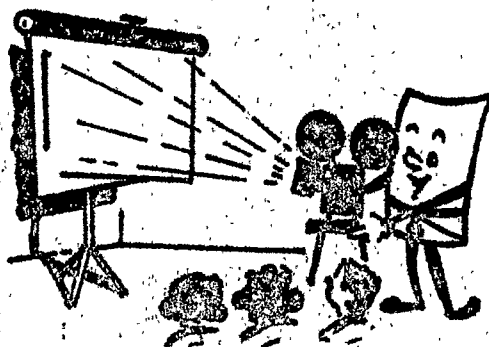


6. Arrange trainee participation:

Participation of the trainees in manipulating illustrations on the flannel (magnetic) board will result in added motivation and stimulation. Invite them to take part as often as possible.

7. Make use of other aids:

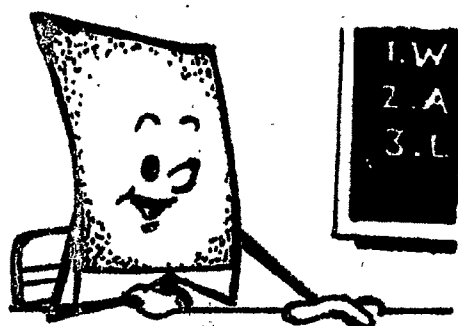
Often other teaching aids, such as films, slides, filmstrips, charts, graphs, etc., when used properly, provide means with which to supplement the magnetic (flannel) board presentation.



One important point for you is that time may not permit you to practice all these preparations. However, the experienced and creative instructor appreciates their value in the learning process and will apply them whenever possible.

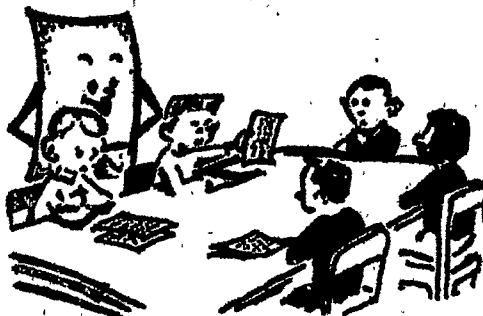
D. FOLLOW UP

The importance of follow up cannot be over-emphasized. It is through activities of this type that the value of the presentation will often be judged. Some worthwhile practices in these areas are explained below.



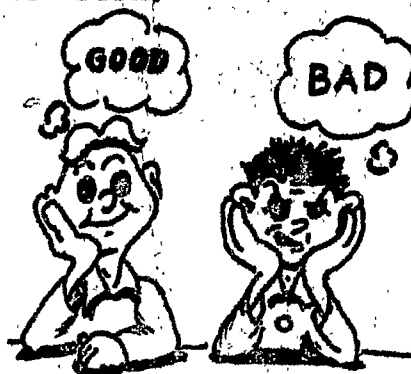
2. Determine impression of trainees:

It is important to observe the impression of the flannel (magnetic) board itself on the viewer. If you cannot determine this by observation, ask the trainees directly.



1. Discuss questions on Chalk board:

It is good for you to write questions on the chalkboard before the lesson and it should be discussed and answered immediately following the presentation while the lesson is still fresh.

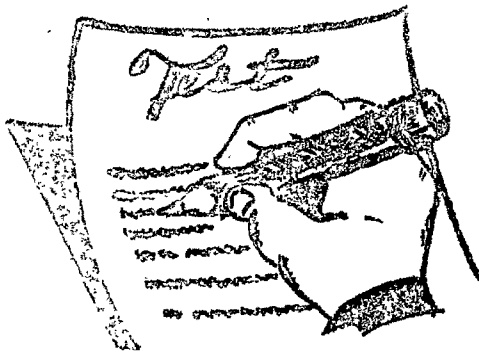
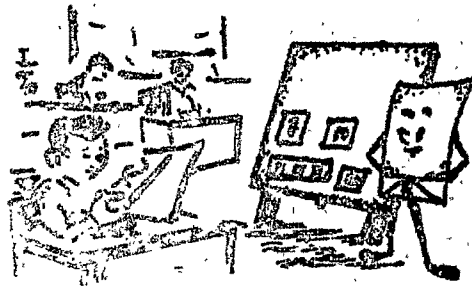


3. Set up group discussions:

You should divide the class into small groups, after the flannel or magnetic board presentation and provide each group with specific questions or problems to discuss and solve.

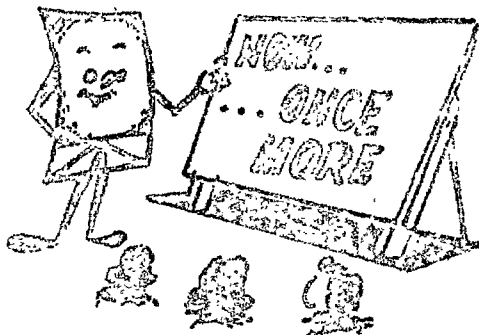
4. Follow up with related projects:

Follow up activities involving manipulation or actual application provide the best means with which to improve learning.



Evaluate your performance:

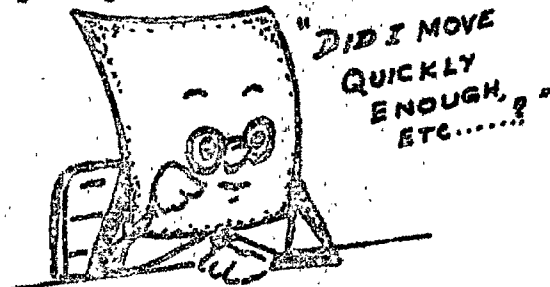
You should evaluate your own performance also after the lesson for timing, clarity, and effectiveness. You must not overlook this point.



E. EVALUATION:

1. Conduct tests to judge results:

Objective type tests provide valuable means to evaluate learning. So conduct tests at regular intervals, discuss answers after every testing. Tests are, very important to give you results.



3. Repeat performance if needed:

Any repeat performance, especially if it is requested by trainees, may add to learning. The wise instructor will consider the value of repetition versus other methods.

Learner activities:

1. While you have planned for the flannel board and magnetic board presentation, did you follow the 7 points enumerated here for instructor preparation. If not what are the items you have omitted? Discuss with your friends, the reasons if any, which would have made your presentation better.
2. In your presentations for both magnetic and flannelboard were you able to make written instructional materials, and distribute to your trainees? How can you arouse trainee interest in your presentation?
3. Are you in the habit of making simple presentations, checking the understanding of students? If not why? How will you arrange for the trainee participation during your class. Demonstrate this in your practice demonstration class.
4. Recall your presentation last time you made, and say how you determined the impressions of your trainees? Have you any time evaluated your own performance? How did you do that?
5. For your teaching assignment next time, plan for a follow up activity to add to learning, and to see whether your trainee has been able to retain what has been taught to him.

...

AUDIO VISUAL EDUCATION

Module II

Non Projected Visual Aids.

Unit 7

Flannel & Magnetic Board.

Pr.Ex. 24: Group presentation on Flannel Board.

PROBLEM: Using Flannelboard make a classroom presentation.A. PROCEDURE:

1. Select a theme fit for flannel board display. Get it approved by your Training Officer;
2. List out ideas that help illustrate your theme.
3. Select the presentation materials that could be added on to sandpaper,
4. Develop shape for your presentation.
5. Arrange illustrations as per the shape and finalise the best layout.
6. Prepare title, lettering and other materials that will go with your theme, and present them on Felt-board.
7. Make the presentation.

B. MATERIALS & EQUIPMENT:

1. Flannel board.
2. Sandpaper.
3. Bonding materials- glue, staples, rubber cement.
4. Colours, writing materials & instrument box, lettering guide.
5. Pictures and display items.

C. POINTS FOR GRADING:

1. Form
2. Content
3. Display of caption, illustration, symbols and pictures.
4. Inter-relation between pictures and words.
5. Neatness of cutouts.
6. Overall appearance.

D. Deadline for the Project : May 23rd.

M II/7/Pr.Ex.24(i).



Module II

Non Projected Aids

Unit 7

Flannel and Magnetic Board

Pr.Ex. No:25 : Group Presentation on Magnetic Board.

PROBLEM: Using Magnetic Board make a class room presentation.

A. PROCEDURE:

1. Plan and prepare the magnetic board presentation on given topic.
2. Select presentation materials that will demonstrate your creativity.
3. Use mounted pictures.
4. Use few real things.
5. Use G.I. backings that are magnetised for fixing materials.
6. Use white or coloured chalk or felt pens during presentation to add letters, captions and information.
7. Manipulate your visuals during presentation.

B. MATERIALS & EQUIPMENT:

1. Magnetic Board.
2. Magnetised G.I.strips.
3. Pictures, objects that could be attached to the strips.
4. Masking tapes, glue or other cements for attachment of materials to magnetic strips.
5. Writing materials.

C. POINTS FOR GRADING:

1. Form
2. Content
3. Display of symbols, illustrations, pictures and lettering.
4. Neatness of the display.
5. Overall appearance.

D. Deadline for the project: May 23rd.

M II/7/Pr.Ex.25(i).

MAGNETIC BOARD PRESENTATION

