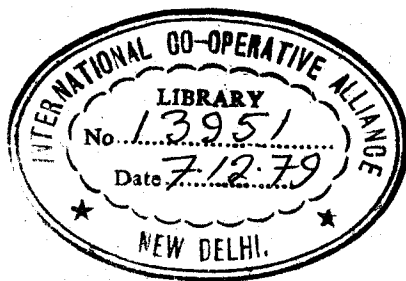


NATIONAL WORKSHOP ON THE USE OF AUDIO-VISUAL AIDS
(JOINTLY ORGANISED BY ICA, RO&EC/NCCT/VMNICM)

VENUE : VMNICM, POONA-16

DATE : 1-5-1979 to 19-5-1979



PROF. R. V. NADKARNI
PROGRAMME DIRECTOR
SHRI. R. S. DESHPANDE
JT. PROGRAMME DIRECTOR

DR. G. OJHA
PROGRAMME DIRECTOR
I. C. A., RO&EC,
NEW DELHI

International Cooperative Alliance

NATIONAL WORKSHOP ON THE USE OF AUDIO-VISUAL AIDS

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ANNOUNCEMENT

Inauguration of the National Workshop on Use of
Audio-Visual Aids in Cooperative Training
...

Chief Guest : Sri.M.V.M.Moorty
Director
Film and Television Institute
of India

Place : Vaikunth Mehta National Institute
of Cooperative Management
Ganeshkhind Road, Pune-16.

Date : 1-5-1979

Time : 9.30 a.m.

①

NATIONAL WORKSHOP ON AUDIO-VISUAL AIDS
JOINTLY ORGANISED BY ICA/NCCT/VMNICM
FROM 1ST TO 19TH MAY 1979

REVISED PROGRAMME

1st May 1979, Tues

0930 - 1100 hrs	Inauguration	Shri M.V.M. Moorthy, Director, Film & TV Institute, GOI, Pune
	Introduction and working method of the course	Dr. G. Ojha, ICA, N. Delhi Prof. R.V. Nadkarni, VMNICM, Pune
1115 - 1245 hrs	Psychology of adult learning	Prof. S.W. Deshpande, Deptt. of Psychology, Pune University, Pune
1400 - 1530 hrs	Human Communication Process	Dr. G. Ojha
1545 - 1700 hrs	Role of Audio-Visual Aids in modern teaching - Classifi- cation of Audio-Visual Aids into projected and non- projected aids	Shri R.D. Bokil, Director, Mah. State Institute of Audio Visual Edn., Pune

2nd May, Wed.

0930 - 1100 hrs	Salient features of various Projected aids (Demonstration of use)	Prof. R.V. Nadkarni
1115 - 1245 hrs	Salient features of various non-projected aids (Demos- tration of use)	Dr. G. Ojha
1400 - 1530 hrs	The art of lettering and simple figure drawing/Demonstration & Practical session	Prof R.D. Bokil, Director M.S.I. of A.V. Edn., Pune
1545 - 1700 hrs	The technique of photography and its utility on the teaching process	Dr. G. Ojha

3rd May, Thus.

0930 - 1100 hrs	Concept of training package based on Audio-Visual Aids and its role in modern teaching	Dr. G. Ojha
1115 - 1245 hrs	How to prepare a training package based on audio-visual aids (with demonstration)	-do-
1400 - 1700 hrs	How to prepare a training package (contd.)	-do-

1128

<u>4th May, Fri</u>		
0930 - 1100 hrs	Teaching through a film - the technique of film appreciation	Prof Satish Bahadur, Film Instt. of India, Pune
1115 - 1245 hrs	-do-	-do-
1400 - 1530 hrs	Preparation of simple projected and non-projected aids	Dr. G. Ojha
1545 - 1700 hrs	Formation of groups for training package and allotment of subjects	Prof R.V. Nadkarni and Dr. G. Ojha
<u>5th May, Sat.</u>		
0930 - 1300 hrs	Preparation of simple projected aids, O.H.T./flannel, cut-outs, etc.	Dr. G. Ojha
1500 - 1700 hrs	Study visit to film and T.V. Institute, GOI, Pune,	
<u>6th May, Sun.</u>	F R E E	
<u>7th May, Mon.</u>		
0930 - 1530 hrs	Operation and maintenance of film Projector/OHT/Slide/Film Strip projector at Mah. State Instt. of A.V. Edn., Pune.	Shri R.J. Kale
1545 - 1700 hrs	Group work on training package-study of subject matter and preparation of script - group to work under guides	
<u>8th May, Tues.</u>		
0930 - 1530 hrs	Operation and maintenance of film Projector/OHT/Slide/Film Strip projector at Mah. State Instt. of A.V. Edn., Pune	Shri R.J. Kale
1545 - 1700 hrs	Group work on training package-study of subject matter and preparation of script - group to work under guides	
<u>9th May, Wed.</u>		
1545 - 1700 hrs	Operation and maintenance of film Projector/OHT/Slide/Film Strip projector at Mah. State Instt. of A.V. Edn., Pune	Shri R.J. Kale
1545 - 1700 hrs	Group work on training package-drafting of the script of the training package.	

10th May, Thus.
0930 - 1530 hrs Operation and maintenance of Shri R.J. Kale
film Projector/operation of 35mm
camera - practical training in
photography
1545 - 1700 hrs Finalisation of the script of the
training package - to be ready for
typing

11th May, Fri. Holiday

12th May, Sat.
0930 - 1700 hrs Training package - work on visual
aids.

13th May, Sun. F R E E

14th May, Mon. Study visit to Bombay Television Centre,
Worli, Bombay at 10.00 a.m.

15th May, Tues.
0930 - 1700 hrs. Training package - work on visual
aids (Assistance by Shri Kamathe & Shri Kamble)

16th May, Wed.
0930 - 1600 hrs Training package - work on visual
aids to be completed (Assistance by
Shri Kamathe and Shri Kamble)
1600 - 1700 hrs Visit to Cooperative Training College, Pune

17th May, Thus.
0930 - 1245 hrs Presentation of Training Package by
Group-I - Discussions
"Processing of loan application
of composit loan"
1400 - 1700 hrs Presentation of training package by
Group-II - Discussions
"Fundamentals of Salesmanship"

18th May, Fri.
0930 - 1245 hrs Presentation of training package
by Group-III - Discussions
"Economic Benefits of Cooperation"
1400 - 1700 hrs Presentation of Training Package
by Group-IV - Discussions
"Bank Reconciliation Statement"

19th May, Sat.
0930 - 1700 hrs Evaluation and
V lediction

Sd/-
(G. OJHA)
Programme Director, ICA

NATIONAL WORKSHOP ON AUDIO-VISUAL AIDS
JOINTLY ORGANISED BY ICA/NCCT/VMNICM
FROM 1ST TO 19TH MAY 1979

COURSE SYLLABI

1. Orientation in human communication:
 - i. Communication system and teaching techniques in cooperative education and training
 - ii. Psychology of Adult Learning
 - iii. Techniques of Participative Teaching
 - iv. Adult Learning and retention
2. Role of Audio-Visual Aids in Modern Teaching:
 - i. Role of Audio-Visual Aids in Adult Learning/Teaching
 - ii. Classification of Audio-Visual Aids:-
 - a) Non-projected Aids and its classification and utility
 - b) Projected Aids and its classification and utility
 - iii. Planning a lecture through Project Aids and Non-projected Aids
 - iv. Demonstration of a lecture through the help of projected Aids and non-projected aids
 - v. Teaching through the help of films - techniques of film appreciation and follow up
3. Operation and Maintenance of Projected Aids:
 - i. 16mm film projector
 - ii. Overhead projector
 - iii. Slide projector/Film strip projector
 - iv. Photographic camera 35mm and reflex
4. Technique of preparing Training Package based on Audio-Visual Aids:
 - i. Training package and its role in cooperative training and education
 - ii. Techniques of preparing training package
 - iii. Preparation of Training Package on the following subjects by the participants:
 - a) ~~Leakage in Cooperative Consumers Store~~
 - b) ~~Cooperative Marketing of Agricultural produce~~
 - c) ~~Management of Credit~~
5. Evaluation:

3

Vaikunth Mehta National Institute of Cooperative Management
Poona-16

National Workshop on Use of Audio Visual Aids
1-5-1979 to 19-5-1979

- List of Participants -

Sr.No.	Name, State and Designation	Sponsoring Organisation	Residential address
(1)	(2)	(3)	(4)
<u>ASSAM</u>			
1.	Shri.AK.Sah Lecturer	The Principal Coop.Training College Kharghuli Gauhati-781 004 (Assam)	Fatasil Ambari Pinali Gauhati (Assam)
2.	Shri.Promode Barua Lecturer	The Principal Assam State Coop. Training Institute Jayasagar P.O. (Sibsagar-Assam)	Meteka P.O. (Sibsagar-Assam)
<u>GUJARAT</u>			
3.	Shri.BL. Shrivastava Lecturer	The Principal Udaibhan Singhji Coop.Trng.College Gandhinagar Sector-No.30	Baroda Building Bakrol Road V.V.Nagar (Via Anand) (Gujarat)
<u>JAMMU & KASHMIR</u>			
4.	Shri.Gh.Mohd.Dar Coop.Education Instructor	The Principal Coop.Training Centre Jammu & Kashmir Munir Manzil Srinagar	R/o Rahpora, P.O.Wanpoh Anantnag Kashmir
5.	Shri.Kuldip Singh Sambyal Coop.Instructor	The Principal Coop.Training Centre Jammu & Kashmir Munir Manzil Srinagar	Ward No.II Near Employment Exchange Kathua
<u>KARNATAKA</u>			
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(1)	(2)	(3)	(4)
<u>MAHARASHTRA</u>			
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9.	Shri.CS.Mishra Lecturer	The Principal Dhananjay Rao Gadgil Coop.Training College Sahakar Mandir, Mahal Nagpur-400 002 (MS)	Plot No.148 Reshambag Nagpur (MS)
<u>ORISSA</u>			
10.	Shri.A.Ramakrish- nan Lecturer	The Principal Coop.Training College 361 Saheed Nagar Bhubaneswar-751 907 (Orissa)	A-19 Sahid Nagar Bhubaneswar (Orissa)
<u>RAJASTHAN</u>			
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12.	Shri.Madanlal Lecturer	The Principal Coop.Training Centre Ship House Jodhpur (Rajasthan)	Hanuman Bhakari New Road, Tower Jodhpur (Rajasthan)
13.	Shri.WK.Yadav Lecturer	The Principal Coop.Training Centre A-61 Santi Path Tilak Nagar Rajasthan State Jaipur	Coop.Training Centre A-61, Santi Path Tilak Nagar Jaipur (Rajasthan)
14.	Shri.RC.Sharma Lecturer	The Principal Coop.Training Centre Bharatpur (Rajasthan)	Coop.Training Centre Bharatpur (Kodi Maderper) (Rajasthan)
<u>PUNJAB</u>			
15.	Shri.SN.Mishra Lecturer	The Principal Coop.Training College Kothi No.3095 Sector-28-D Chandigarh (Punjab)	House No.351/20-A Chandigarh (Punjab)

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Lecturer Coop.Training College -oga Ali Ganj,
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Dist.Nadia (WB)

20. Shri.RN.Sau The Principal Coop.Training Centre
Lecturer West Bengal State At & PO Jharram
Coop.Union Dist.Midnapur (WB)
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Road, (VIII Floor)
Calcutta-1 (WB)

AUDIO-VISUAL WORKSHOP - I.C.A. RO & ECAdult Psychology and the learning situation

- 1) Teaching is a conscious process of passing of knowledge, know-how, skills, information from one person to another. Learning is the process of adoption and understanding of the knowledge, skills, information, as well as sign, symbols, and actions performed in a person's surroundings by others or by himself.
- 2) All teaching involves two parties, the teacher/instructor and the students/trainees.
- 3) All teaching is a matter of communication-preferably two-way communication in which the students/trainees benefit from the teacher's specific knowledge of a certain topic and the teacher benefits from the experience, practice, and general knowledge of the students.
- 4) The aim of all teaching is to cover the knowledge/information in such a way that it is - as far as possible - understandable and applicable by the students/trainees.
- 5) The pre-conditions for all teaching are:
 - that the teacher has something to teach, has a message, has a specific knowledge.
 - that the teacher has the knowledge of the techniques, tools, and methods to pass on his knowledge.
 - that the teacher is aware of the group of trainees/students their minds, expectations, level of knowledge, to enable him to direct his message to that specific group.
 - that the teacher is aware of and understands the learning situation and is able to make the students aware of their learning situation.
- 6) Your teaching is meant for adults, not for children and youngsters.
- 7) Your teaching is not just for the personal benefit of the students (i.e. for their recreation/entertainment or for their enrichment intellectually) but also for

a directly social and economic benefit is so far as the students/trainees are supposed to improve their work, their performances, to function better as a result of your teaching. Not for your own performance as teachers.

The teacher's know-how, his techniques, tools and methods are not dealt here and the discussion is limited to learning situation in the classroom or course-hall where a teacher is present and where a number of trainees/students-adults will have to learn. Here it will be interesting to know as how do we learn and how learning is retained by the students/trainees.

How We Learn

- 1% through taste
- 1½% through touch
- 3½% through smell
- 11% through hearing
- 83% through sight

Learners Retain

- 10% of what they read
- 20% of what they hear
- 30% of what they see
- 50% of what they see and hear
- 70% of what they say as they talk
- 90% of what they say as they do a thing.

The Adult Student

PHYSICALLY DETERMINED FACTORS CHARACTERISING ADULT STUDENTS

1. Most adults have a low level of natural curiosity and for exploration and learning.
It is marked feature among all normal children and

and youngsters to be curious, keen on exploring, experiencing and learning. All this is a part of the process of growing up to become a full member of the society, able to care for oneself and one's family. Once grown up, the level of "natural" curiosity and feeling for learning decreases. This has to do with the fact that adults have less time for learning, involved as they are in time-consuming responsibilities in their houses, working places and political/social life. Once grown up and qualified for a work adults tend to think that learning is a secondary activity to which they are prepared to pay less attention, except when learning is directly and materially related to improve status or increase income.

The consequence is that adults will have to be motivated properly, their level of curiosity will have to be stimulated.

2. Adults, do learn slower than children, (more repetitions are therefore needed, especially repetitions posed in different ways).
3. Adults do not so easily see and perceive details as children do. (Concentrate on important details, and avoid too many details).
4. Adults do not so easily remember as children do. (again requires repetition).
5. Adults are mostly not used to sit for longer periods at a table listening to talks. (make use of break when people can move around, change position).
6. Adults have less energy than children, mainly because major part of their time is used on energy consuming activities leaving less energy for learning. (Don't push adults too long, have time for small rests and breaks).

CULTURALLY DETERMINED FACTORS:

7. Adults are not used to systematic reading and learning. Mostly adults receive information through discussions, exchange of experience and ideas, through gossip, through films, and in many cases through reading newspapers/books. (Decrease the time used for one way communication and lecturing - increase the teaching through discussion).

8. Adults think that they cannot learn or that they are less capable to learn. (Proper motivation is needed and assistance to start learning at the proper level of information; not too low).
9. Many adults are not used to read and many are unable to read. (Illiteracy is not correlated with intelligence and experience. Do not underestimate the illiterate persons' ability to learn and gather knowledge and know-how. Do not expect too much to be read during the course)
10. Adults have less time for learning. - (See to it that the content of your teaching is relevant for the use of the group or you just waste their time).
11. Adults have many more biases than children. Adults are more influenced by the social surrounding, by the opinion of their relatives, friends, colleagues, by the reactions of their surroundings to their participation in learning activities. - (The landlord may not like to see his tenants participate in adult education, the father may not find education of his daughter worthwhile, etc. The adult may not be willing to learn from a younger person, or from a person of a lower caste, from a person of the opposite party. All such biases are social bindings for a full learning, They are less developed among children, yet adults do all they can, consciously or unconsciously to develop such biases in the children).
12. Because adults are more influenced by cultural norms, by ideas about what the surroundings expect from them, by social status, they are less suited to accept information to learn. - (Try to understand the social and cultural background of your students/trainees and try to bring up for discussion such norms which will diminish the benefits of your teaching).
13. Adults have their practical possibilities for learning. This is due to the fact that emphasis is on education of children and youth. - (The lower the social ranking of your students the fewer are their possibilities for learning. Do not waste the time of your students by being un-prepared, by giving information which is irrelevant and unrelated to the needs of your students/trainees).
14. Adults do often have some or out dated basic formal knowledge. - (Make sure that you don't take knowledge for granted which is not achieved by your students).

PSYCHOLOGICALLY DETERMINED FACTORS

15. Adults are often scared of showing that they do not know or that they do not understand. Adults tend to think that it is excusable if children do not know, but that adults should know. - (Be aware of this, observe of the students, look as if they follow your ideas and understand, ask if they understand - but do not ask in such a way that the students will only have to answer yes or no. Put questions which will show as if the students understand the information. You are not teaching just to show of and impress, you are teaching to communicate a message for the sake of the students/trainees).

THE LEARNING SITUATION

For all learning the "climate" of the learning situation is very important. The learning situation is influenced by external factors, as well as by the teacher, and the students. The ideal is to create the best possible learning situation. This necessitates an awareness of the factors promoting or disturbing the situation.

- 1) External factors influencing the learning situation:
- A) The setting for the teaching that is the size of the room in relation to the number of students, the light, the furniture, the arrangement of the furniture, the temperature, the availability of the teaching aids.
- Example - if it is too cold students/trainees use too much energy to keep warm and if it is too hot students get sleepy or uneasy. A proper temperature or proper facilities promote a good learning situation.
 - If a room is very dark, students cannot see the demonstrated material or read the black board. They will get sleepy and relax and learn less.
 - If a room is too small, students will disturb one another by their closeness. If the room is too big, the sound may be bad so people cannot hear properly.
 - If the furniture is uncomfortable, students will feel tired and pain in the body and will not be able to concentrate on learning.

- If the furniture is set in lines, authoritarian learning situation is created. Differences in level of knowledge will be demonstrated, as the best and most motivated will sit in front, the poorest and least motivated in the back, trying to hide themselves. The centre for communication will be between the teacher and the first rows. Their learning situation will be improved at the expense of the back rows.
- If the furniture is in a circle, a non-authoritarian learning situation is promoted in which communication between all involved takes place. The teacher can more easily observe that the students are able to follow his ideas as he can see all faces. He can then more easily repeat when he sees it is necessary; The learning situation is improved.

B) The introduction of the course:

- The way a course is introduced determines to a large extent the expectations of the students/trainees as to what they can gain from participation.
- If there is a discrepancy between the promised aims and content of the course and the actual contents, students will be disappointed or frustrated or upset all influencing the learning situation. So make sure you know the needs of the students for whom you arrange a course and keep to the announced contents.

C) The motivation of the students:

- It is generally known that the more motivated, the more open and responsive are the students and the better is the learning situation.

Motivation can be achieved in several ways:

- The need of the students can be clearly repeated in the content so that students see that the course is an answer to their needs.
- Economic structure can be used as motivation-increase in salary/stipend etc.
- Social structure can be used as motivation-promotion, eligibility to group membership, honour of having passed a course.

- Expected achievements may be motivation for participation.

2) Internal factors influencing the learning situation

A) The size of the group:

A number of experiments have shown that the smaller the group the more can be given to the students and the better learning situation. Also the smaller the group, the fewer "new faces" one has to become familiarized with, and sooner prepared for learning. The insecurity which human beings feel among "new faces" has a negative effect to one's ability to listen and learn. One has to know enough about one's group. Energy and time is consumed just to cover to know one another in a course. Often 2-3 days are spent on this until learning situation becomes positive.

Other financial and time-constraints decide the size of a group. The teacher can compensate the negative effects of too big a group on the learning situation by arrangements which speed up the process of knowing each other and by splitting up the big group into smaller groups for purpose of discussions and practical exercises.

B) The composition of the group:

Not all participants have the same level of information, the same degree of motivation, the same background. Some students/trainees turn up very motivated, well prepared, others may be motivated but tired from heavy manual work etc.

The more heterogeneous the group, the more difficult is the teaching. Those who know less may want more detailed explanations, which may irritate those who already know. It may disturb the learning situation, as some students may abstain from putting forward their claims for better explanations; once out from active involvement, their learning situation will be negatively affected.

- For the teachers it is important to be aware of such differences, to be careful in selecting teaching method to try to equalize the level of knowledge and to pay attention to the tired part of the group, etc.

C) The teacher's choice of teaching methods:

During the years, series of teaching methods and techniques have been developed and tested with the aim of improving the learning situation for students/trainees. Since this will form a separate topic, only general remarks are given here: -

- The length of lecture: The longer a lecture the less chance that the students will remember and learn. Experiments have shown that the man's brain can only intensely concentrate for 4 seconds at a time on a certain topic/idea. Therefore repetitions and small breaks are needed.
- The reading from a manuscript makes students sleepy and less receptive. The learning is heavily attached negatively.
- The least fruitful for learning is continuous series of lectures. Students just cannot concentrate and remember one from another and do learn very little from just passive listening.
- The most fruitful is a mixture of lectures, discussions and exercises where the students/trainees under the guidance of a teacher have a chance to practice and utilise the knowledge passed on to them. It gives the teacher a feed back on his teaching and the students a chance to claim repetition of what they did not fully grasp, and to test their own improvement. Of course, the latter technique demands much more preparation by the teacher. It is much easier to stand up and lecture without opening discussions and preparing meaningful exercises to test students improvements and own teaching methods. Too many teachers choose the "easy way". In selecting a proper teaching technique, 'Learning Pyramid' given at the end of this note will be helpful.

D) Effect of the group pressure:

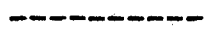
The roles we play as teacher and students and the expectations we have to the performance of these roles, are also important. Each of us is performing a number of roles: -

Father/Mother	Worker Consumer	Sportsman
Committee Man		Landlord
Husband/Wife		Farmer

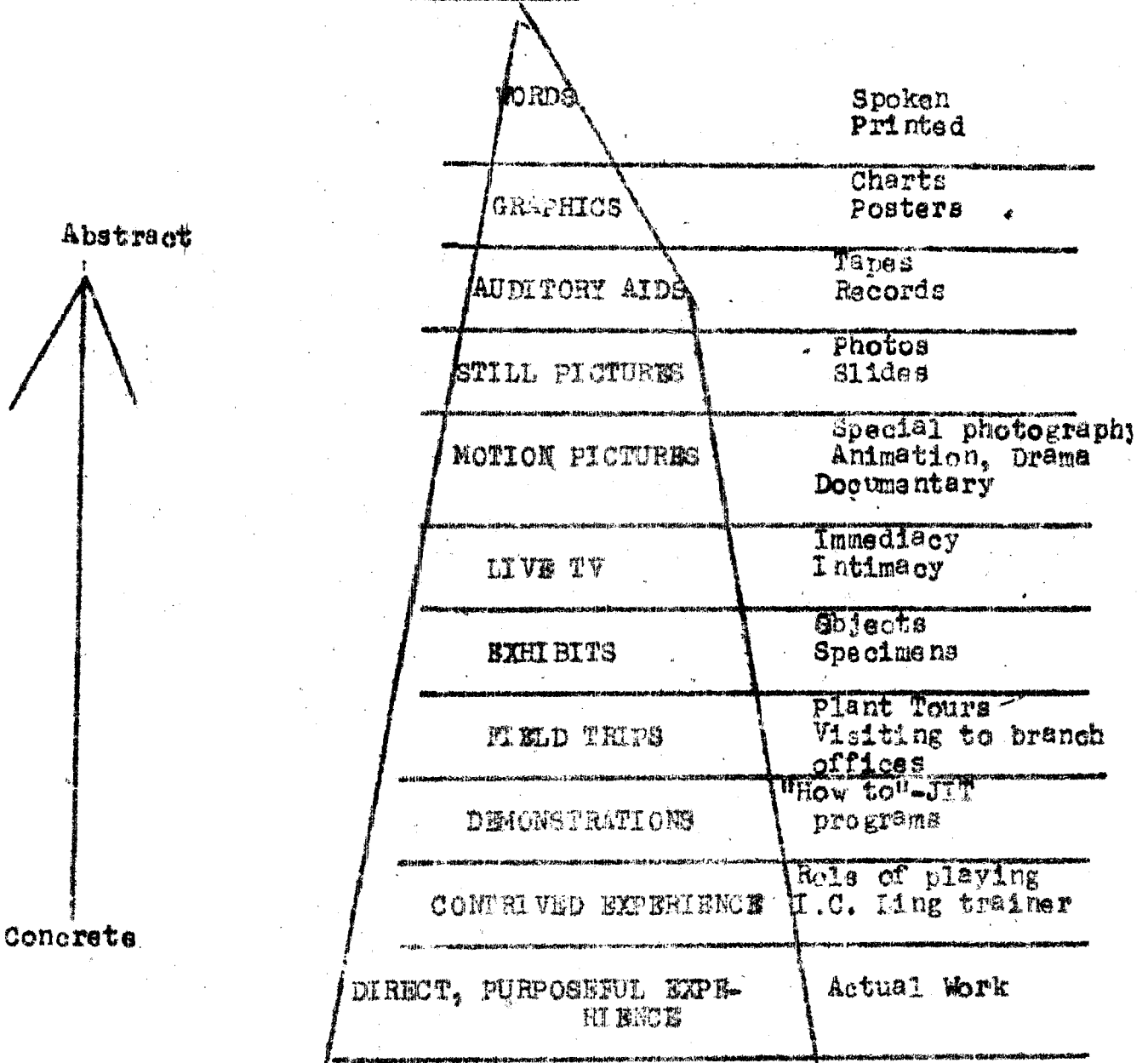
Each one of these roles arises from the position person occupies in the social structure, in the society, as he interacts with others. We have in some way to anticipate the behaviour of others when we have to interact with them. That is why we have to familiarise ourselves with "new faces" by asking where they come from, what they do, what they are called, if they are married, if they have children, etc. We know that to each role (father, husband, teacher, player) is a certain behaviour. Also we know that there is a certain room for personal interpretations of the behaviour of certain role.

If we now take the two roles: teacher/student there are a set of expectations which must be fulfilled if the two shall be able to communicate:

T ^S perception of his own role	:	S ^S perception of his own role
T ^S perception of S ^S role	:	S ^S perception of T ^S role
T ^S perception of T ^S role as seen by the S ^S .	:	S ^S perception of S ^S role as seen by the T.



LEARNING PYRAMID



International Cooperative Alliance
43, Friends Colony, New Delhi-65.

13 Sept. 1978

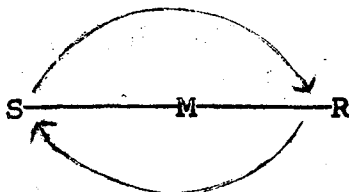
COMMUNICATION SYSTEM AND TEACHING TECHNIQUES
IN COOPERATIVE EDUCATION & TRAINING

by

Dr. G. Ojha
Education Officer (CEMAS)
ICA RO & EC, New Delhi.

Teaching is a process of communication for transferring knowledge/ideas/facts from teachers end to students end. In modern sophisticated terms of management it is the process of transfer of certain knowledge/ideas/facts from trainers end to trainee's end. The process through which this is achieved is called communication system, and the method or aid through which the system is regulated is called the communication media/aid.

Human communication to be effective is a two way sharing process. The process could be divided into three stages as indicated in the diagram below.

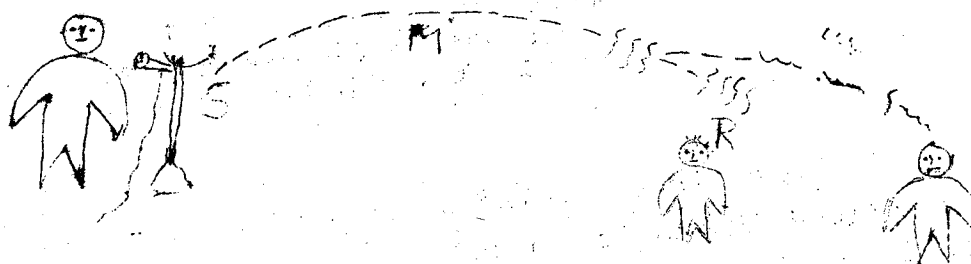


S = Sender or communicator
M = Message and
R = Receiver or audience

For effective communication the process should be two way. The communicator/teacher therefore, must be careful about the receiver/trainee and also about the message.

Message must have clarity and the receiver be in a relaxed situation.

The third important factor in human communication is the background of the receiver/trainee. This background may take into consideration the educational level, past experience, social and professional status and other psychological aspects of the receiver also affects the process of communication.



The effectiveness of communication, apart from the factors explained above, depends largely on the media of communication.

In the selection of communication media the communicator should take into consideration the composition of the receivers. The receiver may compose of an individual or a group of individuals or a mass of individuals. The communication system could be classified into individual method, group method and mass method. The contents of message decides its suitability for adoption of either of the system of message.

For example if the purpose of communication is just to provide knowledge/awareness about a particular seed or fertilizer variety, the group or mass method could be suitable. In this case the communicator may not be interested in knowing the result of such message.

However, in training process, the communication to be effective must have a system of feed back.

The following are the main contents of the three methods :

1. Individual method : The message is direct between the expert and the receiver. But this type is not suitable for programmes involving the community. It is also time taking. However, there is perfect feed back.
2. Group method : The group approach to communication and feed back is suitable for such programmes which require group action. It is less time consuming and less costly. Though feed back is possible but it is not sufficient. It also faces operational problems.
3. Mass communication system : Here one could transmit message to a large population but can not get a feed back. This is one of the limitations of Radio programmes. The communicator does not know the reaction of receivers.

In training situation one deals with individuals in groups in a class room situation and therefore, the individual communication method and group communication methods are adopted.

As pointed out earlier, for effective communication in training the followings are required :

- i. training situation,
- ii. clarity of message,
- iii. background of the trainees,
- iv. image of the trainer,
- v. relationship between trainer and trainee etc.

Once the trainer has identified his target group, the training situation and the background and other relevant factors it would be possible for him to select various medias of training/teaching. There is no hard and fast criterion on the basis of which one could judge the suitability of a particular teaching technique as the best communication media. The point to remember is that selection of teaching techniques should be made on the

basis of the objectives to be achieved, the size of the group, the level of the group, the type of message to be communicated and the resources and time at the command of the teacher.

Teaching techniques :

"The purpose of teaching is to promote learning. The role of the teacher is to help the student to understand and not merely to make him listen or copy. The main function of a teacher is to organise and provide the setting within which learning can take place".

The teaching technique that is being used today can broadly be divided into two groups -

- i. Participative teaching methods, and
- ii. Non participative methods.

(i) Participative Teaching Methods:

The participative teaching methods aim at involving the students in the learning process. It is learning by doing. It encourages the students to discover things for themselves and to learn by bringing their own experiences, ideas and skills into active participation in the process of learning.

It helps in developing the verbal, mental and social skills of the students and hence it has greater impact in imparting knowledge/skills to the student. In this connection it is worth mentioning the old proverb:

What we hear we Forget.
What we See we Remember.
What we do we Understand.

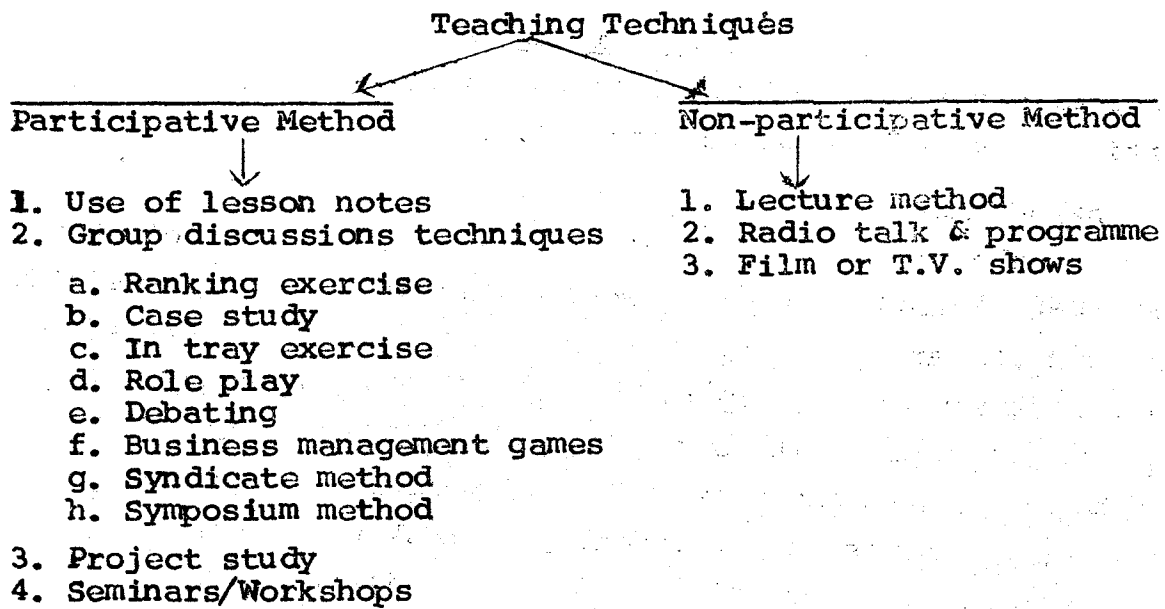
One of the greatest advantage of this method is that the teacher gets a feed back which helps in improving the teaching/learning process.

(ii) Non-participative Teaching Methods:

Non-participative teaching method is defined as a one

way communication system in which the teachers job is limited towards communicating the knowledge to the students. In this method while the teacher is active the students are passive. There is no immediate feed back and hence the effectiveness of teaching is difficult to be objectively assessed. Since the students are not very active in the learning process, it creates a dull situation.

The various methods of teaching techniques today could broadly be classified in these two groups and sub-groups.



The lecture method which is essentially a non-participative method of teaching could partially be used as participative technique by combining the elements of discussion.

Participative methods :

1. Use of lesson notes: If used correctly, duplicated lesson notes could be a valuable support to participative teaching. They provide basic study and discussion materials which can be developed in participative teaching sessions.

The contents of the lesson notes should be a summary or outline of the teacher's own comments and not the copy of the text book. It should raise such questions to which the teacher wants the students attention.

Lesson notes in outline should allow sufficient space for the student to add to his own notes.

When to give Lesson Notes? It depends on the subject to be treated and the extent to which the teacher wants to involve the students. If the subject is complicated or deals with concepts, definition then it is better to give it in advance. However, lesson notes for the entire programme/course should not be given at the beginning of the course.

2. Group discussion techniques: As indicated earlier the group discussion technique could take various forms as a participative method of teaching, i.e.

a) Ranking exercises:

This is one of the simple but effective participative method in which the students work either in groups or individually. The students are given a list of items and are asked to rank them in order of priority and degree of importance. For example a number of items could be prescribed for the eligibility for the post of Manager of a marketing society. Students may be asked in groups or individually to rank the eligibility criterion in order of priority/degree of importance. In the second step the ranking of groups or individuals are compared and then the concerned groups or individuals are asked to explain the choice.

b) Case study:

A case study is a written description of a given situation/incident or series of situations or incidents. The main purpose is to help the trainees to develop their skill in

identifying problems analyzing them in the given situation and then find out solutions. It basically aims at developing the decision making skill of the learner.

Thus case studies could broadly be divided into three groups: (i) Those case studies where the trainees are required to find out the causes of the problem; (ii) Those case studies where the problems are apparent and the trainees are required to work out solution; and (iii) Those case studies where the trainees are required to identify as well as find out solution of the problem.

The case study method is generally used as a group discussion exercise but it could also be profitably used to illustrate a particular lesson.

(c) In tray exercise:

It is another form of a case study method prepared from office papers.

Before setting out the task the students are given the description of the situation and the necessary background information which he/she may require, to decide the course of action. Each student is then given to understand to assume themselves to hold a particular executive position. Each student is then given a set of letters which such executive might expect to find in his table tray awaiting his attention. The students have to decide what action they would take in respect of each paper.

This technique is simple to use and it arouses great interest on the part of the students. It helps in developing the sense of judgement and improves ability to take decision on the basis of available informations.

(d) Role playing:

There is a distinct difference between a role play and

a case study exercise. In a case study exercise students are asked to give their decision on the basis of given information. In role play they are asked to imagine and actually act as a decision maker and to work out their responses to the situation as it develops. As in case of the case studies, the situation contained in the role play should be from the real life situation. The role play technique is most suitable when a teacher wants to communicate about human relations aspects of co-operatives.

(e) Debating :

It is one of the oldest method of participative teaching technique. The subject matter for discussion is given. One side/group argues for a case in support of a given opinion the other side/group seeks to refute it. The students listening to the debate are given a form and are asked to evaluate the performance of each speaker. A chairman is appointed to regulate the debate. Debating method helps the students in researching, organising and presenting the facts of a case. It helps the learner to develop the habit to listen to others arguments apart from developing his own skill of speech making.

(f) Business Management games:

"A management game uses a 'Model' of a business operation in order to give trainees an opportunity to make management decisions which show how they would manage and control the operation if they were the managers in charge. The model used reflects realistic business situations in a compressed and often simplified fashion suitable for use in a training room".

For preparing a particular management game it is essential to identify the training needs of the participants and the training objective of the trainer.

(g) Syndicate method:

Syndicate method is a group technique of participative teaching. A real situation/problem is given to a group for

finding out a common agreeable solution. It's essence is that each member of the group contributes his own experience/opinion and also learns from the experience/opinion from others. Knowledge, ideas and opinions on a particular subject are freely exchanged.

(h) Symposium method:

In this method the subject matter for discussion is selected by the teacher and discussions are initiated on the subject. Besides the students and teacher, certain resource persons or the experts could also be invited. The method helps in bringing together different people and helps the students in knowing the opinion of others. In this method the teachers job, however, gets confined to the tasks of a rapporteur.

3. Project study: In this method the students are assigned a particular job to be carried out under real field situation. According to the training needs and objectives of training, the area of study is assigned to the participants. They are then asked to visit a given organisation for study of the situation and prepare their own study reports. Such reports are then discussed in groups. The method helps in developing the analytical and decision making process of the students.

4. Seminar & Workshops: This is a highly sophisticated type of teaching technique suitable for working out a common consensus on a given problem/problems. For this, the subject matter is decided according to training objectives and needs. The subject matter is then divided into several sub-groups. Background papers are prepared by the trainer as well as by the participants on various aspects of the subject matter for discussion. These background papers form real base for discussion leading to general consensus on various issues.

Non-Participative Technique:

1. Lecture method: Lecture method is the most common type of teaching. It does not generally involves participation or discussion unless the lecturer is interested in doing so. The result is that in this method there is no feed back.
2. Radio Talk & Programmes: It is mass teaching method in which there is only one way communication. It takes into consideration mostly the educational objectives of the trainer. No feed back. It does not creat much interest in the learning process of student.
3. Film and T.V. shows: It is most effective media for mass communication and teaching. Receptively of the message is highest if the film is well produced and edited according to the level of understanding of the audience. The use of films in the class room however, should be to supplement what the teacher has said.

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Extracts from:

"Management Communication
Through
Audio-Visual Aids"

by

Langton Gould-Marks

Definitions

To give a working vocabulary here are some definitions. Audio-visual aids have come to have a narrow meaning. Many people think only of projected material. It is important to define our terms.

If we consider all forms of communication tools which impinge on the human senses, we shall be able to put them into their proper place in the tasks of instructing, informing, training and changing attitudes.

We will ignore the physical ways in which image or sound are reproduced. The definitions are more basic. They define the reason for using an aid at all. Though many additional divisions could be made, the following three classifications can include all normal and many abnormal uses of aids.

First: AUDIO-VISUAL AND OTHER SENSORY AIDS Have little or no value or significance if shown or heard on their own. The teacher or speaker uses them to illustrate, make more comprehensible or supplement in other ways what he says.

In many cases the image needs a spoken caption, or the spoken word needs an image to clarify its meaning. Geography, be it sales or navigational, would be impossible without maps. Engineers cannot talk without drawings, mathematicians need formulae to resolve their problems.

In the same way the audio-visual aids and the teacher are complementary to one another. According to this reasoning most aids will be meaningless if put up before a talk. They will often have only doubtful value as reminders if left up after they have been used.

If used without an introduction, a summing up and discussion films may be misleading. Aids are an addition to the teacher's personal fluency in putting over his subject. They are seldom random pieces of information designed to give general background knowledge; if they are, they come under the second category.

Sensory aids are the means we use to reinforce verbal explanations in encoding messages, so that they become clear, simple and stimulating. They are only effective if well used and adapted to the group. They can be anything from a gesture or a natural sound, up to a computerized flight stimulator.

Second: EYE AND EAR-TEACHERS contain a complete message within themselves. A student seeing them, can get all the information contained in them without the help of an instructor.

In this category, are learning packages, notice and bulletin boards, books and manuals of instructions, letters, exhibitions, working models and films used without introduction or discussion, radio and television broadcasts, recordings used on their own and many wall charts and posters.

Many posters contain small detail and long, small captions which are illegible, even in the second row. The speaker can see them clearly and they help him, but mainly they give little or no help to the class. Most of us want to see those points we cannot distinguish. If a single picture contains all the details of a process, we look at the right hand bottom corner while the speaker is talking about the top left hand side. When he reaches the right hand side we are wondering what he said at the beginning. On the other hand if charts of this kind are put up in exhibition rooms, corridors or common rooms, and the groups encouraged to look at them, they will study them and learn from them.

Decide logically if each item is an aid or an eye teacher. Use them in the way which will achieve the most complete communication. Complex diagrams and masses of written information may be worse than useless if used to illustrate a talk, but if individuals have time to study them they may be the ideal way of putting over the facts.

The most involved form of eye - and ear-teachers are the teaching machine and language laboratories. With these and books designed to fulfil the same function, students can cover a syllabus at their own speed. By pressing buttons to give yes-no answers to questions shown on a screen, the machine moves another image into the screen. They are shown further information and questions which correct misapprehensions or reinforce the correct answers and give additional facts. This system needs supervision and control, but very little direct classroom teaching.

Third: STIMULATORS, besides aids used by the speaker and communication material left around to browse on, there is often a need to awaken or re-awaken interest. Stimulators do this job. The after-dinner speaker realises this need when he tells a story. Stimulators should be relevant to the subject if they are to be useful.

Dramatic or amusing flip-over charts and flannel board presentations related to the subject, startling 'noises off', like the sound of a crash at a Safety Meeting, are ways of waking up a somnolent audience and changing tempo. You constantly need to re-animate a feeling of enthusiasm and alertness in your group.

Stimulators are needed at the beginning to get things going, at intervals when interest flags, and particularly at the end. For the last few moments are the most important in any session. If they are forceful and dramatic the group disperses with a stimulus for thought and action. If they are on a falling interest pattern, attention fizzles out. Studies in Italy have shown that it usually takes 5-10 minutes for a group to settle down and become receptive. Then in cycles of 10-20 minutes interest waxes and wanes. Therefore we do not know what the group has taken in or rejected. A few minutes before the end, almost everybody thinks about whatever they are going to do next.

Distractors

Aids which are badly designed, too full of unimportant detail or not related to the subject hinder comprehension. Films for example which go beyond the subject, raise questions which may be dangerous, and certainly disperse the group's thinking. Presentations which are too slick may make a group suspicious that something is being put over on them, in which case thoughts will be political and not on the theme you want to discuss.

Eye and ear teachers round a conference room may be an escape route from a dull or unpalatable presentation. The decor of a room may be badly adapted to its use; this will distract. Windows on to a busy scene cause eyes to wander. Music-while-you-work coming through the walls may not help a serious discussion. Consider everything you use and those potential distractors that are part of the background to find out whether they help or hinder.

Composition, symbols and colour

Just as language has its grammar, syntax, prose and poetry, visual material should have a similar code which allows it to be used in the same functional way as words. You can transform a dull article or speech into a forceful and interesting communication by altering its structure, by using other words, good punctuation or calculated pauses. You can play on the emotions, make people laugh or cry - even make them angry.

If the work is done by a competent graphic artist, the presentation will be professional, but it may miss the goal. Teachers and trainers have seldom studied picture-making techniques sufficiently to be able to convey abstractions, moods or movement. We must have close liaison between the skilled artist, who can make the aids, and the communicator, who knows precisely what message must be conveyed.

Only too often the artist wants to show his creative ability and craftsmanship, rather than convey an exact message. Trainers, on the other hand, are convinced that the expert knows best. The result is often visually attractive, but factually inaccurate, or psychologically unsatisfactory.

Composition-layout

Unless we are working with real objects, models, role-playing or discussion, we usually make visual presentations on a flat surface within a definite frame. This forces us to observe, more or less, the artistic laws of composition. However well-designed and carefully thought out drawings may be, they lose force if they are not arranged in a definite and purposeful pattern.

Layout, or composition, reinforces the impact of the visuals. It is enough to give a few simple, and basic suggestions which will help you to plan your aids more effectively. These are general rules. Exceptions prove them!

1. Material starting at the bottom left hand corner, and going up diagonally towards the top right hand corner suggests progress, development or evolution. If the elements are arranged in steps, the feeling given is an upward movement by stages. The reverse is true in Arab countries, where it should go from right to left.
2. Material starting at the top left and going down towards the right gives an impression of regression or failure. If the fall is arranged in a careless curve, the display may suggest despair.
3. Arrange the elements in a circle and there is a sense of continuity. If the key image is in the centre, with the other symbols arranged round it, the feeling is of a complete, integrated story.
4. If the components are arranged in formal balance, the effect is static. It can also convey the idea, if the subject is suitable, that both sides of the argument are about equal.
5. If the balance is informal the effect is dynamic. If one side is heavier than the other, this imbalance can be used to emphasize the presentation. For example, more important ideas can be seen to outweigh less important ones.
6. Muddled layouts indicate muddled and illogical ideas. They should be avoided, even on the chalkboard, unless they serve a definite purpose.
7. Different types of line produce different impacts on the viewer. Smooth curves and straight lines suggest harmony. Ragged, broken lines and heavy contrasts in form suggest conflict. This is not always true of course, but used consciously they can convey this impression. If you use free, rather than geometrical shapes, smooth forms are calm, while rugged irregular edges are disquieting.
8. Aim for simplicity above all else. Simple drawings, and on no account clutter anything that you want to show. Remember, both words and images should be simple, concise and clear.

We must realize that words are, by their very nature, the most abstract symbols. Look at the words 'SEA' and 'CAR'. They bear not resemblance to the objects they describe. Yet we immediately create a mental image of water surfaced with waves, or a vehicle with four wheels. Primitive people and young children sometimes find it difficult to recognize the simplified artistic conventions with which the civilized world shows things.

Sometimes we can represent people by dots, at others we need to show them in detail, with clothes, eyes and hair-do or lack of it. How are we to represent drawings? This depends on the objective.

Basically there are a whole range of possibilities for the representation of the concrete and the abstract. Let us list them:

1. Words. These must be chosen to suit the audience. Technical phrases and jargon must be tempered to meet their needs. Analogies and abstract phrases may confuse, as many words can be understood in several different ways.
2. Photographs. These approach reality, but the choice of angle and the distance from the object affect the translation of the three-dimensional object into a two-dimensional picture. Light and shade and irrelevant detail often turn the photograph of a real object into an abstract image. Photographs must be carefully chosen and possibly retouched to eliminate the unnecessary, and emphasize the important.
3. Realistic Drawings. These at times may be clearer than photographs, for they are always 'filtered' through the human intellect. Details are emphasized or played down according to the requirement. A danger is that they often sacrifice symbolic emphasis and impact to reproduce reality. Too much detail often distracts.
4. Stylized Drawings. These vary from the matchstick (or pin) men to the abstract. In this type of artwork much realistic detail is dispensed with in order to get a code which is acceptable and understandable to the viewer. It is most important that human figures, machines or other objects should be designed, so that when they are spoken about they provide a complete idea through the integration of hearing and sight.
5. Cartoons and 'Emotive Artwork'. Humour and heart-writing drawings have their place in our battery of symbols. It may be of great value to poke fun at some part of the establishment. But in communication we should use laughter purposefully, not just for fun. It is good to release tensions and change the rhythm, but quite often the real message is hidden by the joke.
6. Diagrams. These can be defined as 'graphic designs which explain rather than represent'. There are an infinite number of types of diagrams. They can show how machines work, show electric circuits or lubrication systems. They can show organigrams, which explain the chain of authority in industry. Chemical

reactions, time, flowcharts, psychological problems and economics can all be explained diagrammatically. The chief trouble is that most of us show too much on a single diagram. It is often more than the brain can, or wants, to absorb. Diagrams by definition try to show how things work by using simple coded representations. If the artist then complicates them by filling the page with masses of details he defeats their ends. Diagrams in books and wall charts are made to be looked at in a leisurely way; they are therefore very often unsuitable for class rooms or conference use.

7. Graphs. Experience in Britain and America has shown that most people, even graduates, only get ideas of tendencies from graphs. They are usually accurate but complex symbolic representations of statistical, economic, or mathematical data. To most of us the line of a graph going up is good - even if it shows the increase of tuberculosis. If it goes down it is bad - even if it shows the decrease of unemployment. Most people will not make the mental effort to interpret a graph. It is necessary to devise a way of presenting this type of information in an acceptable way. Remember that by choosing a scale dishonestly, it is easy to lie blatantly with any form of statistical presentation.

8. Maps. Various projections, conventional signs, contours and the other ways of conveying information on maps and navigational charts must be learnt before they can be understood. On the other hand the basic shapes of countries and prominent features are generally accurately interpreted. Therefore maps can be used effectively, but they should be as simple as possible. Italian Naval Officers were asked at a test to put on a map of Italy six principal cities. Many displaced Rome and other cities including the islands of Sardinia and Sicily by over a hundred miles!

9. General. There are dozens of other variations, combinations and permutations, but the basic principles apply. Be simple, comprehensible and stick to the real point.

Drawings and designs can be as virile and stimulating as perfect prose, or as dull and antipathetic to the viewer as a badly composed letter. You are trying to get across ideas or facts about concrete things. Even reality may not convey your complete message, therefore you must choose sensory methods to convey the messages which are the most efficient.

Colour

How should we use colour?

There are psychologists who specialize in the study of colour, trying to discover the impact of colour on the human being, and to codify their results. It is clear already that some colours stimulate and others soothe. This impact is usually related to large surfaces; the decor of rooms, or workshops, is chiefly under consideration.

One interesting experiment was carried out in the U.S.A. A group was seated in a cinema auditorium, and asked to tap at an even

speed on a small drum connected to a recording instrument. Colour was projected on to the screen and held for about thirty seconds. When blues and greens were shown the tempo of the taps grew slower. When reds and oranges were projected, the speed picked up. For neutral colours the group fell back into their normal rhythm.

It has also been found that with excitable nervous patients and heart cases in hospital, red tones were too stimulating. In a school in the States a classroom was painted red, and misbehaviour increased immediately.

There are different reactions to bright colours in cold northern and sunny southern countries. Generally speaking this does not concern us, as the aids we use are, as a rule, so small that they do not have an emotional effect, unless the colours used have a political or other significance to the viewers. But we should, if possible, arrange that our room décor is pleasantly neutral. If the rooms we use are dull and dirty, the effect is exactly that. We are competing against our environment. The same happens in reverse if the setting is garish.

Now for colour in the way that we are most likely to use it. No intelligent communicator should use colours haphazardly. We do not pick up the nearest crayon and use it indiscriminately. Generally colour has three basic purposes:

1. Realism. It is usually easier to recognise objects, especially if the drawing is simplified and stylised, if actual colour are used. Fields, the sea, faces, pillar boxes, traffic signs and many other objects are easily recognised if the colours are true to life. There is a danger that a slavish adherence to this method may confuse, because many objects are of similar colours. On the other hand it may produce a picture which is pretty-pretty and loses all its dynamism.

It is difficult to know when to stop. You may produce a picture which is a mass of colour without emphasis.

2. Codes. With some aids it is a good idea to keep all the elements, which have something in common, in the same colour. There are a number of codes in everyday life. Fire is usually red. Traffic signs are red - stop, amber - wait, and green - go. Moving parts are marked with bands of yellow on black in many countries.

A lubrication system can be shown in one distinctive colour, while the electric wiring system is in a contrasting shade. You are using colour to help the audience to distinguish between one group of facts and another.

It is important that colour be used for one task at a time. It is confusing if you use red for fire risks, and show a red bus with it. Realistic colours do not blend with a code.

In organigrams, colour can indicate the different branches of the organisation. Different elements in graphs can be in different

colours, just as colour used on maps to indicate Highlands and Lowlands, the different classes of roads and crops or industries.

Do not use shades which are like one another. Contrasts must be clear and definite. Form should be used as well as colour, for many more people are colour-blind than we realise. Usually these people do not tell us of their disability, so we may believe that the colour code has conveyed its message when in fact one or two people have not been able to distinguish between the shades.

3. For Artistic Contrast and Mood. In this case colour is used purely artistically, and not necessarily realistically. Human figures may be purple, red or green. No attempt is made to stick to actual colours or a definite code. This treatment may be effective and dynamic, but colour is not being used for any clear-cut purpose, except to please the eye.

This can lead to confusion or irritation, as some colours have preconceived associations. In Holland a group of experienced workers were being retrained for a new and automated job. The necessary reorganisation was shown on a flannel board. The people for the replanned tasks were shown in green. There was immediate antagonism from most of the group. They said indignantly 'We may have to learn new jobs, but we're not green'.

Use symbols and colour with tact and intelligence. As with every tool, choose with care, and employ with a definite purpose in mind. More ideas on the use of layout, symbol and colour will be given in later chapters, with actual case histories.

TABLE OF SIZES OF LETTERS AND THEIR VISIBILITY

Visible at distance in metres	Height of letters in millimetres	Thickness of stroke in millimetres
10 m.	20 mm.	3 mm.
15 m.	30 mm.	5 mm.
20 m.	40 mm.	6 mm.
25 m.	50 mm.	8 mm.
30 m.	60 mm.	10 mm.
35 m.	70 mm.	12 mm.
40 m.	80 mm.	15 mm.
45 m.	90 mm.	18 mm.
50 m.	100 mm.	20 mm.

Using film

When a good instructor wants to teach, he uses his tongue, his pen, his black-board and his gestures according to a plan. Experience has taught him how he can best deal with the learning needs of his class. It is the same when you use film. Irrelevancies are out. Very few teachers use a musical background to their lesson, and therefore there is some doubt whether music is useful in the background of instructional films.

Unless a film has been made for an exact purpose - and this is rare - it is unlikely that you will find exactly what you want. In almost every case you will have to compensate for errors and over-statement. Adapt it for your group. It is difficult to change a film without re-editing, or re-commenting on it. You can focus attention on the key points by ingenuity.

Presentation

The way you show your film is most important. The whole audience should see a clear, luminous and undistorted picture without craning their necks or other physical discomfort. As a basic principle, no one should be seated beyond a line drawn at an angle of 30 degrees from a line drawn from the projector to the centre of the screen. The angle is smaller with silvered and beaded screens. Trial and error prove this statement.

Viewers should not be too near. Heads should be 'staggered' so that they have a clear line of vision. The screen should be reasonably high as this helps everyone to see. Sometimes it is best to project diagonally from corner to corner of a room. Consult your agent; he will advise you on the best equipment, the choice of lenses and screens.

Daylight projection is simple and need not be expensive. If black-out is difficult, the following may be your best solution. The image is projected from behind a translucent screen, through a mirror, which turns the image the right way round. These can be most expensive and efficient, but can be improvised with an ordinary mirror and a sheet of tracing paper. The space between the projector and the screen is enclosed.

Black and white films in general can be shown without perfect black-out. Colour falls off very rapidly unless the projection room is completely dark. Again this depends on the amount of detail in the picture.

Ventilation and heating are of great importance. Sleep creeps in with stuffiness, and interest goes out with cold and bodily discomfort. Draughts are distracting. Chairs support you, and their seats must be supportable without being sleep-inducing.

There are three basic methods of film presentation. Like so many other generalisations, there are an infinite number of variations which appear to contradict this statement, but in fact most of them can be fitted into the rule.

1. The films, or parts of films, are an integral part of the session conference of instructional period. They are just as much subservient to the leader as the black-board. The films are visual aids and as such must be an extension of the speaker's personal fluency. They should be shown in the room where the work is taking place with as little fuss as possible. It should not be necessary to have a separate projectionist, as this suggests that the film has an undue importance in the total presentation.

2. Films can be shown on their own, independently, to give information or background instruction. If there is no discussion or pin-pointing of highlights, every viewer may go away with different ideas. If there is no discussion and no instructor, some other form of follow-up is desirable if the film is to achieve a definite result. In this case a reasonable amount of showmanship is justified, for the film is standing on its own.

3. Films can be shown as part of a programme. This usually means that there is no definite or measurable communication, unless the programme has a clear theme. These programmes have no foreseeable result - How can we say in advance which film, and what part of that film will interest the individual most? We need feed-back to find out what is happening. Film programmes arouse interest among all ranks in industry; workers are often willing to attend a show in their spare time. Some of the points will go home to some of the audience. A few of the points may get through to all of the audience. But the proportion and the type of information received is unpredictable.

The general opinion of people working in this field, is that mixed programmes are only useful in getting people together, but of little value in training or motivation. This is why we distinguish between the single film shown with a goal in mind, and the film programme.

A case history of a bad use of film:

A film programme was shown to a group of engineering apprentices in Hamburg. They were shown a black and white film on safety in ship-building, then a black and white film on using tools, and finally a most interesting colour film on tropical fish. There was obvious mental indigestion. The picture left in their minds would probably be of a tropical fish in full colour with a bandage round his tail and a hammer in his mouth.

A very good use of a film programme in Germany in the Ruhr; a series of films on human relations were shown to a group of foremen and junior managers. They were used with the flannel board and a newsprint stand.

After each film, there was a discussion, and the leader wrote up the points which the group made on newsprint. After a few minutes he summarized with prepared flannel board material, and led the group's thinking towards the important message contained in the film they had just seen, and led their thoughts towards the next film in the programme. The audience were therefore keyed up and receptive when the lights went out.

Previewing and appraising films is a job which needs training and self-discipline. One has the tendency to see the film from one's own point of view. If you are interested in the techniques of film production, you note camera angles, editing and sound quality; if the subject is your speciality you may query some of the facts. Yours duty is to find out its value and place in a particular communication task. It is hard to see a film once, and to be able to recapitulate what it will do, and how much it is capable of teaching.

Film as record

It is logical to want detailed records of important meetings, experiments, processes, exhibitions and demonstrations - and what could be more accurate and lively than film? Otherwise all the work, effort and expense disappear without trace. This is one side of the coin. Many films made at considerable expense, have been assembled, given a sound track and then forgotten, because they are too long and pointless to be shown.

Film is an economic medium, it can make its point quickly, a shot lasting a few seconds can place the subject in space and time. Reality dawdles along, very little happens fast, and that which does, often goes too fast to be seen. If the cameraman is merely told to photograph everything, he may have hours of repetitive footage, and be reloading when something dramatic happens. The only way to avoid wasteful shooting, and days of boring editing, is to know in advance, what and when you want to shoot. Script the film when you plan the sessions or the experiment.

There are film cameras which record sound either optically or magnetically at the same time as they take pictures. These are very useful, but if they are not available, use a tape recorder to record speeches and the casual remarks of participants.

Audience reactions can be got by getting people to remain after the meeting, or whatever it is, is over. Speakers can give shorter versions of their talk for the camera. There are all sorts of ways in which the record can be made into a real film which will fill needs in training, selling or informing if the time and thought is given in planning. Most often the cost will be less, for the saving in film stock, lighting and camera time will compensate.

There are times, however, when it is worthwhile to run the camera continuously, in which case more than one camera will be needed to allow for reloading. It is also a pity if the camera takes all the shots from the same angle, though it is possible with a zoom lens to go from longshot to close up.

lighting for these type of films must be adequate without embarrassing those involved. Very fast stock may help to solve this problem. A professional cameraman or your dealer will know the answer, or be able to find them out.

If fast film is used the result will not be very exciting or contrasty. For colour you must have enough light to make your

colour thermometer give a healthy reading. A cameraman friend of mine told me that he was engaged to make a colour film of a conference, and when he was set up to take an important key shot, he was told to kill his lights. The speaker, a big shot, and one or two of the audience found the lights annoying. The whole sequence was lost, and the very person who gave the order to extinguish was surprised that the scenes had not been shot.

Sometimes the background to a record film may be of great value. Shoot scenes of the background and preparations, so that other people doing similar jobs can see your methods. A large company ran a most successful conference in Paris, which they planned as the prototype of a series throughout the world, so they began their film-record months before. The first scene in the finished film showed the first plan being put on paper, and the camera showed every stage up to the follow-up after the meeting was over.

Here are some basic rules for record films:

1. Decide why you need a film, then script or plan the coverage, so that the film unit understand what is expected of them. Decide whether you need colour or black and white, and whether you need on-the-spot sound recording.

2. Do not waste film. A good plan will mean that lights and camera are ready when you need a shot. Reaction shots of people may be got with hand held lights on the spot or afterwards. Plan and organise camera positions, so that technicians do not have to push their way through participants during the action, whatever it may be.

This mental discipline, and pre-planning needed for selective shooting makes for a better film. For historical, or other good reasons, you may need a complete record, but that will come out in the preparatory stages.

3. Use skilled technicians. Even if you are the cameraman, do not be amateurish. Script, lighting, camera-work, editing and sound recording reflect the prestige of your firm or product. I have seen industrial films of a lower standard than holiday films from the Costa Brava.

4. Editing should produce a clear, logical and precise film. It should have a beginning, middle and end. Titles should be readable and to the point.

5. Beware of technical hazards. Many films shot at the silent speed of sixteen frames per second have later required a sound track. If there is any chance that you may need sound, shoot at twenty-four frames. Do not move your camera restlessly, many shoots are spoiled by the camera spraying like a hose from object to object. Study films and books on the subject, so that you know what you are doing and why you are doing it.

We seldom see ourselves as others see us. The use of the film camera in training sessions is a worthwhile experiment. I have taken part in filmed courses over a number of years and checked on the results. Students have shown marked and continued performance improvement, after seeing themselves in action on the screen. The method I have used is to accustom participants in training, trainers or sales courses to the idea that they are going to be filmed while instructing, speaking, group leading or selling. Then the camera, one which records sound simultaneously, is set up with the minimum lights. The student begins his demonstration, and at intervals the cameraman takes shots of characteristic mannerisms. These have to be carefully chosen, so that the proportion of good to bad is high enough to encourage improvement.

Experience has shown that to take long bursts or to recall the whole of an exercise is not so stimulating as filming short typical shots.

This type of recording has been done with video-tape, which can be played back and seen immediately. Generally a time-lag, such as that imposed by processing film, makes the student see himself more objectively, and with less emotion than if he sees himself immediately after his 'act'. Most people who have undergone this ordeal, say that they are not aware of the camera after the first few seconds, providing that the strain of dealing with problems makes them forget their physical environment.

Film loops, continuous projectors and 8 mm. cassettes

In some forms of skill training, single-concept films are of value, especially if they can be repeated time and again. There are film loop modifications which can be fitted to most projectors, which allow one or two minute films to be shown continuously - the film being a loop recommences as soon as it is finished. These are invaluable when people want to study a process or a procedure. One textile factory fitted old projectors with loop attachments and put them between machines. When newly-trained girls were unsure of what to do, they were trained to switch on the nearest projector, which was focussed on a light wall. They could reinforce the knowledge they had gained in training, using the projector as a teaching machine.

The Swedish army has used loop projectors to train artillery gun drill and vehicle maintenance. A woman's hairdresser filmed new hair styles and the way to set them on 8 mm. film in cassettes and used them to train hairdressers in their own saloons. They could set up the projectors and practice on models, glancing from time to time at the film which was left running.

Special applications

Reading matter has been filmed for quick reading training, and the potential use of high speed cinematography is unlimited in workstudy and the investigation of otherwise insoluble problems.

One of the most unpleasant, but valuable films I have ever seen, was made by the forensic laboratory of the French police. Bullets were fired at a corpse and filmed at ultra high speed - this showed exactly how a bullet enters the body, and its effect on the skin and the flesh. The same techniques have been used in the investigation of fires and explosions.

The Czechs have experimented with live actors synchronising their movements with film, and the potential technical development of photographed movement combined with other equipment is only just beginning to be explored. Cinematography by astronauts and space vehicles, using film, video-tape, or techniques not yet discovered make the moving picture still exciting. It cannot be divorced from television because from the spectator's viewpoint, the effect is much the same. In circlorama we can see all round us - no one knows what future films will show.

Notes for: TRAINING MEDIA TECHNOLOGY PROGRAMME

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PRINCIPLES OF PHOTOGRAPHY

A Photographic Camera basically consists of a light tight box, a lens, mechanism for transport of film and a shutter.

The lens used in a Camera is a convex lens; if there is no lens to focus the rays of light coming from the subject, no image will be produced. The convex lens bends the rays from each single point so that they converge on the "focus plane". The image formed is reversed right to left and top to bottom.

The distance measured from the lens plane to the focal plane when the object is at a great distance is known as the focal length of the lens. Lenses used in modern cameras (with the exception of the simplest box cameras) consist of several elements designed to allow maximum amount of light with the least amount of distortion. These lenses also have adjustments for varying the focus and the amount of light.

The amount of light reaching the film can be controlled either by varying the shutter speed or timing or by varying the aperture or diaphragm. The diaphragm (aperture) is similar to the iris of the human eye. The iris adjusts itself to the varying amounts of light; but in the case of the Camera lens it has to be adjusted to the sensitivity of the film and the shutter speed; there are, of course, cameras which do this automatically once the lens is set to the sensitivity of the particular film used. The size of the aperture is measured

in 'f' stops; these numbers are derived by dividing the focal length of a particular lens by its "effective aperture".

The result is a series of numbers whose relationship at first seems arbitrary:

f 1, f 1.4, f 2, f 2.8, f 4, f 5.6, f 8,
f 11, f 16 etc.

These numbers are chosen in a way such that each successive f number in the series will admit only half the amount of light of its predecessor, i.e. an f 4 aperture will admit only half as much light as an f 2.8 aperture or you might say f 2.8 aperture will admit twice as much as an f4 aperture:

Changing the size of the diaphragm (aperture) or 'f' number has another consequence. It changes the "depth of field".

The phrase "depth of field" is used to indicate the range of distances in front of the lens that will appear in satisfactory focus; the depth of field for any particular lens increases as the lens is "stepped-down" (when the aperture is reduced or in other words the f number is increased).

The other means used to control the light is the 'Shutter'. This shutter mechanism can be either between the lens elements or behind the lens, in front of the film plane. The shutter in front of the film plane is called the 'focal plane shutter'; most of the cameras which have interchangeable lens facilities are equipped with focal plane shutters. Shutter speed is invariably linked with 'aperture' size. If you want to freeze the action of a fast moving subject you will choose a fast shutter speed and will compensate for the short exposure

time by opening the aperture to a lower f stop. Shutter speeds are calibrated thus: (in seconds)

$$\frac{1}{1000} \text{ Sec, } \frac{1}{500} \text{ Sec, } \frac{1}{250} \text{ Sec, } \frac{1}{125} \text{ Sec,}$$

$$\frac{1}{60} \text{ Sec, } \frac{1}{30} \text{ Sec, } \frac{1}{15} \text{ Sec etc.}$$

Each successive shutter speed doubles the exposure time.

The fundamental chemical principle on which photography is based is that some chemical substances are "photo-sensitive" i.e. they react to light and change chemically. The photo-sensitive chemicals used in to-day's films are known as Silver Halides; when light strikes the film there is a chemical action produced to convert the 'Silver halides' to silver; the colourless silver halide is converted to black silver; however this action of light can be seen only when the film is 'developed' in a chemical bath known as 'developer' and the chemical action is called 'development'. The development action converts the silver halide ^{to} silver, but only those silver halide particles which have been exposed to light; the amount of darkening caused in the process of development is proportional to the amount of light received by the film. Thus, the film exposed and developed is called a 'negative' because more light causes more darkening - and where there is no light that area is transparent or white; in other words the tones represented in the subject are reversed. The developed image is not permanent, in that, if it is exposed to light the entire film will get darkened unless the process of development is stopped and the image is fixed. The process of fixing the image consists of removing the unexposed silver halide from the film so that light cannot have any action and the process of development is stopped. 'Fixing' is done in a bath known as 'fixer' or

hypo. The negative image thus obtained is printed/
exposed either by contact or by an enlargement on another
paper emulsion or film and this developed image is called
a 'positive' because the tones represented in the positive
image will be corresponding to the original subject.
There are films which will produce directly positive
images without an intermediate negative images. These
are known as direct positives or positive transparencies.

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AUDIO-VISUAL AIDS WORKSHOPPURPOSE OF VISUAL AIDS

Direct experience is the best teacher. Although audio-visual aids are only a substitute for direct experience, they make use of the two main channels of learning: sound and vision. Almost invariably a well-conceived visual or audio-visual aid will provide the most satisfactory method of communicating a new idea. There is little that is new in the use of visual media - the existence of paintings, drawings and wall decorations reaching back into prehistory is testimony to this. What is new is a knowledge of how effective visual and audio-visual media can be. We know that a large percent of all the things we learn are the direct result of visual and audio-visual experiences. It is for this reason alone that no one concerned with the communication of principles and ideas or with teaching and training in any form can afford to neglect the use of audio-visual methods.

Audio-visual aids are no substitute for the cooperative training officer. They will not do his work for him nor will they make his task of preparation any easier, but aids correctly used will arouse a new interest among his trainees and possibly influence, if not change, attitudes toward both instructor and his subject. They will certainly make his work more effective.

APPLICATION TO COOPERATIVE TRAINING:

Trainees who are attracted by a suitable form of subject presentation are likely to be much more receptive to the works of their instructor. The use of training aids will also indicate that the training officer has taken some care in the matter of preparation, that he is concerned for the well-being of his audience, and that he really wants them to understand. These are not superficial matters, for attraction

towards a topic is the very beginning of its comprehension. Audio-visual aids correctly used to have a real and significant part to play in the creation of an ideal training situation.

In most spheres of adult education much benefit can be derived from discussion. In this respect, aids may be used as soon as formal contact has been made with a group of prospective cooperators, and the use of audio-visual methods at an early stage will probably do much to help consolidate an informal gathering into a regular study group. Aids such as wallcharts, filmstrips, films and dramatic interludes presented through the medium of a tape recorder may do much to consolidate a group by providing material to stimulate thought and discussion. Appropriate use may also be made of small pamphlets and publications. Once contact has been established, more formal training aids may be used. It may be better at this stage to use the type of aid which remains rigidly under the control of the instructor. The magnetic board, the flannelgraph, filmstrips slides, or a collection of charts or picture cards made from a filmstrip sequence, may all be suitable for this purpose. With all these aids it is possible to vary the rate of presentation, and to recapitulate or re-present material should this prove necessary.

No technique of communication should be neglected or left untried. Sometimes the most unlikely aid may be the most effective. A whole range of different aids ought to be used during the course of a training program. Generally, the greater the variety of aids used, the better will be the overall effect.

The place of publications and handouts in this process of cooperative education ought not to be neglected, and when properly distributed may serve to stimulate loyalty to the cooperative society. Posters may fulfill a similar function.

It will be necessary to present statistics and other data to cooperators from time to time, and this may be achieved by the use of charts in which information is presented in diagrammatic form. Care must be taken to explain such diagrams carefully, for they are not always easy to interpret. The type of statistical diagram which shows, for example, a half-tractor, a half-man or half coin should be avoided if the intended viewers have had no training in the interpretation of such material, for they may create more difficulties than they solve.

Audio-visual aids may therefore be used for:

1. Spreading the idea of cooperatives and helping to consolidate study groups;
2. the continuous process of education, both formal and informal, within the cooperative movement;
3. constant follow-up purposes, and for promoting loyalty to the movement.

If it is possible for cooperative training officers to attend audio-visual aids course, this is to be recommended. If not, those who produce their own aids should not be too concerned if their locally produced material is not of the highest standard. Relevance to the situation and clarity to the student are much more important than high standard of production - and are, indeed, two factors often lacking in commercially produced visual-aid material.



AUDIO-VISUAL AIDS WORKSHOPART OF PRESENTATION THROUGH AUDIO-VISUAL AIDS

All who make regular use of audio-visual aids will from time to time experience the feeling that both their aids and their presentation have not met with the success expected. There are of course a whole variety of possible causes for the lack of effectiveness of teaching and training aids, and not least among these is the variable human factor. The following suggestions take into consideration some of the more practical points of presentation, and may be used to form the basis of a sound individual audio-visual training method.

It is very important in training and extension work that nothing should be presented visually if it is subject to doubt. A method or system presented in visual terms which in practice is found to fail may lead to the view that all forms of visual presentation are suspect, and a most valuable channel of communication may be lost. There is a common belief that visual experiences are true experiences. This belief must be upheld.

Planning is the best aid to good presentation. If an aid is inaccurate in its assessment of the local problem or if it is not correctly oriented to local conditions, it will be regarded by the observers as being of little value. This means that a very careful study of the local situation must be undertaken. Aids must appear strictly relevant; they must ring true.

When using audio-visual material, have a set aim to keep to it. Depart from it only when there is a strong reason for doing so. Make a point of having an interesting or topical introduction to any cooperative society meeting and make sure all ideas are presented in a logical sequence. Work towards a conclusion, even if the conclusion

is to be in the form of a problem posed to stimulate thought and discussion.

Be sincere in your approach. A lack of sincerity shows much more than lack of skill, and most audiences can quickly detect a lack of sympathy and understanding. If your information is important to you, it will become important to your hearers. If you do not know the answer to a problem, admit it - but be prepared to find out and provide a satisfactory answer. This method of approach will do much to promote the good relations which of necessity must be established before satisfactory communication can take place.

All forms of presentation must make allowance for a two-way exchange between the speaker and the audience. It is better to present less material through audio-visual techniques and leave some time for discussion than it is to use all the time available for presentation to the complete exclusion of discussion and informal exchange. It is necessary to strike this correct balance between the audio-visual presentation of the subject matter and the practical application of the material in the form of discussion and other activities. Neither can stand alone.

PRESENTATION IN PRACTICE

FIVE BASIC STEPS

The following five steps represent in outline a well-tried and proved technique. If the steps are carefully followed it will mean an end to "one-way" communication.

1. Prepare the audience: Put them at ease and show your personal interest in them. Explain how they will benefit from an understanding of the subject. Suggest specific points for attention and observation. It is always a great help if the audience is prepared and knows what to look for: this is of special importance when films are

used as the instructor will not normally be able to interrupt and explain or call attention to any point once the screening has commenced.

2. Present the material: It is important to avoid a too rapid presentation of visual material, and the instructor, naturally already familiar with his materials, may find that for this reason alone he is making insufficient allowance for his students to assimilate material which is new to them. Care must therefore, be taken over the rate of presentation. Variation of pace will both stimulate and add interest but, like the art of story telling, it will be best developed as a personal technique.

3. Application: It is at this stage that the students should be encouraged to examine and apply their new knowledge. In the sphere of formal education this could take the form of a written exercise, but in the more relaxed atmosphere of cooperative education, a conversational approach would naturally be more acceptable. The aid will really have been used to create a talking point and stimulate thinking. It is of course under such conditions that prospective cooperators begin to find their own answers to their own problems. The skillful extension officer will so guide them that they provide him with the solution he requires. Real knowledge and understanding frequently follow from the discussion and expression of ideas. All forms of presentation will be more successful if active participation rather than passive observance is the aim.

4. Test: A deliberate attempt should be made to assess the comprehension of the subject if this has not become apparent in the preceding stage. Assess your own effectiveness by means of a tactful and informal use of question and answer.

5. Review: Once weaknesses are determined, the subject may be reviewed and the visual aids used yet again where appropriate. Some audio-visual aids may be subject to revision at this stage if this will make them more effective.

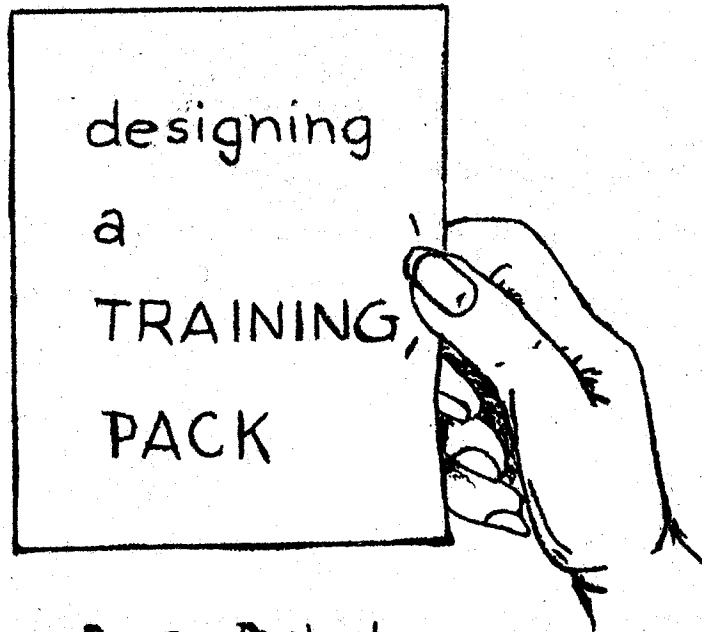
POINTS WORTH REMEMBERING:

1. Use an aid which can be seen by all members of your audience. Be prepared to view it critically from a distance, and make sure that all words are readable.
2. Make sure that all can hear without difficulty.
3. Make sure all present can see both the speaker and the visual material.
4. Do not present too much material at once.
5. Leave the aid on view for an appropriate length of time. Remember that you may be familiar with an aid because you devised it and are constantly using it. Others are not. Give them time to assimilate the material you present to them.
6. Do not leave a poster or chart on permanent display for too long. It will lose its effectiveness and may even detract from the value of material displayed at a later date.
7. Make sure your ideas are presented in a logical sequence.
8. Ensure, by experiment and test, that the pictures are not subject to misinterpretation. This is particularly important with pictures of a diagrammatic type depicting movement and action.
9. Face your audience, not your visual aid.
10. Do not continue talking to your trainees when you have turned away from them to change part of your visual presentation. They may not hear.

11. Never apologize for an aid. If it only approximates to your exact requirements, do not use it.
12. Never use an aid which is likely to offend or annoy. It is always useful to get a second opinion on your aid from a person or persons who will not give personal praise.

A visual aid or audio-visual aid is only a tool in the hands of the cooperative training officer. To attempt to make a training session more interesting merely by adding a few pictures is a technique which is inadequate and is almost bound to fail. The training officer must first analyze his problem. Only then can he decide upon the best form of aid to use under local conditions. It is hard to better the personal touch of a visual aid prepared to fit exactly the requirements of the local situation. It is also worth remembering that no aid will be of real value unless it is presented with enthusiasm.

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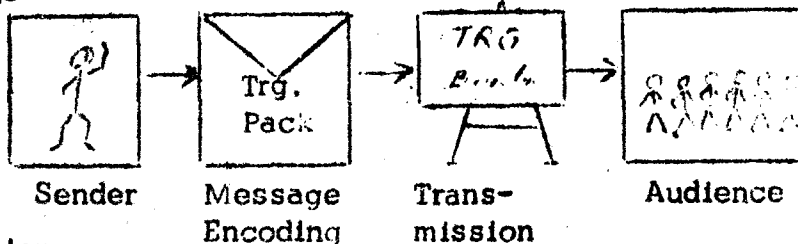
DESIGNING A TRAINING PACKAGE

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Introduction

1. Essential ingredients of communication process are (a) the Sender, (b) the message, (c) transmission, and (d) the audience. Another equally important factor is termed as "feedback" which completes the two-way process of communication. How a message

is communicated, and how it travels from one end to the other can be explained better with the help of this illustration.



Feedback helps the sender in determining the accuracy of the message and in identifying the right type of audience, and, of course, the correct channels of communication (transmission) which have been made use of. In this case the sender is the teacher, or the trainer or the manager. The message originates from the teacher and gets consumed in the audience.

2. The teacher makes use of various methods of teaching and applies various teaching aids in order to make his ideas clear. In this paper we will discuss how a teacher can make his work easier by making use of a training package (or training pack). The techniques of constructing a training package will be discussed here. This is a modern technique of imparting instruction and improving skills.

3. The teacher, after identifying the subject of the message encodes it in such a fashion that it is easily understood by the audience for whom the message is intended. The identification of the subject or the topics is a very delicate task and the teacher has to devote a lot of time and energy in accurately determining the topic and its various aspects. After the identification of the topic the teacher then considers which aspects of the topic need what amount of attention and stress and in which order. Naturally, the topic has to be further broken down into units or modules and each module has to be so placed that it relates with the other. The first module should relate with the second one and the second one with the third one and the third one with the fourth and vice-versa. Once the logical division of the topic into modules is achieved, the teacher then decides how much and which type of material could be added further and which material could be discarded, or rearranged. He has then to hunt for authentic material by consulting references, holding discussions with the relevant people, experts, subject specialists and by going around on his own to collect visuals and other material. This material is needed to support the assumptions and statements which are to be made during the course of the lesson. After collection of this support material, the teacher then puts the facts in the form of modules duly supported by visual aids and other illustration material. Here he makes use of various media, say, audio-visual aids. Each module is thus complete with text, teacher's notes, students' notes, audio-visual aids, and exercises etc. All other modules are constructed in the similar fashion. At a later stage, all the modules are kept in one large-size container, or a box or fileholder and that collection is termed as a "training package".

4. After the training package is ready, the teacher puts it to various tests to find out if the material meets the requirements of his audience, if the material needs any revision or adaptation. He collects the reactions of his friends, colleagues, experts, subject specialists and the audience. He incorporates all these reactions into his training pack and revises it wherever needed. The teacher keeps the training pack with him and uses it in its entirety or in parts whenever he is to undertake any teaching assignment on that subject. He can leave a little note in the training pack giving instructions for those who might like to use this training package in the absence of the teacher. The designer of the training package, the teacher, thus creates a specialist-assistant for himself while communicating his ideas to his audience. When the training pack is used by any other person than the designer-teacher himself, he is actually present in the training package but outside the classroom. The training package almost replaces the teacher. This notion has been expressed over and over again and it is regarded absurd to think of training a group of people without the teacher himself. This is not actually the case. The teacher is very much there and his presence is extremely important. He plans the subject, reduces the subject into modules, supports the modules with supporting material, authenticates the training package, and undertakes updating and revision of training pack as and when necessary. Without the teacher being there, this would not be possible. So the teacher is needed and is a MUST in a training situation. He is a friend, philosopher and guide of students. The only major difference is that he need not be present everytime in the classroom when the same topic is discussed. His training package can do the job.

Concept of a Training Package

5. By a training package we mean a systematic collection of educational material on a particular subject divided into cohesive modules containing relevant audio-visual aids, exercises and evaluation devices aimed at imparting the most authentic knowledge and skill to the learner. The training pack is based on the modular system under which the training material consists of independent but inter-related units which can be put together to meet a variety of training requirements.

6. The training package is not produced by one person alone. It is a result or a product of a combined effort and where several heads and hands work together in unison, the end-product is supposed to be perfect or near perfect and authentic. The teacher devises the methodology, and the team of subject specialists and resource persons chosen by him, help the teacher in constructing the training package.

7. To understand the training pack better we can say that this technique is a part of self-instruction or programmed instruction method of training. There can be two types of training packages e.g. i) Trainer's Package, and ii) Learners' Package. The trainer's package is used by the teachers to impart a certain knowledge or skill to the learners, while the learners' package is aimed at putting the learner in a position where he acquires a certain knowledge or skill by using the pack himself.

8. Some other terms given to this instructional material are "training manuals", "training guide", "training kit", "programmed book", etc. Whenever be the name, a trainer's package is the teacher's assistant while the learners' pack is the companion of the learner himself.

9. Training packages are today employed in management training, vocational training and in improving the skills and knowledge of a variety of people. They avoid wastage of manpower, time and resources which can otherwise be usefully employed in improving the training programmes. They lay special emphasis on the principle of "active involvement" of the teacher himself and the learners. They tend to make the task of the teacher much easier and allow more time to him to develop more material for other categories of people. Training packages assume the role of the teacher to a great extent.

Construction of a Training Package

10. Let us now discuss the techniques of production of a training package. It is an interesting exercise for the teachers to undertake production of their own training package. Provided the teachers have some interest in undertaking the production of this device, there is nothing which would discourage him. It is, therefore, important to take note of the following rather carefully.

(1) Use of Project Format

11. Before deciding to take up the production of a training package, the teacher has to give a shape to his ideas. This is done by making use of a Format (see Annexes I & II). The main purpose of using this format is to determine the MAIN AIM of the training package and the Objectives that are sought to be achieved by using it. The format helps the teacher in consolidating his thoughts. The subject of the training package is precisely

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indicated and other information is also included in the format. This becomes the guideline for the teacher and his team members to go ahead with the construction of the training pack.

12. After its completion the Project Format is studied carefully by the teacher and his team members and then discussed with subject-specialists and with a few members of the target audience in order to determine the usefulness and relevance of the subject and the terminal objectives set forth therein. It is regarded proper to have discussions on the subject format several times which might also result into its rewriting.

(ii) Stages of Production

13. The construction or designing of a training package passes through six principal stages (see Annex III). These stages are:

- | | |
|-----------|---|
| Stage I | Identification of Main Subject |
| Stage II | A. Breakdown of the Main Subject into cohesive and inter-related modules |
| | B. Selection of Module/Modules on which instructional material is to be produced. Sub-modules are created at this stage. |
| Stage III | Collection of material, sifting of material, process of consultation and referencing |
| Stage IV | A. Concretising the module. This includes the script writing, sequencing of material, identification of communication media to be used. |

B. Production of material on each module. This includes application of audio-visual aids, exercises, case studies and other material.

Stage V Putting the material relating to each module into separate covers with specific instructions as to how to use. This is the stage of completion of modules.

Stage VI Putting all the modules into a main cover and called "Training Package on"

14. Let us now go over the stages of production of a training package once again for a better understanding.

State I

Identification of subject. Each community has some problems. Some are complicated problems and some are those which can be solved easily with some assistance or instruction. Some people have problems which are created by their mental weaknesses and some have problems relating to the skills. Some have emotional problems and some have financial and other social difficulties. Everybody likes to get over his problems as fast as possible.

So the man naturally looks towards his teacher or friend to help him solve his problems. Agricultural community may have specific problems relating to the cultivation of a certain type of crop, cooperative teachers may be having problems as to how to teach Principles of Cooperation or how to produce a certain teaching

aid e.g. flannelgraph or the like. The teacher classifies the problem which is persisting and which needs some solution. These problems can be (a) cognitive (b) affective, or (c) skill-oriented. By making use of the Project Format (see Annexe I) the teacher is able to precisely determine what the problem is and what sort of material is needed to find a reasonable solution to the problem. So, Stage I of production involves the use of Project Format.

Stage II

Modules. The subject is now broken down into chapters, sections or units or to be specific into MODULES. It is done on the basis of main factors which form part of the main subject. These main factors or points are to be clearly indicated. Breakdown of the subject into convenient modules helps the teacher in explaining the subject to his audience step by step.

Here is a point of caution. The teacher briefly discusses the main modules. It is obviously very difficult to produce material on all the modules because this exercise involves a lot of efforts, resources and money. Also it is not feasible to present all the modules to the class at one time. The teacher, therefore, selects one particular module and sub-divides it into units or sub-modules. The form will be something like sub-chapters of the main chapter.

When the material on all the main modules is produced, it can be presented over a period of time, say, a training course spread over a week or a month or even more. Referring to Annexe IV "Farm

extension", for instance, the teacher can produce material on all the modules (M-1, M-2, M-3, M-4 and M-5) but the presentation of this material will have to spread over a period of time. In this case the teacher has selected only M-3 for presentation at one session.

The teacher thus takes up one step, explains it, discusses it, summarises it, undertakes an evaluation, and then takes up the other sub-module. The second sub-module begins from where the first sub-module ends. There is, therefore, an inter-relationship between the two sub-modules and thus all sub-modules are related to each other.

This is also the stage when the teacher and his team members make use of Sequence Sheet (See Annexe V & VI). The teacher now allocates the work among his team members. In fact, each member is given the task of taking care of one module. The team member then makes a rough use of these Sequence Sheets. He makes a brief note on this sheet of the visual to be used and against it writes what he would like to say at the time of presentation of that visual (See Annexe VI). The unit or the module is thus reduced on these sheets. These sheets are to be serially numbered.

Stage III

Collection of material, sifting of material, process of consultation and referencing. Once the break-up of the subject into modules and sub-modules is done, it becomes necessary to support the modules

with material, e.g. photographs, illustrations, exercises, interviews, discussions, case studies etc. The teacher makes a broad selection of material which he considers relevant to support each module or sub-module. The material is collected from resource centres, libraries, by holding interviews with concerned people, by taking photographs, by making rough notes etc.

Stage IV

Concretising the modules and production of material. After the completion of the rough work on Sequence Sheets, all the team members get together and discuss their assignments among themselves to avoid duplication and to remove unnecessary parts and to consider inclusion of other material and information. At this stage, the production work commences. The team members get together and undertake the production of material. Sequence Sheets are now written in a fair form, and the visuals etc. are actually produced. These Sequence Sheets now serve the purpose of "notes for the teacher" to some extent.

Stage V

Unit Packs or Modules. At this stage the Sequence Sheets, duly numbered and arranged in the correct order, are put together with the visuals and other information material, in separate modules or containers or envelopes. Each envelope is then given a little outside e.g. "Module 1 - Crop Protection: Training Package on Farm Extension". The module will now contain the Sequence Sheets,

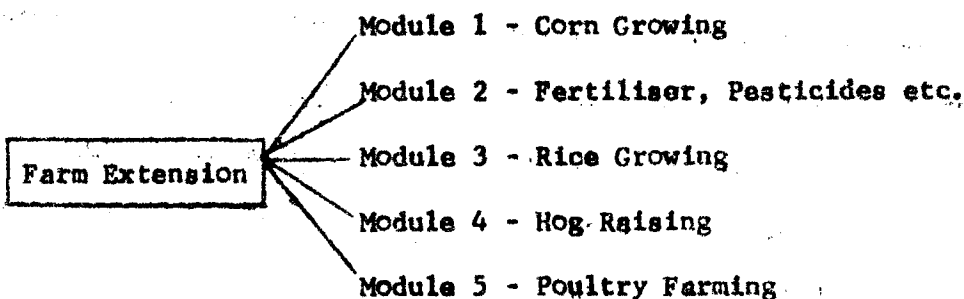
Teacher's Notes, and the supporting material like the audio-visual aids, proforma for exercises and evaluation sheets.

Stage VI

Training Package. When all the modules or unit packs are placed together into a bigger envelope, it is called a Training Package. The package now contains a number of modules or unit packs, and a complete text of the manuscript of the training pack, project format, and evaluation sheets. It would be worthwhile, at this stage, to have a look at the "Steps to Follow in the Construction of a Training Package" appearing as Annexe VII.

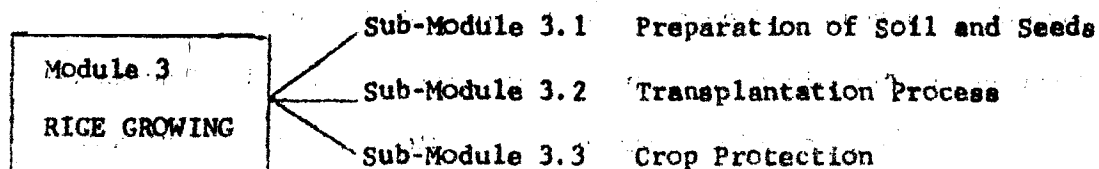
An Example: Training Package on Farm Extension

15. The chart (at Annexe IV) gives an idea of breakdown of the subject "Farm Extension" into modules. In this case the teacher has decided to construct a training package on Farm Extension. He has broken down the subject in the following manner:



16. The teacher knows that it would be extremely difficult to produce material on all the modules. It would be very laborious and expensive. It would take a lot of time to produce the material on all the modules.

He has therefore decided to breakdown one particular module - in this case Module 3: Rice Growing - into sub-modules or units. He has thus covered the subject in the following manner:



17. This is the most logical manner of presentation of a subject. He will now go ahead with the production of material to illustrate and support all the three units of Module-3. After putting the material in order e.g. Project Format, Sequence Sheets, Teacher's Notes and Audio-Visual Aids, into unit packs, he is able to produce a training package on "Farm Extension with special reference to Rice Growing".

Teacher's Notes

18. At the time of presentation of the training package the teacher has to place in front of him a sheet containing the guidelines on which he is to present his subject. These need not be detailed notes. A note on the preparation of Teacher's Notes is placed at Annexe VIII. These notes also should form part of the training package as well. In the absence of the producing-teacher, other teacher can also make use of the training package with the help of these notes.

19. The teacher presents his training package to his audience and uses the material that forms its part. He may use group discussion method or a straight lecture method. After the presentation of the training

package, it so happens that the teacher packs up all his material and disappears. No notes or handouts are distributed among the members of the audience. During the course of the presentation of the training package, the students make some notes on their own. When they leave the class after the presentation they nearly leave the knowledge also in the classroom, because the teacher was not able to distribute any handouts to them. In order to enable the students to refresh their memory on the subject, it would be very helpful if they were given some written notes.

20. In some cases, the teachers distribute the text or the copies of the Sequence Sheets which also contain some illustrations. It is advisable, however, to prepare brief notes for the students.

Evaluation

21. How effective has been the training pack can be the relevant question asked by the teacher and also by the audience. How to determine the effectiveness and usefulness of the training package? How far has the training package been able to stand up to the main aim and objectives? Answers to these and many similar other questions can be found by undertaking some sort of an evaluation or assessment of the training package.

22. This can be done in several ways e.g. (a) by distributing evaluation sheets and analysing them, (b) by sending the training package to a panel of experts or subject specialists for comments, (c) by demonstrating the training pack to some selected members of the target audience and obtaining their first-hand reaction, or (d) by having an informal opinion of colleagues etc. Several other methods of evaluation can be found by the teacher himself.

23. It is, however, essential that a training package must be pre-tested and duly revised before classifying it as an authentic training package and by releasing it for use.

24. It might also need revision because of the change in policy, practice or due to time factor. The producer therefore should keep his ears and eyes open and undertake adaptation, revision and updating as and when necessary.

Conclusion

25. A training package is that instructional material which is based on the modular system duly supported by visuals, audio-visual aids, exercises, case studies, etc. and which explains a subject stage by stage for an easier understanding by the audience. It is the companion of the teacher and can, to some extent, replace the teacher himself. The importance of the teacher in the classroom cannot be overemphasised although, while making use of training package, the teacher can make his task easy and devote his time to create more instructional material. The training package contains project format, which contains the title of the subject and defines the main aim and the objectives sought to be achieved.

26. There is a system of production of a training package and it involves the teacher and his team members. This obviously means that many heads and hands are involved in its production. The contents are discussed with experts, subject specialists and members of audience before undertaking the production so that the package is standard and authentic. The teacher makes use of teacher's notes and prepares notes for the students which help them in keeping their memory fresh.

27. There is a constant revision, adaptation and updating of the training package on the basis of a continuous evaluation and assessment.

28. It is an expensive exercise and should therefore be taken up with great care. Although expensive yet its achievements and effects are spectacular and rewarding. It is a challenging exercise.

TRAINING PACKAGE / PROJECT FORMAT

1. Name of the Project _____

2. Media _____
3. Language _____
4. Producers of the Package _____ Coordinator _____

5. Target Population _____

6. Age group _____
7. Ability _____

8. Other relevant factors _____

9. MAIN AIM of the Package _____

10. Terminal Objectives a. _____
 b. _____
 c. _____
 d. _____
11. Attached documents a. Script of the lessons
 b. Teachers Notes
 c. Students' notes
 d. _____
12. Reasons for choice of the media _____

_____ Date

_____ Signature of the Coordinator

EXAMPLE OF A PROJECT FORMAT

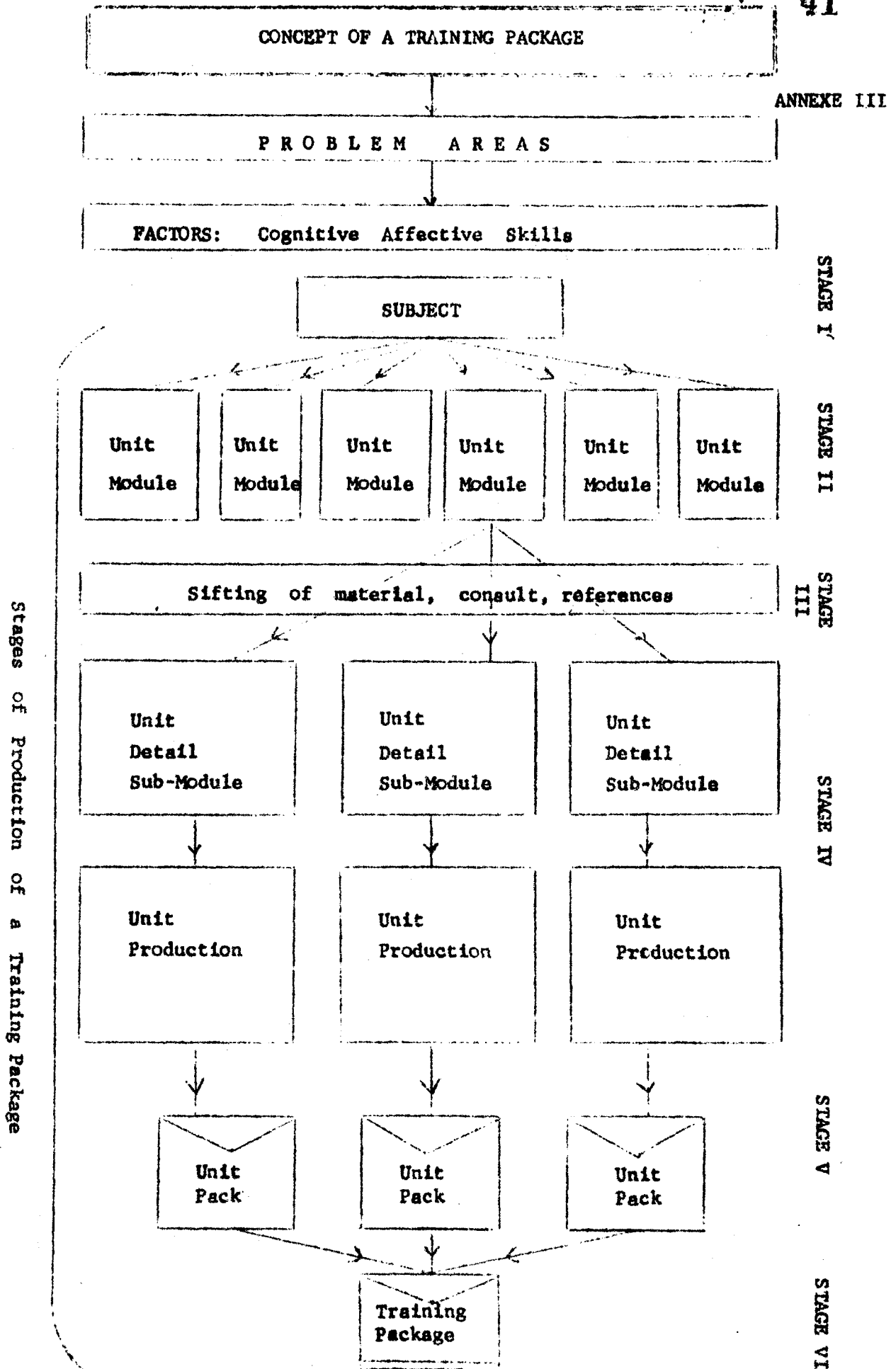
P R O J E C T F O R M A T

1. Name of the Project TRAINING OF COUNTER SALESMEN OF
CONSUMER COOPERATIVES
2. Media ·Lecture Method
Audio-Visual Aids
3. Language English
4. Producers of the
Training Package 1. TT Thomas (Singapore) Coordinator
2. Hayati Salleh (Malaysia)
3. WGUI De Silva (Sri Lanka)
4. P. Phawaphutanond (Thailand)
5. Target Population SALESMEN
6. Age group 20-30 years
7. Ability Can read, write and converse fairly
well in English
8. Other relevant
factors a. Goods have been properly displayed
b. Pricing has been done
c. There is a wide range of goods
d. Poor sales
e. Goods are available in plenty
f. Salesmen are properly paid
g. Salesmen are both males and females
9. MAIN AIM TO INCREASE SALES
10. Management Objectives 1. To increase sales by 10%
for this fiscal year
2. To increase the product
knowledge of the salesmen
3. To maintain a high degree of
customer relationship
4. To increase the efficiency of
the salesmen
11. Attached documents 1. Script of lessons
2. Teachers' notes
3. Photographs, charts, etc.
12. Reason for choice of the medium of Training Package (briefly)

Since the target population has a fair knowledge of English, the lecture method is adopted. Since the activity of the persons concerned is mainly of a practical nature, audio and other visuals are used in the classroom.

Date: 15.2.1978

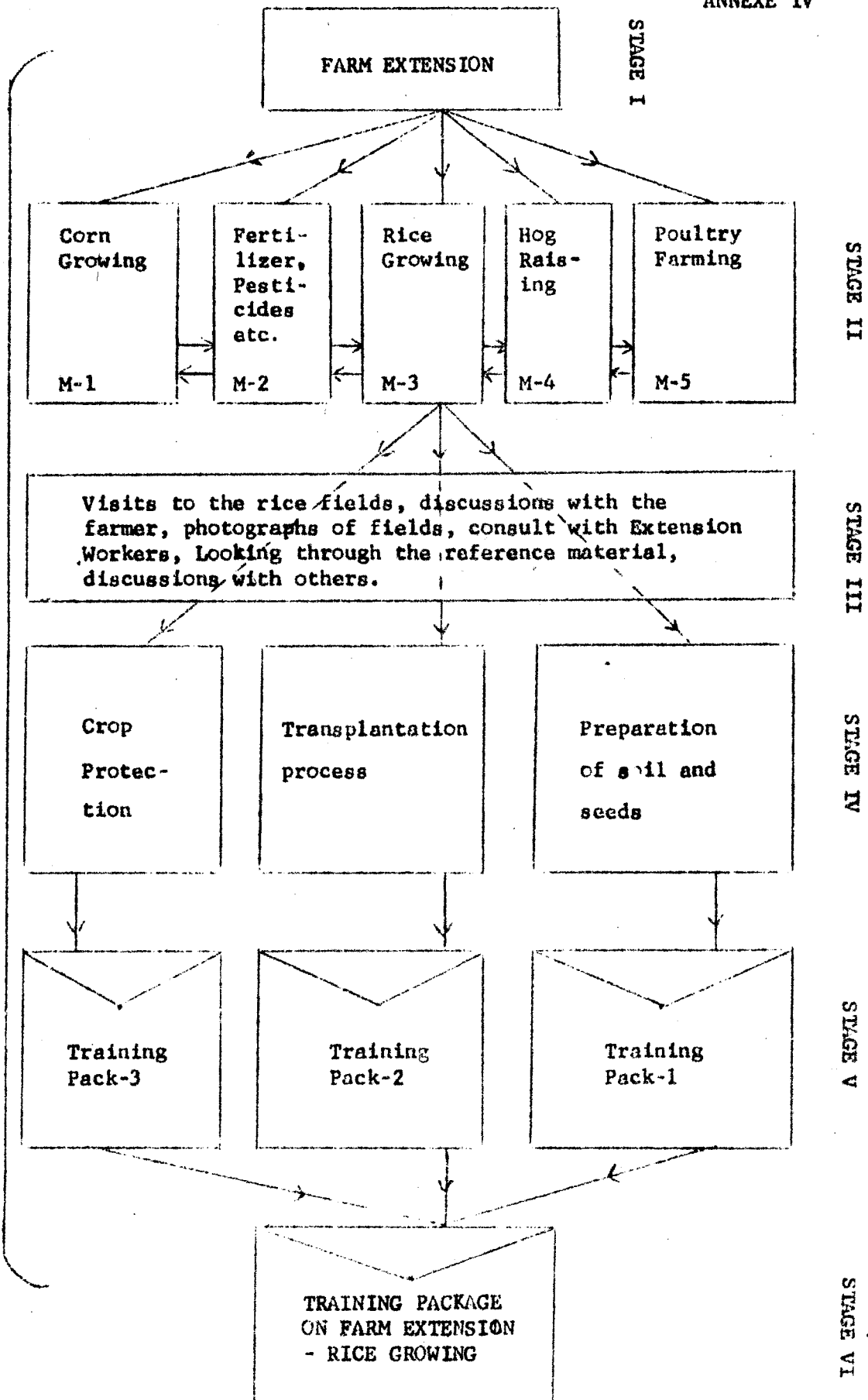
(sd) TT Thomas (Coordinator)



STAGES OF CONSTRUCTION OF A TRAINING PACKAGE
 - Example: FARM EXTENSION

ANNEXE IV

Teaching Notes - Lesson Plans, Flip Charts, Overhead Projector
 Transparencies, Posters, Slides, Tapes, Students Notes.



EXAMPLE OF A SEQUENCE SHEET

Subject: Channels of Marketing Presentation : 10 minutes Discussion : 5 minutes	Page No. 7
	Unit No. III

Sr.
No.

Suggested visuals

Verbal/Narration

6

SLIDE
showing the shop
of a private trader

The narrator has to give the private trader's characteristics as the following:

1. buys at lowest price
2. farmer has to carry goods to him and waste his time and money
3. private trader does not pay cash price immediately
4. He only buys best quality goods

7

POSTER
Exchanging
expensive farm
produce with cheap
consumer commodity
(plastic bucket)

Secondly, the barter system should be explained.

Points to be stressed:

1. Low price for farm produce
2. Wastage of time and money for transport

8

SLIDE
showing a
Government
Collection Centre

Thirdly, the extension worker explains the functioning of the Government Marketing Department and gives its defects

1. Corruption and indifference
2. They sometimes buy from middlemen
3. Farmers have to carry their produce to collection centre
4. Low and fixed price for farm produce

STEPS TO FOLLOW IN THE CONSTRUCTION OF A
TRAINING PACKAGE

By making use of a training package in your education and training programmes you are going to make your own task as well as the task of the learners easy. With the help of the training package you are going to diminish the disturbances in the process of communication. In order to make the training package a trusted companion, you should follow these steps in its construction.

1. Select the subject - it can be a broad subject, not necessarily a precise one.
 2. Identify the target population for which you are going to design the training package. All training packs cannot be effectively applied to all types of people.
 3. Set the MAIN AIM of the training package. This has to be defined as consisely as possible. There should not be too many of ideas and themes in the MAIN AIM.
 4. Define the OBJECTIVES that you wish to achieve after the application of the training package. These should be your Terminal Objectives.
 5. Be aware of the availability of material.
 6. Select the right type of media and take into consideration its availability. The media should be related to the general level of understanding of your Target Population. Do not make it too sophisticated.
 7. Collect suitable information from various sources. It would be necessary for you to make trips to farmers, their fields, meetings with experts, consulting of standard documents and obtaining of information from well-established resource centres.
 8. Plan or organise the instructional material. Make use of a lesson plan and prepare your teaching notes. The instructional material should be in a sequence.
 9. Produce the rough visuals on the Sequence Sheet.
 10. Synchronise the audio part with visual images (if slide-cum-tape synchronisation is to be used.)
 11. Prepare teachers notes and student' notes.
 12. Prepare Evaluation Sheets and keep enough copies ready.
 13. Pre-test the training package with limited audience.
 14. Incorporate changes and standardise the training pack for use.
-

**GUIDELINES ON THE PREPARATION OF
TEACHER'S NOTES TO BE USED IN CONNECTION
WITH A TRAINING PACKAGE**

Following are some of the guidelines which a teacher should keep in mind while preparing his notes to be used in connection with the Training Package. These notes, if prepared carefully, will keep the teacher on right lines while in the class. This will also help him in making the right use of the Training Package.

- Section 1 **General Introduction (to the subject)**
Brief details of the Training Package
(The teacher should mention why he chose to use the training package and what it actually contained and how it would be relevant to the subject and the audience.)
- Section 2 **Objectives (of the lesson)**
- Section 3 **Target Population**
- Section 4 **How to use a package? (These will be the guidelines for the teacher as to when to make use of a certain portion of the training package and with what emphasis)**
 - a. General details of necessary equipment, classroom situation, preparation, introduction etc.
 - b. Detailed instructions on how to use this package most effectively:
 - i. contents, duration and number of slides and other visuals,
 - ii. necessary pre-knowledge for instructor and students,
 - iii. knowledge/experience level required to use this package effectively.
(Here a Lesson Format can be included)
 - iv. follow-up and evaluation suggestion, e.g. verbal, written, drawing, practical, discussion.
- Section 5 **Students' Handouts.** A summary of the text (where suitable). After the lesson, it is necessary for the students to receive something in a written form which could help them in recollecting the main points of the lesson. If the Teacher's Notes are important, then equally important are the Notes for the Students.

sml/
157/4/79

HAND OUTS

A) Hand-outs, are to reinforce and support the learning.

Process, they are intended :

- 1) to foster retention by enabling the learner to review the lecture individually.
- 2) To provide the learner with a summary of the essential information.
- 3) To give the individual learner visual help in understanding a process, a sequence of actions, a technical problem.

B) The hand-out is not a substitute for literature, books and other instructional material. It is one of the media besides others intended to reinforce the learning process.

N.B. The handout is not a substitute for lack of cooperation and attention during organised learning activities.

C) There are four kinds of hand outs :

- 1) Hand outs distributed before the session starts.
- 2) Hand outs distributed after finishing subject.
- 3) Learner's notes.
- 4) Tests.

C.1) Gives the learner the chance to recognize the sequence of the learning steps and to be able to make notes accordingly.

C.2) Gives the learner a brief summary of the learning process dealt with during the training.

Any additional information like reference literature, related fields of knowledge, forms for individual assignments whether practical work or research, should be given after the lesson.

C.3) Besides the handouts prepared material for learner notes can be issued before the class starts. The prepared material is to facilitate writing down notes, to guarantee the proper sequence of notes and to save time.

C.4) Tests. Should be arranged in such a way that the learner has to solve a problem or perform a task not to demonstrate his ability to merely memorise the text.

HAND OUTS

TEST

1) Please prepare :

Hand out to be distributed before the lesson starts.

Hand outs after the lesson finished.

Learners notes.

Test.

For the following subject :

.....

2) What objectives do you intend to achieve with your hand-out.

.....

.....

C) (continuation)

Reasons for :

C1

C2

C3

C4

STUDENTS NOTES

HAND OUTS

A) Why :

B) Hand out is no substitute for :

C) What hand-outs are given to learners?

1.

2.

3.

4.

AUDIO-VISUAL AIDS WORKSHOPTHE USE OF CHALKBOARD

The chalkboard (or blackboard) is perhaps the most common visual aid, and can be one of the most useful. As it is so readily available, it is essential for all training personnel to be in possession of a good basic technique. The size, position in the hall or meeting place, the ease with which it can be made to command attention and its flexibility in use are factors which contribute to the possible effectiveness of this aid. It is economical, long lasting and requires only a minimum of maintenance and ease. It may be used to present drawings, sketches, maps, diagrams, graphs and statistics for the summarizing of discussions, and for general written work. Capable of such versatile use, it is a natural supplement to all other forms of aid. The cooperative education and training officer will find the chalkboard a particularly useful working aid when it is necessary to present facts for study, and to explain cooperative principles and procedures. The chalkboard may be of special value for:

1. Planning group projects;
2. Explaining cooperative Principles by means of simple diagrams;
3. Working out daily, weekly and monthly plans with a study group;
4. Explaining the functions of cooperative officers, and rules and policies for cooperatives;
5. Showing in diagrammatic form relative costs and statistics;
6. Presentation of drawings to introduce topics for discussion;
7. Illustration of points in progress reports to cooperators;

Although the specific application of the chalkboard is naturally in the hands of the extension officer, the board

itself must be correctly sited and the seating in the room conveniently arranged for the best overall result. A board measuring 120 x 180 centimeters (4 x 6 feet) will give a good working area, and two boards of this size may be used with advantage. It must also be remembered that a good technique is really worth cultivating, and that practice is rewarding.

If a large board is used, care must be taken not to place it so high that the top is out of reach. The bottom edge of the board should be from 75 to 90 centimeters (2 feet 6 inches to 3 feet above the floor level).

LAYOUT AND PLANNING:

It is always best to plan chalkboard work and to note down exactly what is needed on the board. This does not mean that a plan must be rigidly followed but, if such a scheme is worked out, it is of course easier to adapt and change when necessary. A plan is essential for work summary, and it takes only a short time to arrange ideas in a sequence for visual presentation. As with any type of visual aid, the work must be presented in a logical order, and a sketch of the intended layout of items on the board can form a most useful working guide.

Neat work on the board is an aid to attention, and will help toward a quicker understanding of the material. Chalkboard arrangements should be :

- (a) Legible
- (b) Simple
- (c) Clear
- (d) Interesting

All drawings and illustrations, simple and bold, should be assessed from the back of the room to see if they are clear enough to be readily understood without undue effort.

It is sometimes useful to write pencil notes on the board at eye level. They can be seen only by the user and may be prepared before a formal talk begins. They may act as an aid to the memory, and save constant reference to prepare notes and plans.

Planning is an aid to better presentation, and is most important when using the chalkboard.

PRINTING AND WRITING:

Slanting writing is not easy to read, and writing which starts high on one side of the board and slopes down at the other is irritating to the observer. Moving across the board when writing helps to eliminate this error. To be easily readable chalkboard, writing should be between 5 to 6 centimeters (2 to 2½ inches) in height. When words need to be underlined for emphasis, this must be done neatly and unwanted material should always be erased.

USE OF COLOUR:

Coloured chalks vary in quality and colour density. Pale colours are more effective than deep ones, and some colours are easier to see than others, especially against a matt (non-shining) black background. Generally colours should be selected for their clarity. This is a useful guide:

White Yellow)	Good contrast with green & black backgrounds.
Red Light Blue Green)	Valuable for adding interest to a board, for adding colour to drawings or for underlining key words or phrases.
Brown Purple Darkblue)	Not so effective: in some cases very difficult to see.

An olive green chalkboard surface is restful to the eye, and yellow chalk gives a good level of contrast against this surface colour.

TOOLS & TECHNIQUES:

CHALK -

Always select the best quality available. Better quality chalk can be used with a lighter pressure, and is free of impurities which can cause unpleasant squeaks when writing and may even damage the surface of the board. Some white chalk is coated with lacquer to render it dust-free in the hand. The so-called "dustless" chalk is a heavier substance and is more expensive, but is longer lasting, and will produce fine, clear lines.

ERASERS: -

Felt block erasers are the best and cleanest in use, but the chalk dust needs to be beaten out of them frequently. For best results, always finish cleaning a chalkboard with vertical strokes of the eraser.

DRAWING CIRCLES -

In the absence of a chalkboard compass, this need present a problem. A string loop stretched between a finger held in contact with the board and the chalk will prove quite an effective substitute, or a strip of card in which the appropriate holes have been made may be used.

RULING LINES -

A flat piece of wood about 75 centimeters (30 inches) long will make a satisfactory ruler, and a small handle may be attached to make it easier to hold. A cardboard roller may also be useful. It can be rolled across the board and used to draw parallel lines.

Faint but straight lines can be "snapped" onto a board with a string covered in chalk. The string should be stretched tightly from one side of the board to the other and then "Plucked" like the string of a musical instrument, when it will leave a line of chalk dust. A string could be kept

in the chalk box and then would remain permanently impregnated with chalk dust. Lines so produced form a useful lettering guide.

TEMPLATES -

Templates can be a most useful aid when it is necessary to produce a series of simple outline drawings. They can save much time, and would prove specially useful to cooperative training officers who have to prepare statistical diagrams. Such templates may be cut out of thick card or thin plywood or hardboard and provided with a small wooden handle. The template is held against the surface of the chalkboard while a chalk line is drawn round it. The technique may also be used for the production of outline maps, human figures and so on.

PRESENTATION:

One of the problems associated with fixed chalkboards is that material cannot be prepared in advance and concealed. If all visual material is on view at the beginning of a training session, those taking part will soon tire of it, and the freshness of approach and even the point of the lecture itself may be lost. The stimulus given each time new material is presented would be absent, and the attention of the audience hard to retain. There are however, several ways of overcoming this difficulty and three are given below :

1. A lightweight black curtain may be suspended from a wire and arranged to fall directly across the front of the chalkboard. The curtain can be drawn back stage by stage to reveal material already prepared. The knowledge that more material is yet to be presented always helps to maintain interest in the subject matter.

2. Illustrations drawn and lightly erased with a felt chalkboard eraser are not visible from a distance nor can be seen quite easily by any one standing close to the board. Material prepared in this way can be lined in when needed and thus be made visible to the group as a whole.
3. The "dot-dusting" technique is very useful and effective and requires only a little time and no expense. It is particularly useful if the same basic material has to be repeatedly presented. It can save hours of preparation and can give a really spontaneous look to chalkboard work.

PREPARING A DOT-DUSTING OUTLINE:

1. A full-size drawing of the material to be presented is prepared on a sheet of brown paper or packing paper. As this does not have to be shown, used but otherwise undamaged material will prove quite satisfactory.
2. A series of perforations at close intervals are made along the lines of the prepared drawing using a compass point, the sharp point of a pair of scissors, or of a large needle. Alternatively a sewing machine with the thread removed and with a large stitch setting could be used. The aim is to make a perforated outline of the final work required on the chalkboard.
3. The completed perforated outline should then be firmly held against the surface of the chalkboard and the lines patted gently with a chalkdust-filled board eraser. When this is done and the perforated outline is removed, a faint series of chalkdust dots will be seen on the board. They will be visible only to the instructor.

The dots so produced may then be used as a guide to the production of the required illustrative material during the course of the lecture. It is of course only necessary to complete those items needed at any point in the program, and dot-dusting outline can be used for the preparation of the same material on another occasion.

HUMAN FIGURES :

It is not necessary to have artistic talent to portray human figures on the chalkboard. Matchstick-type figures may be used to supplement a storytelling technique. These are quite easy to draw; expression and character can be shown in the face of the figure and an impression of action readily conveyed.

TWO-BOARD SYSTEM :

The two-board system is a most effective way of using chalkboards without the addition of charts or any other visual media. It may be of special value for less formal sessions and discussion groups which form an essential part of cooperative training and education. The technique involves summarizing points on one board, while the other board (which may be an easel type if the main board is fixed) is used for less permanent work - incidental explanations, group thinking, the illustration of points to stimulate discussion etc. The main theme and its appropriate summary remain visible on the main board.

CONSTRUCTION AND CARE IN RURAL CONDITIONS :

A sheet of hardboard or plywood makes a good chalkboard. It may be attached to the wall by screws driven into holes filled with a wall-plugged compound. Screw cups or washers should be fitted under the screw heads to provide a better form of anchorage. If a thin wooden surround is used, both hard board and wooden surround may be secured by

steel masonry nails. In both cases it is more convenient if the boards are painted before they are finally fixed in position.

Cement-surfaced boards are common, but unless they are prepared correctly they are inclined to use up a large amount of chalk. The final skimming of cement plaster should be finished with a good quality plaster's steel trowel. The plaster must not be overworked nor must it be too rich in cement, or crazing and cracking of the surface will result. The cement must also be well cured by keeping it wet for about two days after the initial set has taken place, and sufficient time must be allowed for the mixture to dry out thoroughly before paint is applied.

A freshly painted board will need to be "broken in" when the paint is dry. This may be achieved by lightly covering the whole surface of the board with a layer of chalk dust, and then carefully removing as much as possible. Otherwise, the surface will be badly marked at the first erasure.

MAINTENANCE AND CARE :

Periodically chalkboards should be thoroughly washed to remove any accumulation of chalk dust. A thin type of chalk-board paint or renovator will restore a not too badly worn board to its original condition.

GLARE :

Look for light reflected from the board surface. If the board cannot be moved the problem must be tackled at source, and a curtain or other suitable material be used to obscure light from the offending window. Special care is also needed under artificial lighting conditions, and it may be necessary to change the position of either lights or seats before satisfactory results are obtained. Always check for glare, but do it from a seated position. When standing, the effect may be quite different.

AUDIO-VISUAL AIDS WORKSHOPTHE USE OF FLANNELGRAPH, MAGNETIC BOARD AND ADHESIVE AIDS:FLANNELGRAPH -

The flannelgraph is a most adaptable and flexible teaching aid. The user is able to present material to his students at the requisite moment, and is thus able to build up a composite picture step by step. Drawings, titles, illustrations and headings may be added at will, and associations clearly demonstrated. Material can be re-arranged, developed and simplified at will. The principle is so closely allied to the learning process that its effectiveness depends solely on the careful choice of material, and the care and skill of the user.

PRINCIPLE OF ADHESION

Pictures, illustrations, captions and other symbols prepared on light card or stiff paper are backed with a light fluffy material. When these items are placed on a board covered with a similar material, the fibers of the two interlocked on contact, and a light temporary adhesion takes place. If the flannel board is lightly brushed before use, this adhesion is improved.

FLANNEL BOARD

This may be quickly improvised by stretching a material over a portable chalkboard and securing it with large spring clips. A permanent board may be made by lightly gluing cloth to a hardboard or plywood surface. (Note that the glue should only be brushed evenly over the surface of the board. It must not be permitted to penetrate the cloth or it will spoil the appearance of the working surface, and the adhesive quality of the board would be impaired).

In use, flannel boards are more efficient if they are set at a slight angle to the vertical. If the flannel board is suspended against the surface of a wall, then small

blocks should be fitted behind the lower edge in order to create this angle.

The colour of the flannelgraph background is of importance. A plain background should always be of a colour selected to give a good contrast with the teaching material placed upon it. Black, dark blue, dark green or grey material could be used, and any plain cloth with the fluffy surface may be selected. The following have been found suitable for this purpose :

- a) felt and feltette;
- b) winceyette;
- c) Dorset drape;
- d) flannelette.

In many instances it may be better to purchase locally made materials possessing similar characteristics.

With pictorial backgrounds, keep the horizon fairly high in order not to restrict the area on which symbols may be placed. Do not produce a background which lays too much emphasis on perspective or depth, or items will look wrong when moved from one place to another. A two-colour background representing only the earth and the sky may occasionally prove quite adequate. This can be made from two pieces of coloured felt carefully joined together.

PORTABLE STANDS

A portable stand may be made of plywood and hinged. This simple stand will support a board measuring 90 x 120 centimeters (3 x 4 feet). Note that any reduction in the dimensions of the stand will effect its stability. The board may also be made with a cloth or adhesive tape hinge down the centre.

PREPARING THE SYMBOLS

Material for backing the symbols need not be expensive. Medical lint and winceyette are quite suitable, even glass

paper may be used. Special flannelgraph paper (sometimes called flock paper) usually possesses the best adhesive qualities. Blotting paper will adhere to a flannelgraph background, and drawings may be made directly on to it with wax crayons or coloured pencils. This may not be very durable, but it is most useful for quickly prepared aids, as no gluing process is necessary. The adhesive qualities of the blotting paper may be slightly improved by brushing the reverse side and blowing away the dust.

When mounting card or paper symbols on cloth, do not cut closely round the outline, and use the adhesive sparingly. PVA plastic, latex and rubber-based adhesives are the most suitable for this purpose and the final cutting out should be done only when the adhesive is dry, scissors being used to cut simultaneously through cloth and paper.

Spread the adhesive on the paper and not the cloth and work from the centre outward toward the edge of the symbol, using wastepaper or newsprint underneath. This is the only satisfactory way of obtaining an even coating of adhesive.

PICTORIAL BACKGROUND

A picture may be projected onto a piece of white flannelette or similar material. The picture can then be copied. The following process has been found to give good results :

1. Draw a light outline of the projected picture using a soft pencil and light pressure.
2. Switch off the projector, and in daylight conditions draw a bold outline following the pencil lines, and using a felt-tip pen or black crayon.
3. Add colour very lightly, using a wax crayon with a worn point and holding a pad made of a few folds of a cloth underneath the work to prevent any hard marks appearing, and to obtain an even spread of colour.
Use the crayon in one direction only.

MAGNETIC BOARD

This aid is particularly suitable for use by the cooperative training officer who finds it necessary to conduct training and educational programmes in the open air. It possesses all the flexibility of the flannelgraph, and even moderate gusts of wind cannot move the symbols kept in place by magnetic attraction. The working surface of the magnetic board is usually coated with chalkboard paint which not only gives it the requisite matt background, but also facilitates the use of both chalk and magnetic symbol on the same surface.

PREPARATION OF MATERIAL

The preparation of material for the magnetic board involves little more than the preparation of flannelgraph material. Lettering and drawing methods are employed in the usual way, and the prepared work is mounted on card. Small magnets are then secured to the back of the prepared material with a strip of sellotape. A plastic magnetic strip which may be cut into convenient lengths is currently available, and is less expensive than individual metal magnets. In either case the magnets may be glued to the back of the teaching material, but there are two advantages gained from the use of sellotape. A film of tape covering the magnet will reduce the possibility of damage to the painted surface of the board. Magnets so secured may be quickly removed and mounted on another aid, thereby reducing the overall cost.

CONSTRUCTION

A sheet of tinplate or galvanized iron (it must be a ferrous metal) glued to a piece of wood or hardboard will make an excellent magnetic board. Both wood and metal surfaces should be well scratched with an old hacksaw blade before adhesive is applied, as this provides a better "key". Adhesive of the contact type (that used for fixing plastic table-tops or working surfaces is admirable) should be

spread evenly over both surfaces and allowed to dry before they are brought together. As this type of adhesive acts instantly and there is no possibility of correction if the two surfaces are misaligned, results are best if the metal surface is bent slightly, brought into contact at one end and then rolled onto the timber or hardboard.

A hand-size board could be made from an old paraffin can of a piece of tinplate measuring approximately 60 x 45 centimeters (24 x 18 inches). This need not be mounted provided that two parallel edges are folded over for rigidity. It will show how such a fold might be made over the sharp edge of a table. Care should be taken to bond the metal evenly, only a little at a time, and a wooden mallet or leather hammer should be used if available. Do not be in a hurry, If the fold is left partly open, a prepared thin card and special purpose background could be introduced. It will not reduce the efficiency of the magnets if it is not too thick. Alternatively, a prepared card or paper background may be secured to any magnetic board by means of spring clips or additional magnets.

A sheet of metal may also be fastened to a board with strong adhesive tape. A magnetic board should also be carried in a cloth cover or cardboard case to prevent accidental damage to either the corners or the surface of the board.

The magnetic board is particularly suited to the showing of small rapid movements, and many technical applications are possible.

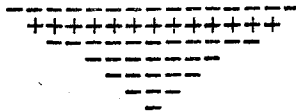
PLASTIC ADHESIVE AIDS

Many people are familiar with the method of securing a license to a car windscreen with a smooth soft plastic disk. This is the same principle as that of the plastigraph adhesive aid. A smooth surfaced plastic material of the poly-vinyl-chloride (PVC) type will adhere to a similar surface simply by the total exclusion of air. Employing this

technique, it is possible to build up coloured shapes layer upon layer. For the cooperative training officer this may have useful applications for showing statistically the benefits of cooperative action.

There are however, two difficulties. Firstly, dust is the enemy, and a slight build-up of static electricity in the plastic attracts dust. Dust prevents the necessary close contact between the plastic surfaces, and adhesion is lost. This may quickly be restored if the plastic is washed and carefully dried. Secondly, light is reflected from the smooth plastic surface, and careful placement of the aid is necessary if all are to see clearly.

Lightweight paper symbols may be backed with strips of sellotape when they can be made to adhere to a sheet of PVC. The paper must be thin, flexible and perfectly flat.



AUDIO-VISUAL AIDS WORKSHOP

THE USE OF POSTERS AND CHARTS

POSTERS -

Posters have many features in common with charts, but also possess distinctive differences. A good poster can stand on its own and communicate its message effectively without assistance from any external source.

It is for this reason that nearly all posters are designed to communicate one idea only. Advertisement hoardings placed by the roadside or near a railroad track demonstrate this principle in action. The traveller may only have a moment in which to observe a poster presented in competition with other distractions. If the poster is not attractive or the message neither memorable nor capable of quick assimilation, the point is lost.

Occasions may arise when it is advantageous to present a series of posters with a common theme. Posters presented in this way should also possess a common feature, a visual point instantly recognizable, to connect with material previously presented. This could take the form of a symbol or slogan representing the campaign, the initial letters of the campaign title, a consistent colour scheme or even a recurring cartoon-type character. Under rural conditions, posters may act as frequent reminders and persuaders.

In common with other forms of visual aid, posters should not be left on display for too long a period. An old poster is not the best way to communicate a new idea.

POINTS ON POSTERS -

1. Posters must make a positive approach - for example, "Shop Co-op."
2. The content of a poster must be limited: it must achieve a lot in a short time; one point only should be clearly made.

3. The message may be conveyed in bold lettering, with an illustration to reinforce and make the idea memorable, especially for illiterates or neoliterates.
4. A short catchy phrase may help: use might be made of alliteration or rhyme.
5. Message and illustration must be clear enough to be read at the required distance: style and size of both lettering and illustration are important.

TEACHING CHARTS -

Cooperative training officers working under adverse rural conditions will find that charts are one of the most useful form of visual aid. They are light in weight, easy to present, and may still be utilized when conditions do not permit the use of more sophisticated media.

A teaching chart is essentially an aid to formal education, although it may also be used to create talking points and stimulate discussion in cooperative meetings.

For the presentation of some types of material it is clearer and more colourful than the chalkboard, and can be used in place of chalkboard diagrams, thus saving time and preparation before each session. Lettering may be incorporated, but generally only a minimum is required. Too much printed matter :

- a) Distracts from the spontaneous presentation of new items;
- b) adds confusing detail.

The best answer may be found by using the chart in conjunction with a written chalkboard summary, completed point by point.

Teaching charts have more content than a poster, less than a wall-chart. When preparing teaching charts, it is

best to aim to create a clear overall impression of the subject matter, carefully avoiding small work and superfluous detail. It is doubtful if a teaching chart measuring less than 55 x 38 centimeters (22 x 15 inches) would be of much value except for very small audiences. All diagrams must be clearly visible from the back of the meeting room.

The size of any lettering used is important. Cursive or freehand writing on a chalkboard needs to be between 5 and 6 centimeters (2 and 2½ inches) in height, but block lettering of smaller dimensions may be equally effective. As this is largely a question of style, experiments must be tried, the clarity of such work assessed under actual working conditions, and the many modifications made.

TEACHING CHARTS CAN :

1. Save time spent on preparing elaborate and repetitive chalkboard work.
2. Make better use of colour and contrast than is possible with the chalkboard.
3. Form an aid to the accurate presentation of material.
4. Permit the use of mounted pictures cut from magazines or newspapers.
5. Be used in conjunction with the chalkboard.

A teaching chart should not be designed to stand on its own. Points are presented and summarized by the instructor, not by the chart.

FLIP CHARTS :

Turnover of flip charts are of special value when sequence presentation is required in situations where a flinstrip or slide projector cannot be used. A collection of charts is arranged in a predetermined order and fastened together at the top edge. Thus when one point has been presented, the first chart is turned up and over to reveal

the second. With this method a composite visual image can be built up stage by stage, and a written summary included if the points are made in a pictorial form. The technique represents an advance on the presentation of a single teaching chart.

Charts arranged in sequence for turnover presentation may be clamped between two strips of wood and secured with screws or small nuts and bolts, or alternatively the charts may be laced together through holes punched on the top. Any method of securing the charts should allow for a change of order or the insertion of new material.

Some consideration must be given to the selection of the basic material. The paper used should be of good quality, capable of withstanding a considerable amount of flexing. Charts made up out of mounted cutouts and captions are best avoided for this type of presentation.

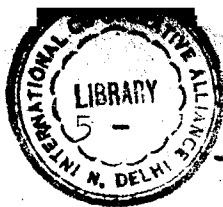
Turnover charts are a good means of maintaining interest during the course of a training period. The knowledge that more material is yet to be presented :

- a) acts as a stimulus to thought;
- b) helps to retain attention;
- c) encourages the viewers to anticipate the next step, thus stimulating and encouraging audience participation.

It should be remembered that aids which create audience anticipation help people find their own answers, and contribute to the best possible teaching technique.

PICTURE CARDS :

When working with a small group of cooperators, the training officers may find a good alternative to the turnover chart in a series of picture cards. These can be used in exactly the same way and, being of a convenient size, may be held in the hand when in use, or even placed on a

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small stand on or a table. They retain all the advantages of a sequence presentation, and are easy to carry from place to place. A convenient but minimum size would be 30 x 25 centimeters (12 x 10 inches).

Sometimes termed flash cards, they are only suitable for use when viewing distances are not very great.

WALL CHARTS :

Wall charts have some special advantages but, as they are essentially for follow-up use in informal sessions, they cannot be really effectively used outside these limits.

In composition a wall chart may be likened to a wall newspaper. The content is very much greater than that of either poster or teaching chart. It may present more pictures on a much smaller scale, and smaller text requiring closer study.

The informal use of wall charts should naturally follow formal sessions. Thus they can be used to supply information additional to the lecture, or for purposes of consolidation of the material already presented. The Wall chart cannot be used as a teaching diagram; the spread of information is too great and the detail too fine. Wall charts may however serve a useful purpose as a general information broadsheet, and be displayed in a public place other than the lecture room.

DESIRABLE FEATURES

ATTRACTION

A wallchart needs a feature to attract the eye, to draw the attention of the viewer toward it. This result may be obtained by :

- a) using a striking title;
- b) using a bold illustration, somewhat larger than the other illustrations;
- c) careful use of a striking colour.

RESOLUTION

A wallchart should have an aim and a conclusion. If these are absent, it cannot teach anything. Although a chart may be intended solely for use as a follow-up after a meeting or training session, it will be more effective if it is capable of conveying information to the casual observer in a logical manner.

TYPE OF WALLCHART

Flow Chart:

Such a chart will start with a known concept and will progress through a series of logical steps until the final result is reached. In the example given the direction of flow is indicated by means of arrows.

Storytelling chart:

This may employ a method closely allied to the flow chart, but a slightly different approach is made. Local colour, may be added and a strip cartoon method employed. It is useful to remember that people always tend to identify themselves with the hero, and a story telling of the adventures of Mr. Wise and Mr. Foolish can often be used to good effect.

Factual Chart :

This type of chart presents facts in a visual form. Charts presenting statistics are not always easy to interpret, and may not be capable of standing on their own, often needing careful explanation.

Comparative Chart :

This is one in which direct comparisons are made and associations shown. In a "before and after" version, the extension officer might find this kind of material helpful when the initial introduction is being made to a new

cooperative scheme.

PRESENTATION :

1. Do not leave wallcharts (or posters) on display for too long a period. They quickly lose their effectiveness.
2. Limit the amount of material on a chart, and do not present too much at once. A maximum of seven distinct items is a useful rule to follow.
3. Eliminate unnecessary detail. Observation is best when the effort involved in comprehension is least.

ASSESSMENT :

Wall charts should be striking , strictly relevant to the situation, with their salient points easy to remember. The more information presented at one time, the less liking is it to be memorable. It is of value to pose some questions as an aid to the assessment of wallcharts.

1. Does the chart attract attention?
2. Is the message clear?
3. Is the message presented in a persuasive & stimulating manner?
4. Is the message within the comprehension of the viewers?
5. Is the sequence of presentation logical?
6. If the chart is to be used for teaching purposes, is it visible from the maximum viewing distance?

Making Posters and Charts :

Individual preferences for equipment and methods can only be determined by practical experience and the availability of material. The following list is given as a guide to the selection of some basic equipment :

1. Drawing board and T square, if possible, save time in layout work.
2. Soft grade of pencil
3. Ruler.

4. Eraser.
5. Steel pens or felt-tip pens.
6. Coloured inks for use with pens.
7. Lettering guides and stencils of various sizes.
8. Poster colour and brushes.
9. Variety of coloured paper, plain bold colours.
10. Supply of white cartridge paper, available in many weights or qualities.
11. Plain brown paper or grey sugar paper for use as the base material for pasted-up charts.
12. Rubber-or latex-based adhesive.
13. Tube of quick-drying adhesive.

PASTED-UP METHOD :

The pasted-up method is a simple way of producing a wallchart. A selection of prepared illustrative and textual matter is systematically arranged on a contrasting inexpensive background paper. The individual items are then mounted with adhesive. The main advantage of this system is that lettering, illustrations and captions can be produced independently, trimmed if necessary, and a trial layout made to determine the best arrangement. Rubber-or latex-based adhesives are clean in use and any surplus may easily be removed. Items may also be "spotted" on at each corner with small dots of quick-drying tube glue. They may be quickly and accurately positioned if light pencil location marks have first been made on the background paper.

Charts prepared in this way should never be rolled, and all charts are best stored flat. A chart with a permanent curl is difficult to use, and rolling a pasted-up chart will quickly ruin it.

LAYOUT :

When planning, work to a scheme, the word can form useful reminder.

- Aim : Determine the concepts and ideas to be taught.
- Choice : Select the reference material.
- Trial : Sketch or arrange a trial layout.

RELATIONSHIPS :

Items which are related must be shown to be related. Association may be indicated by grouping (figure 8). Shape and colour may indicate relationships. Lines and arrows may also be used. A coloured background may lay emphasis on one picture. Formal and informal layouts may suit different topics.

Colour Selection -

It is best to use colours which will contrast and complement. Black, white and one of the primary colours will have a striking effect. Do not introduce without careful consideration more areas of plan colour than are necessary to show associations and relationships.

LETTERING AND DRAWING METHODS :

Drawing and lettering need present no problems. Many instructors have refrained from making visual aids because they have questioned their own ability to produce satisfactory illustrations and diagrams. Fortunately a lack of artistic training or ability need be no obstacle, and practice with some of the methods described in this chapter will do much to help the cultivation of a simple style.

LETTERING :

Freehand Lettering -

There are many good mechanical lettering methods which are both quick and efficient, but there are occasions when such equipment is not available and when it is necessary to produce an aid with the utmost speed. This alone is

is sufficient justification for a little time being spent on the development of an individual technique.

The tools available for freehand lettering may range from simple pens made from strips of bamboo cut to a wedge point, to round and broad-tip lettering pens, and the felt-tip variety.

The technique for using each type of pen is similar, but the felt-tip pen permits the fastest work. A felt-tip pen with a wedge-shaped tip is the best type for lettering and should be used with the cut angle of the tip uppermost. The sharp edge of the tip is presented to the paper, and this will produce the neatest line. The pen should be held with the point at an angle of approximately 45 degrees to the guidelines.

Light pencil horizontal and vertical guidelines should be drawn for all form of freehand lettering (Figure 15). Although the vertical lines may not be in the exact place required for any particular letter, it is in practice much easier to draw a truly vertical line if there is another vertical line nearby. Wherever possible, letters should be formed from a series of downstrokes. The letter " S " for example could be drawn by making three downstrokes as indicated in Figure 16. Holding the pen at the angle described will help to give the letter character and style.

CAPITAL AND SMALL LETTERS :

We tend to recognize words by their general shape as much as by the order of the individual letters. It is for this reason that a row of capital letters is more difficult to read than words composed of small (lower case) letters like those used in this paragraph. If extensive and continuous use is made of capitals (upper case), reading can become tedious. In visual-aid work, capitals are

more appropriate to captions and main titles than to long phrases.

The practice of lettering with a felt pen need not be expensive. Newspaper is ideal for this work and, if an old newspaper is turned so that the columns of print are horizontal instead of vertical, the edges of the columns and line of print may serve as horizontal and vertical guidelines. These may be supplemented by pencil lines to give a measure of control over the size of lettering. A little time spent in practice is rewarding, both in terms of speed and neatness. For the best results :

1. Use lightly penciled horizontal and vertical guidelines.
2. Choose a wedge-shaped felt tip.
3. Hold the pen with the tip at an angle of 45 degrees.
4. Form all letters with a combination of downstrokes.

Flo-master felt-tip pens are admirable suited for this purpose and are available in both disposable and refillable form in many parts of the world.



FROM THE CHALKBOARD TO THE OVERHEAD PROJECTION SYSTEM

I - HISTORICAL BACKGROUND

A) The Chalkboard

- Advantages
- Disadvantages
- Future of the Chalkboard

B) Episcope (opaque projector)

The ancestor of the overhead projector

- Advantages
- Disadvantages
- Future

II - THE OVERHEAD PROJECTION SYSTEM

- Presentation :

- 1) overhead projector
- 2) transparencies (from opaque to transparent materials)
- 3) transparency makers

- Advantages

- Disadvantages

- Future

- Types of transparencies and writing materials

- Advice on :

- a) making hand drawn transparencies
- b) making masters for the production of transparencies

THE CHALKBOARD

ADVANTAGES	DISADVANTAGES
1. FREEDOM TO PREPARE WHEN AND TO WHAT EXTENT DESIRED	1. NEED TO BE ABLE TO DRAW
2. CAN BE BUILT UP IN SIGHT OF CLASS	2. CANNOT BE TOO COMPLICATED
3. SPONTANEOUS ACTION POSSIBLE	3. DIRTY
4. REPEAT, ERASE, REDRAW POSSIBLE	4. VISUAL CONTRAST SOMETIMES POOR
5. FAMILIARITY TO LECTURER AND STUDENTS	5. NEED LARGE AREAS OF BOARD
6. UNLIKELY TO BECOME STEREOTYPED	6. LIMITED COLOUR RANGE
7. NO ADDITIONAL HELP NEEDED	7. LIMITED VARIATION IN LINE THICKNESS AND TEXTURE
8. CHEAP MATERIAL	8. EPHEMERAL
	9. REQUIRES LECTURER'S TIME

E P I S C O P E (O P A Q U E P R O J E C T O R)

A D V A N T A G E S	D I S A D V A N T A G E S
<ol style="list-style-type: none">1. CAN TAKE ANY OPAQUE DOCUMENT 30 x 30 cm (ARTICLES FROM NEWS-PAPERS OR MAGAZINES, BLACK AND WHITE AND/OR COLOUR PHOTOGRAPHS, POSTCARDS, ETC.....)2. VERY LITTLE PREPARATION REQUIRED3. COST OF SOFTWARE INSIGNIFICANT4. SMALL PICTURES ARE ENLARGED5. PROJECTOR OPERATION IS SIMPLE	<ol style="list-style-type: none">1. VERY HEAVY AND CUMBERSOME2. COMPLETE DARKNESS IS REQUIRED3. THE LIGHT NECESSARY IS SO POWERFUL (2000 W) THAT THIS CAN RESULT IN SCORCHING AND/OR BURNING OF DOCUMENT UNLESS IT IS WELL HELD DOWN4. DIFFICULT TO MOVE THE PLATEN TO CHANGE THE PICTURE5. THE LUMENS PLACED ON THE SCREEN IS ONLY 1/15 THE BRILLIANCE OF THE OVER-HEAD PROJECTOR

08

FUTURE OF THE BLACKBOARD

The blackboard is and will remain one of the fundamental tools used by the teacher, specially in remote villages where there is no electricity.

We must teach the student the various possibilities of the use of the chalkboard.

There is even still room for improvement and imagination on its use.

In the case where an overhead projector is available on a full time basis, the chalkboard remains a useful piece of equipment in the classroom; the possibility of spontaneous action, repeat, erase, redraw makes the chalkboard a natural tool for the student.

FUTURE OF THE EPISCOPE

There is no future for the Episcopes. The advantages cannot compensate for the disadvantages. Moreover, all the advantages of the Episcopes are or will be equalled by the overhead projection system (it will be possible to have any material on transparencies in black and white, and even in colour, at low cost in the near future).

OVERHEAD PROJECTOR

A D V A N T A G E S	D I S A D V A N T A G E S
<ol style="list-style-type: none"> 1. LARGE IMAGE (CLEAN AND NEAT) 2. CAN BE USED IN WELL LIT ROOM 3. LECTURER FACES THE AUDIENCE 4. SPONTANEITY YET PREPARATION POSSIBLE 5. SIMPLE MATERIALS NEEDED 6. PERSONALIZED PRESENTATION 7. IDENTITY WITH THE USER 8. PERMANENT RECORD KEPT 9. POSSIBILITIES OF USE UNLIMITED (FUTURE EVEN BRIGHTER) 	<ol style="list-style-type: none"> 1. RESTRICTED MOVEMENT POSSIBLE 2. COSTLY 3. NEW TECHNIQUE HAS TO BE LEARNED 4. GLARE CAN BE TROUBLESOME

ADVICE ON MAKING HAND DRAWN TRANSPARENCIES AND MASTERS

Important points to consider before making a transparency :

- 1) . Is your visual worth making ?
 - . Is it essential to the understanding of your lesson ?
 - . Is it aimed at your audience ?
 - . Does it deserve the emphasis which a visual gives ?
 - . Have you clearly defined your objective ?
- 2) Will words alone describe your point ? If words are sufficient, don't make a visual.
- 3) Does the visual complement the verbal commentary ? Your visual should complement the verbal medium rather than replace it.
- 4) . Are your symbols acceptable ?
 - . Have you considered your audience ?
 - . Are your symbols meaningful to your audience ?
- 5) . Is it visually fluent ?
 - . Is the art functional or ornate ?
 - . Is it really one visual or several ?
 - . Are complex subjects presented in comprehensible units (overlays) ?
- 6) . Does it utilize all available techniques which will improve its efficiency ?
 - . Is colour used effectively ?
 - . Have you considered sequential disclosure or build-up ?
- 7) . Is your visual completely readable by the entire audience ?
 - . Will there be an unobstructed view of the screen ?
 - . Is the printing large enough ?
 - . If you can't read it from the back row, don't use it (5mm letters, as a minimum size, are recommended for transparencies).

- 8) . How much effort did you put into the visual ?
 - . Is it as good as you can make it ?
 - . Have you sought criticism from others ?
 - . Have you tested the visual ?

- 9) . Has it achieved your objectives ?
 - . Has your audience understood it ?
 - . Has it changed attitudes and/or behaviour ?

Writing and Drawing on Transparencies or on Masters

Simple drawings or notes may be easily prepared directly on transparencies. All that is required is a transparent film base and marking devices designed to work on this type of surface. They may be prepared spontaneously, during class, or well in advance of class. The base materials are made of cellophane, acetate or polyester film. With these simple techniques transparencies are prepared quickly but they are not durable. For repeated use, a neater and more permanent method is advisable : the preparation of an original or master from which as many copies as required can be reproduced on transparencies or on paper for distribution to the students.

Notes on special problems in the making of transparencies and/or masters

- 1) Once the transparency is framed, the surface available is 20 x 24 cm. A strip of approximately 2 cm wide should be left blank along the frame. (See attached document A).

- 2) Lettering the transparency or the master :
 - a) Writing materials (see page 7 of this document)
 - b) Size - the first consideration in transparency lettering is size. A great many "rules" can be found for determining minimum letter height and weight (line thickness), and some are so complicated as to require an engineering or mathematics degree just to understand them. You'll probably make letters of the "right" size if you consider this : Minimum letter size must be determined by the maximum distance at which the projected image will be viewed, and the overall size of the projected image. For example, if a projected 24 x 20 cm transparency fills a 1,20 x 1,20 m. screen, and is viewed from a distance of 12 meters, 5mm letter height is adequate.

Press Letters - The easiest method of hand lettering, and one that gives the most professional results, is the use of press-on letters. These letters are printed on a carrier sheet and then transferred to transparency or artwork by burnishing the carrier sheet over the desired letter. Press letters have one major disadvantage; they will not withstand severe handling.

Lettering Guides and Templates are also an important aid to lettering.

When using typewritten texts, keep in mind that Pica character (3mm) is a minimum for size. Speech or Primer characters are best.

When using hand lettering, one important thing to remember is that a 2mm space should be left between each letter.

Remember that for the preparation of originals or masters, pencils, not too hard nor too soft, No.2 or HB, are recommended. For a good reusable master, Indian ink should be used.

3) Colour can be very efficient when used at the right time. It can be used :

- . to underline an important point
- . to separate a part of the information from the whole
- . to "change the rhythm" in order to draw attention

4) Frame your transparencies.

How ? . Centre the transparency on the wrong side of the frame

- . Secure the edges with adhesive tape on the four sides

Why ? . This facilitates the handling and storage

- . It allows writing on the frames (for filing or numbering)
- . Your transparency will always stay flat
- . It allows the use of overlays

5) Making and mounting of overlays.

The overlay technique is the most difficult to master but it is also the most interesting in the overhead projection. It offers a wide range of possibilities.

a) Making : each information must be prepared on a separate transparency or master. In the case of the master, the drawings or graph must always be done with Indian ink or pencil as mentioned above. The colour is provided by using different types of films.

- b) Mounting - If the transparency consists of a base and overlays, tape the base to the underside of the mount as usual, and the overlays to the face. Be sure the overlays register with the base and with each other. Then fasten each overlay with a tape or plastic hinge along one edge of the cardboard frame. Overlays for successive or cumulative use can be mounted on the left or right sides of the cardboard frame, also if necessary on the bottom and top (the top edge should be the last one used). Trim any excess acetate from the edges of overlays so opposite or adjacent ones fit easily into place. After mounting overlays, fold and attach small tabs of masking tape or adhesive-back labels on the loose upper corner of each overlay. Number them to indicate the order of use. These tabs are easy to grasp when overlays are to be set in place over the base transparency. Apart from the base, I recommend that no more than three overlays be added.

Suggestions for building up collections of transparencies

In collaboration with the A.V. Coordinator, the Instructors teaching the same subject can form working teams in order to split the work of transparency making. When special skills are needed, the Instructors can apply to the A.V. Centre.

The students can and should be involved in this type of work which is very formative. To prepare, make and present a good graph for the overhead projector is an excellent way of checking the ability of a student to teach, and they can participate in the building up of transparency collections.

TYPES OF TRANSPARENCIES AND WRITING MATERIALS

I - TRANSPARENCIES

Any acetate sheets, films (negative or positive) can be placed on the stage of the projector. Moreover, the machine is capable of projecting solid objects in silhouette on the screen as well as transparent objects such as perspex rulers or protractors, and it can also be used for polarizing light techniques.

Acetate transparencies are most commonly used because they can be prepared and stored easily. Two main types exist :

1. Thermo Transparencies (Thermofax - Models 45C - 578)

This method is the most widely used in education for the following reasons :

- a) the making of transparencies is very easy
- b) printing time is very short (10 seconds)
- c) apart from black on a clear background, many colours are available
- d) the cost is low compared to other processes

To produce such a transparency a thin sheet of transparent plastic is placed on top of the original and the two are enclosed in a transparent folder before feeding through the copier. After correct adjustment of the exposure has been made, the machine will copy any image made in ink containing carbon or metallic substances, e.g. newsprint, pencil drawings, Indian ink, but will not respond to colour. Photocopies and stencil duplicator copies are also acceptable.

2.a) Transparencies - Dry Photocopier process (3M Models 107 - 581 - 209 - 76)

This type of Dry Photocopier exists in many offices and is usually used only for photocopies, but it can produce transparencies. Ask your dealer to provide you with transparencies for the Dry Photocopier you have. You can produce transparencies from a book the same way as you will for a photocopy. This will be black on a clear or coloured background. It is also possible to get halftones, which means you can reproduce photographs (the quantity, of course, will depend upon the sharpness of the original). During the first stage, light sensitive paper covered by the original is exposed by the normal reflex method. The paper is then placed face to face on a coated film and fed into rollers in the body of the copier where the two are pressed together and heated. This causes a chemical change rather like diffusion transfer to produce an image on the film.

b) Transparencies - Electrostatic Process (Xerograph)

Xerography is mentioned because many organisations also use this equipment. Transparencies can be obtained from any original including books; the quality will be about the same as with a dry photocopier. The photo-surface in xerography is an electrostatically charged plate; where light falls on it, the surface is discharged. Consequently, when the plate is exposed in a camera, a negative consisting of lines of static charge is formed. This plate is powdered, and the powder sticks to the lines of charge just as it would to the surface of a rubbed fountain pen. A charged sheet of acetate film is now placed over the negative; this pulls the powder off the plate and a positive image is formed. The image is fixed in a vapour box, or if special transparent films are used it can be fixed by the heat process.

Photographic : reasonable results can be obtained with the aid of a 35mm reflex camera to copy the original and by using an enlarger to project the negative onto a sheet of slow sensitive film, such as Kodaline Standard KS5, treating it in the same way as a sheet of enlarging paper.

Reflex : this method provides a reproduction of an original by using photographic contact materials without the use of a camera.

Diazochrome Transparencies : Diazo materials are best known to architects, engineers and draftsmen, for it is the material most often used to duplicate their original "tracings" or "masters". The reproduced copies are called "whiteprints" and sometimes, inaccurately, "blueprints". In all cases, however, they are from the family of Diazo materials which number in the hundreds. One of these materials is called Diazochrome. When processed, it produces a brilliant coloured dye image on a transparent film base.

Acetate rolls

It is advisable to have a scroll attachment for the projectors. This consists of two rollers carrying a roll of acetate sheet either 25 feet or 50 feet in length which serves as a writing surface. Writing can be made on the acetate as the lecture proceeds or be prepared beforehand and "rolled" into view when required. Care has to be taken to avoid scratching the surface. It is perhaps advisable to arrange the rollers so that the full roll is at the bottom and the scroll is rolled from the top. A clean surface is then made available and the previous information on the sheet is stored on the top roller.

... See Appendix I

II - WRITING MATERIAL

Grease Pencils - this is the most frequently used implement because of its low cost. They are available in colours although white is the most popular because it is clean to handle and projects a jet black line (because of its capacity to block light). The best type is Mars Omnichrom by Staedler.

Marking Pens (non-permanent) - they are better than grease pencils for tracing fine lines and for colouring surfaces. It can be removed with a slightly dampened cloth. Marking pens are fast replacing grease pencils in popularity (two types can be recommended : 3M and Staedler).

Marking Pens (permanent) - an ordinary straight pen and acetate ink may be used to write on film. Inks are available in colours, the most popular being black, blue, red and green. The ink can be erased with a damp cloth if done immediately, but it becomes permanent with age (Two types can be recommended : 3M and Staedler).

For colouring large surfaces, I recommend the use of 3 M Colour adhesive film.

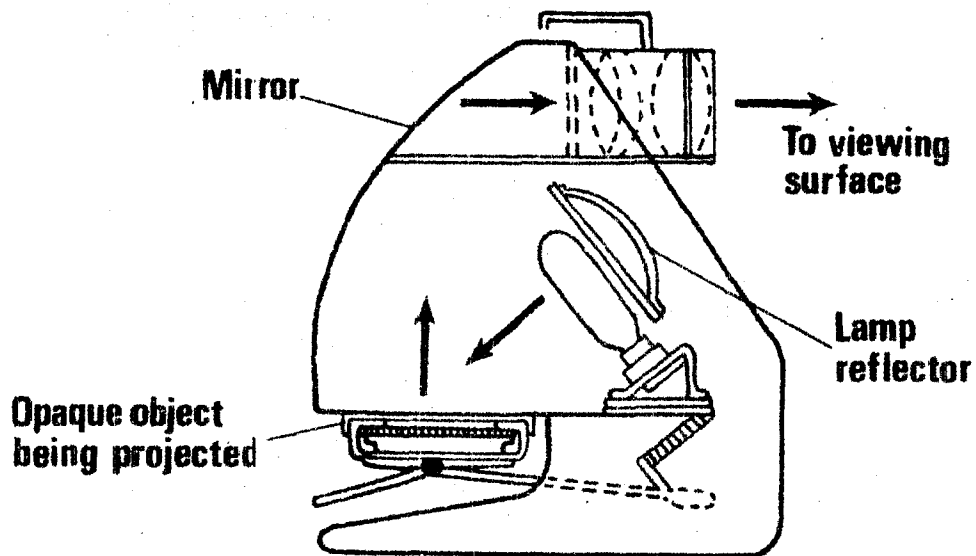
APPENDIX ATRANSPARENCY REPRODUCTION METHODS

Various Processes for obtaining films	Processing time	Drying	Colour	Degree of Simplicity	Cost
Wet Photocopy	5 minutes	Yes	No	Good	Average
Thermocopy (3M)	10 seconds	No	Yes	Very Good	Average
Dry Photocopier (3M)	1 minute	No	No	Good	Average
Diazocopy (Ammoniac)	5 minutes	No	Yes	Average	High
Electrostatic (Rank Xerox)	10 seconds	No	No	Good	Average
Photography (Polaroid)	1 minute	Yes	No	Good	High
Duplication	5 minutes	Yes	No	Good	Average

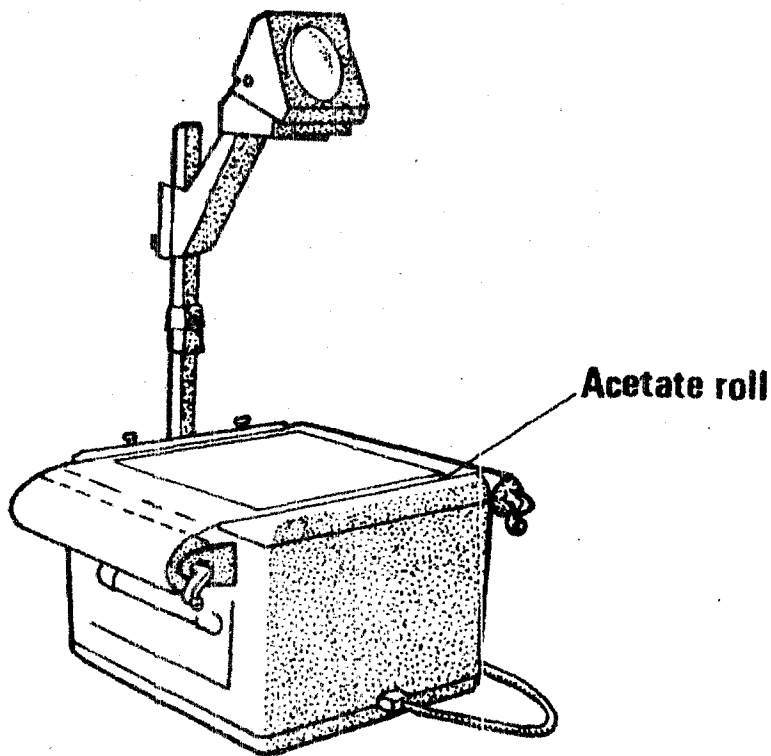
REFERENCES

- "A Guide to Overhead Projection" : Technifax Corporation, Holyoke, Massachusetts, 1969, pp 9 - 22.
- "Teachers A-V Handbook, No. 1" ; "The Overhead Projector" ; "Visual Education" : Evans, T., April 1972, pp 19 - 23.
- "Planning and Producing Audiovisual Materials" : Kemp, J.E., Chandler Publishing Co., 2nd Edition 1968, pp 161 - 186.
- "A-V Buyer's Guide - A User's look at the Audio-Visual World" : Laird, D., 1973, pp 20 - 22.
- "Techniques for Producing Visual Instruction Media" : Minor, E., McGraw-Hill Book Co., 1970, pp 163 - 227.
- "Overhead Projectors" : Audio-Visual, Vol.1, January 1972, pp 33 - 38.
- "Summaries of Lectures Given at Training Courses" : CEDO (Center for Educational Development Overseas), Audio-Visual Division, London, February 1970, pp 19 - 23.
- "A Guide to the Overhead Projector" : Powell, L.S., published by British Association for Commercial and Industrial Education - 16, Park Crescent - London W1M 4AP.

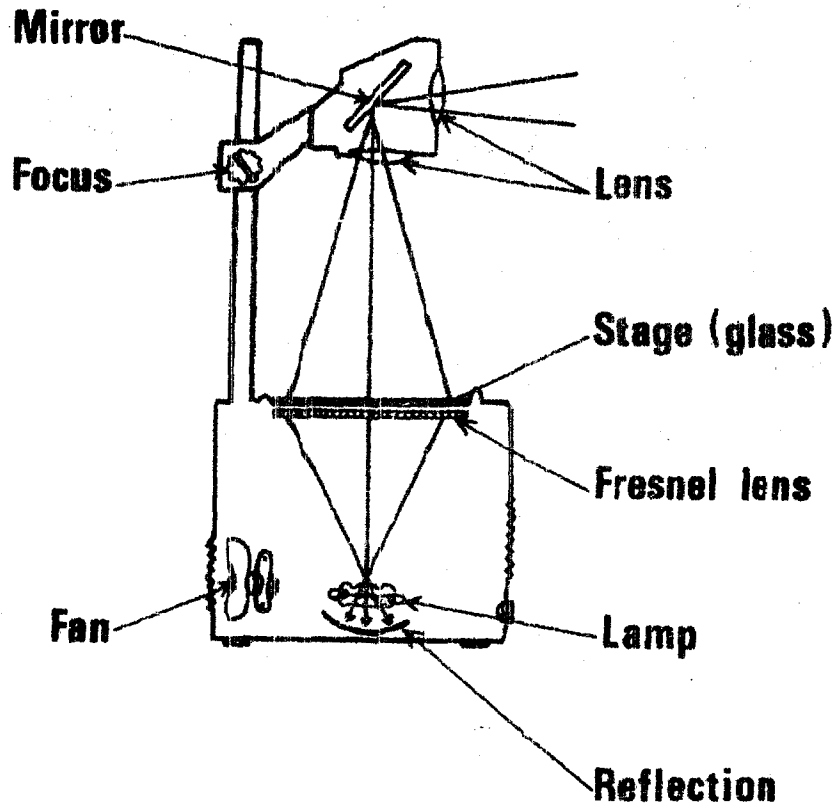
OPAQUE PROJECTOR



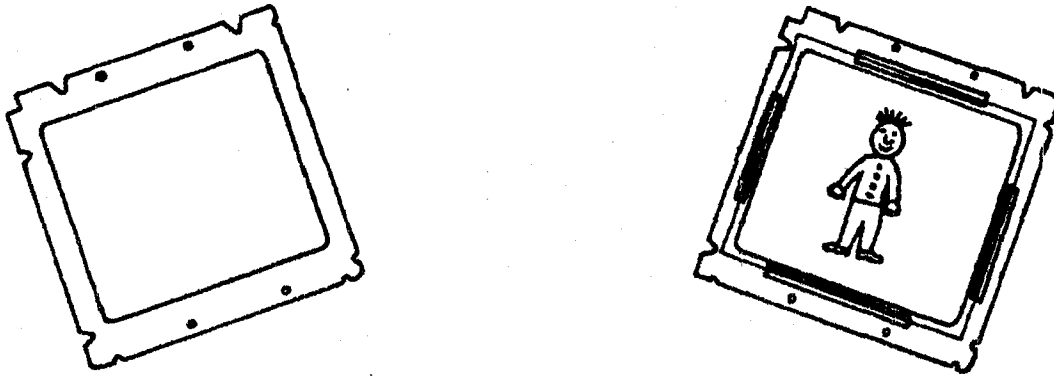
OVERHEAD PROJECTOR



OVERHEAD PROJECTOR

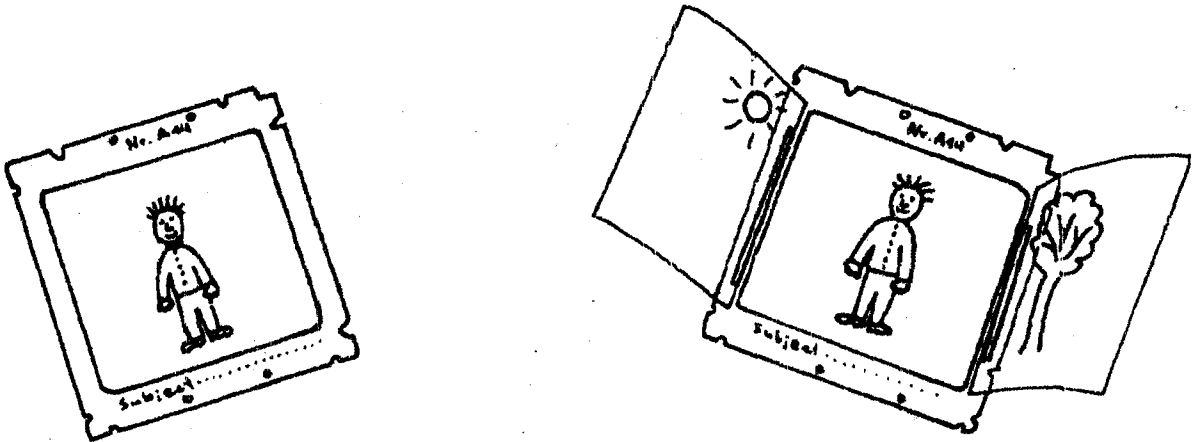


Mounting Transparencies



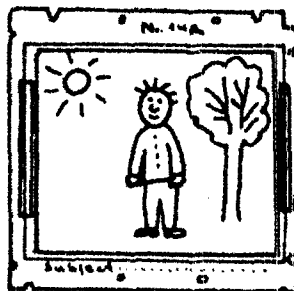
Lay the frame on its underside and tape on the four sides

Mounting Overlays



Turn your framed transparency on the right side

Mount overlays and tape them on one side of the frame



AUDIO-VISUAL WORKSHOPFACTORS TO CONSIDER IN THE SELECTION METHODSHUMAN FACTOR

The Teacher: The teacher has to have a clear and significant message to pass, and his personality has to be acceptable to the students or trainees so that effective communication links can be established quickly and easily. If these conditions are fulfilled, a well charmed and properly used method is likely to ease and stimulate the learning method and end in itself.

THE PARTICIPANTS AND THE ENVIRONMENT FROM WHICH THEY COME

Methods of teaching must respect :

- a) The intellectual level and educational background of the participants.
- b) The participant's age and practical experience; and
- c) The social and cultural environment.

ENVIRONMENT

Training programmes: Supervisors, middle manager or small entrepreneurs whose basic education, far away from school lectures should be replaced by short talk, using visual aids, extensively concrete examples should be given, simple programmed book than text books...

Participants: No or little experience - In this case it is difficult to link the teaching process with any previous experience. With little experience may take the attitude of knowing better in advance. They need to learn to do their job better.

- 1st Group: Simple case study and practical assignment.
- 2nd Group: Discussions, group working parties, syndicates, practical projects.

Educator are now aware of this problem. Any participative method may be used in any environment provided that it is instilled gradually with fore knowledge of the environment making the necessary modifications of the method.

OBJECTIVES OF TEACHING AND TRAINING

A ruled training programme in management is defined in terms of changes to be effected in knowledge, attitudes and skills.

Various training situations will be concerned with various types and level of knowledge, attitude and skills.

A preliminary analysis of needs will help to identify what objectives a particular programme ought to have.

Methods will then be selected with regard to their ability to impart new knowledge, influence, attitudes and develop practical skills.

Knowledge, attitude, influence and skills are inter-related and this must not be at all over looked when setting the objectives of training and choosing teaching methods.

Subject Area

Various subject areas (finance, personnel, operations, research, general management etc.) have their own specific features.

From the management point of view not only techniques are important but also to know when and how it can be used.

On the management aspects in communication leadership and motivation, training methods are important. This can be done through case study, role playing, lectures, discussions, etc.

A business problem/multiple angles and arousing the /has participants interest in specific subject areas, methods and techniques which if properly integrated will help them to take the right action in a complex situation.

TIME AND MATERIAL FACTOR

Time: The length of course predetermines the kind of methods which can be used; Long Course: - Complex cases, and practical project; Short Course: - Participative method.

FINANCE

Affects the cost of the teaching material as well as varies for the different teaching methods. Complex case study and business games require long and costly preparation.

THE TEACHING FACILITIES

Factors such as number of rooms available, availability of audio-visual aids and methods altered in advance.

These are the important factors in teaching-learning process. A teacher should have the understanding about all this so that he can be proved a successful teacher.

INTERNATIONAL COOPERATIVE ALLIANCE
Regional Office & Education Centre
For South-East Asia
"Bonow House", 43, Friends Colony,
New Delhi- 110065 (INDIA).

ICA COOPERATIVE EDUCATION MATERIALS
ADVISORY SERVICE (CEMAS)

- Dr. Dharm Vir
Joint Director (Education).

1. In response to a widely-felt need to improve the supply and quality of materials used in cooperative education and training in the developing countries, the Cooperative Education Techniques Project was launched in 1973 by the International Cooperative Alliance (ICA) with the assistance received from the Cooperative League of the USA.
2. The initial task with which the Project was charged was to carry out a survey into educational materials and techniques used in the developing countries with a view to identifying the main areas of action required to improve the existing provision. As a result of this survey, a report was made, recommending interalia, the establishment within the framework of the ICA and its Regional Offices, a Cooperative Education Materials Advisory Service (CEMAS), the functions of which are:
 - i) to collect materials, and information on materials available to and/ or used by cooperative institutions

in the developing countries, for the purpose of compiling an inventory of such materials,

- ii) to provide advice and information regarding the use and availability of suitable materials to potential users in the developing countries and, where possible, to facilitate the exchange of such materials,
- iii) to produce proto-type materials where special need for such was identified.

3. The round work for the CEMAS operation has been laid in the London office and work on the inventory of materials is well underway. Materials used in connection with cooperative education and training in more than 30 countries have been collected, evaluated and classified according to quality and the areas of cooperative study to which they are mostly suited. This aspect of the service will continue as an on-going operation, details of other items being added to the inventory as they become available. Information on materials already listed is readily available to cooperative training institutions in developing countries on request.

How Does CEMAS operate: Please see CEMAS CYCLE (Annexe-C)

4. A similar service on a modest scale has also been initiated by the ICA Regional Office & Education Centre for South-East Asia, in 1976 through CEMAS UNIT at New Delhi. Another CEMAS UNIT has been established at the ICA Regional Office for the Central and East Africa at Moshi (Tanzania). The CEMAS UNITS in the Region Collaborate with the CEMAS, London, but work within the framework of their respective Regional Offices.

5. An important function of the CEMAS operation is the production of prototype educational materials on particular subjects where there appears to be specific need for these for cooperative education and training purposes in the developing countries. The production of such proto-type has been commended. A list of educational and training materials produced by the CEMAS/London is enclosed as Annexe-A and these can be procured by actual users by making a specific request. In this connection, one can make initial contact with CEMAS Liaison Officers in their respective countries, and also the ICA RO & EC New Delhi. A list of Liaison Officers in the Region is enclosed as Annexe -B.

6. As matter of Regional Priority it has been decided to produce management cases, role plays, case books on Cooperative Management, training packages and some audio-visual aids to provide support to cooperative trainers and management training programmes in South-East Asia. The following priced publications of the ICA RO EC and other educational materials are available from the CEMAS New Delhi Unit:

- i) Manual for Study Circle Leaders
- ii) Communication and the Cooperative Teachers
- iii) Farming Guidance in the Cooperative Movement in Japan
- iv) Economics of Consumer Cooperation
- v) Key to Household Economy
- vi) Balanced Diet
- vii) The Aims and Principles of Cooperation and their Application in the Developing Countries
- viii) Cooperative Member Education & Communication (along with case studies on two agl.coops.in Japan)
- ix) Book keeping for Fisheries Cooperatives
- x) A series of speeches on cooperation

In addition, the ICA RO & EC had produced some study material and study circle kits as an aid to Cooperative Member Education programmes undertaken by it on a pilot basis in Delhi, and other parts of India. Some useful material was also produced by the ICA/NCUI Field Project in Cooperative Education, Indore. The I.C.A. R.O. & E.C. also plans to produce some training packages which would be useful for the field workers & organisations in the field of Coop. Member Education, extension & farm guidance.

7. A special feature of the CEMAS New Delhi unit is the ICA Film Library Service. The service, which has been started on an experimental basis for India, will be expanded to other countries of the Region. To meet the widely need of training in the preparation and use of audio-visual aids the Unit has been assisting the member movements in conducting workshops on audio-visual and other modern techniques of education. It also assist in the follow up teacher participants and other educational activities of the ICA RO & EC in South East Asia.

8. The main priority before the ICA, CEMAS London is to produce material which would help in improving cooperative member relations and member education programmes in the developing regions of the world. It has therefore decided to produce a model member education plan and a manual on techniques of preparation of national cooperative education plans.

9. For additional information and assistance from the CEMAS New Delhi Unit, please write:

The Joint Director (Education)
International Cooperative Alliance
RO & EC, Bonow House, 43, Friends Colony
New Delhi- 110065 (India).

The addresses of the CEMAS Offices are:

1. The Education Officer (CEMAS)
International Cooperative Alliance
Regional Office for East & Central
Post Box 946,
Moshi, Tanzania
2. The Project Officer (CEMAS)
International Cooperative Alliance
11, Upper Grosvenor Street
London W1X 9PA England U.K.
10. CEMAS New Delhi Unit works within the frame work of the ICA RO & Education Centres and its activities in the region are guided by the South East Asian specialist group on Cooperative Training, SEASPECT and the ICA Council for South East Asia, which meet at regular intervals and give their valuable advice.
11. A report on the CEMAS activities in the Region has been issued separately.

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ICA - CEMAS. LONDON. PUBLICATIONS LIST

February 1979.

PUBLICATIONS ON METHODS IN CO-OPERATIVE EDUCATION: Price per copy

General

£

- 1. Participative Teaching Methods
A guide with specimen for cooperative teachers, 119 pages, A, 4. 3rd impression. 1978... 1.50
- 2. Explaining Annual Reports
A guide on the use of annual reports and accounts as an aid to education, 96 pages A.4, Presented in a ring-binder, 1978..... 6.00

SPECIAL

- 3. Co-operative Education Radio Programmes
A general guide with specimen scripts. 123 pages, A. 4, 3rd impression, 1978..... 1.50
- 4. Case Writing Workshop Pack
Including teacher's guide, The Pack contains material for a two-week course in writing of case studies on co-operative management, by Dr. Malcolm Harpor, Cranfield School of Management, 1977..... 12.00
- 5. Correspondance Education
A guide for planners, course writers and tutors, with 6 specimen lessons, Guide: 32 pages, specimen, 98 pages, A. 4, Basic text compiled by the International Extension College, Cambridge, 1977..... 10.00

PUBLICATIONS ON ACCOUNTING AND MANAGEMENT FOR COOPERATIVES

		<u>Price per copy</u>
		£
6.	<u>Co-operative Book-keeping - four manuals</u>	
	(1) Marketing Cooperatives 52 pages	1.50
	(2) Consumer Cooperatives 40 pages	1.50
	(3) Savings & Credit Co-ops. 26 pages	1.50
	(4) Industrial Co-operatives 38 pages	1.50

7. Society Operating Manual:
A guide with specimen on the preparation of operating manuals for agricultural and consumer co-operatives. 145 pages. A.4 Presented in a ring-binder. 1977..... 7.00

MISCELLANEOUS PUBLICATIONS:

8. A Co-operator's Dictionary
Explanations of co-ops. and commercial terms by A. Lamming, 55 pages, A. 5, 1977..... 1.00
9. Sources of Co-operative Information
Including a list of co-operative contacts in most countries of the world. A. 5. 1979..... 1.25

FORTHCOMING PUBLICATIONS:

The following manuals are expected to be published in 1979:-

10. Control of Assets for the Prevention of Losses.
A guide on how losses can be avoided through the application of suitable control measures.
11. Member Education Plan
A model plan for member education with comments. Especially covering pre-formation stages of a cooperative. This will be supplemented by a Teachers' Guide.
12. National Co-operative Education Plans
A manual on the techniques of preparation of a national long-term co-operative education plan.

PUBLICATIONS PUBLISHED IN ASSOCIATION WITH INTERMEDIATE TECHNOLOGY PUBLICATIONS: Price per copy

	£
(i) <u>Tropical Agriculture for the Staff of Cooperatives</u> A programmed text. by P. Yeo. 54 pages. A. 5, 1977.....	1.95
(ii) <u>Business Arithmetic for Cooperative and other Small Businesses</u> For use by Cooperative Society managers and staff, by T.N. Bottomley, 87 pages, A.5, 1978.....	1.95
(iii) <u>Co-operative Organisation - An Introduction</u> by B.A. Youngjohns, 34 pages, A.5, 1977.....	1.25
(iv) <u>The work of a Co-operative Committee</u> A Programmed text by P. Yeo, 87 pages. 1978.....	2.25

CONDITIONS FOR DISTRIBUTION

Co-operative colleges and other training institutions, education departments of co-operative organisation, etc., are entitled to one free copy. Quotations for quantities can be obtained on request.

Note

The distribution of the special publications, such as Co-operative Education Radio Programme, Case Writing Workshop and Correspondence Education, is restricted to training institutions stating a firm intention to carry out such activities.

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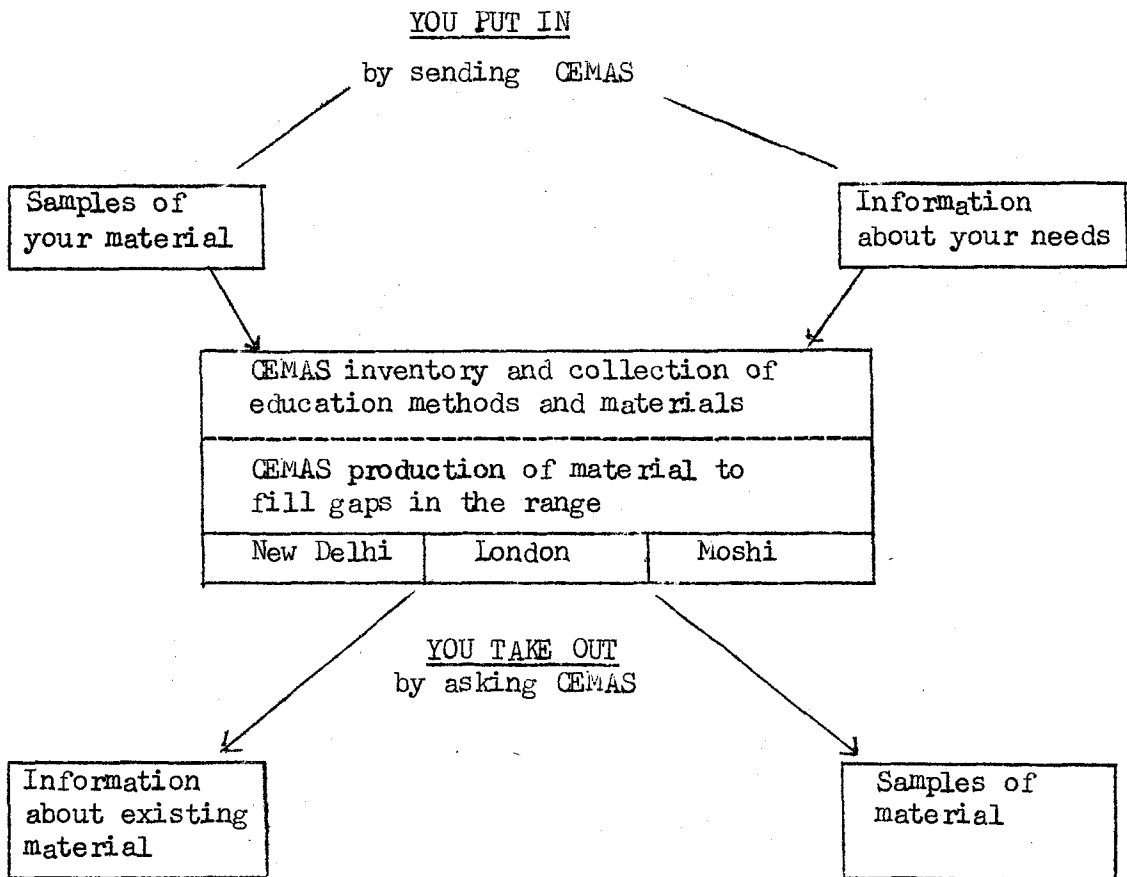
ANNEXE - BLIST OF LIAISON OFFICERS

1. Mr. A. Fattah
Director
Department of Coop. Development
Badam Bagh, C/o P.O. Box 5
Kabul (Afghanistan)
2. Mr. P.S. Parmar
Lecturer
National Centre for Co-op. Education
A-7, Kailash Colony
New Delhi- 110048 (India)
3. Mr. V.N. Pandya
Principal
National Centre for Co-op. Education
A-7, Kailash Colony
New Delhi -110048 (India)
4. Gen. J. Sassani
Managing Director
Sepah Consumers' Cooperative
Amirabad Shomali
Iran Novin Corner, Teheran (Iran)
5. Mr. A. Siva Perumal
Secretary Education and Research
Cooperative Union of Malaysia
P.O. Box 817
Kuala Lumpur (Malaysia)
6. Mr. Supah Noh
Cooperative College of Malaysia
Peti Surat 60
Jalan Templer
Petaling Jaya (Malaysia)
7. Mr. Florencio S. Corral
Assistant General Manager
Co-operative Insurance System
of the Philippines, Inc.
West Avenue, Quezon City
(Philippines)
8. Mr. Quazi Farid Ahmad
General Secretary
Bangladesh Jatiya Samabaya Union
9/D Motijheel Commercial Area
Dacca (Bangladesh)
9. Dr. S.C. Mehta
Professor
Vaikunth Mehta National
Institute of Cooperative
Management
Ganeshkhind Road,
Pune - 411 -16 (India)
10. Mr. Baehaki
Departemen perdagangan Dan Koperasi
Direktorat Jenderal Koperasi
Jalan Jen. Gatot Subroto
Jakarta (Indonesia)
11. Mr. Takashi Furukawa
Institute for the Development
of Agricultural Cooperation in
Asia
24-9, 6-chome, Funabashi
Setagaya-ku, Tokyo 156 (Japan)
12. Mr. C. Sivalingam
Cooperative Central Bank Ltd.
29, Lebuh Ampang
P.O. Box 685
Kuala Lumpur (Malaysia)
13. Mr. Surya Ratna Shakya
Instructor
Cooperative Training Centre
Arniko Rai Margh, Baneshwor
Kathmandu (Nepal)
14. Miss Lolita C. Gonzales
Training Associate
Agricultural Credit and
Coops. Institute
University of the Philippines
at Los Baños, College, Laguna
(Philippines)

15. Mr. Alonso I. Pinlac
Chief of Educ. & Training Division
Bureau of Cooperatives Development
(Ministry of Local Government &
Community Development)
Quezon City (Philippines).
16. Mr. M.D.K. Goonaratne
Documentation Officer
Coop. Management Services Centre,
Cooperative Square
127, Grandpass Road,
Colombo - 14 (Sri Lanka)
17. Miss Somjit Thongdoun
Department of Coop. Promotion
Ministry of Agriculture & Coops.
Bangkok (Thailand)
18. Ch. Jamil Aslam
Principal
Cooperative Training College
N.W.F.P. Kohat Road
Peshawar (Pakistan)
19. Mr. Prayong Phawaphutanong
Chief of Training Section
Cooperative League Section
4, Pichai Road, Dusit
Bangkok (Thailand)
20. Mr. E.R.Mudiyanse
Head Education Section
National Cooperative Council of
Sri Lanka (N.C.C.)
455, Galle Road
Colombo - 3 (Sri Lanka)

(CEMAS CYCLE)

1. HOW DOES CEMAS OPERATE
AS A CLEARING HOUSE FOR
COOPERATIVE EDUCATION METHODS AND MATERIALS?



2. Who are our clients?

Answer: All organisations and institutions
concerned with cooperative education,
training and information.

Training Package : Project Format

- | | |
|-----------------------------|--|
| 1. Name of the Project : | Training in preparation of Bank Reconciliation statement. |
| 2. Media : | a) Lecture cum discussion method
b) Visual aids |
| 3. Language | English |
| 4. Producers of the package | 1. Mr SN Mishra
2. Mr MM Vagganava
3. Mr VB Singh
4. Mr RC Sharma
5. Mr RN Sau |
| 5. Target population | Accounts' personnel |
| 6. Age group | 30 to 40 years |
| 7. Ability | a) well versed in english language
b) acquainted with preparation of cash book
c) knowledge of bank pass book |
| 8. Other relevant factors | a) Transactions of a particular period are entered in cash book with cash and bank columns
b) transaction in the same period are entered in bank pass book
c) the balance was same in the cash book and in the pass book at the beginning of the period.
d) it differs in end |
| 9. Main aim of the package | To impart skill in preparation of bank reconciliation statement. |
| 10. Terminal objectives | a) to equip them the skill of comparing and ticking the cash book and pass book
b) to locate the reasons for difference in balances
c) to train in the technique of preparation of bank reconciliation statement.
d) to make them understand the utility of the bank reconciliation statement
e) to feed back with practical exercise. |

2

11. Attached documents
- a) script or sequence chart of lesson
 - b) teacher's notes
 - c) proforma of the bank reconciliation statement.
 - d) visuals
12. Reasons for choice of the media
- a) as the population is well versed in english, lecture cum discussion method is used.
 - b) to re-enforce the knowledge visuals are used
 - i) as the pages of cash book and pass book are to be used again and again flip over chart is used for them
 - ii) the reasons of difference are to be shown one by one hence aid of the magnetic cut out is taken
 - iii) the utility and method of preparation are to be shown intelligibly hence transparent sheets are used through overhead projector.

VB Singh
Coordinator

RN Sau
Reportier

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

: Technique of Preparing		I
Subject	Bank Reconciliation Statement	Page Number I
		Unit Number -

Sr
No

Recapiluation of the knowledge of ~~of the columns of~~ cash book with bank column wherein transactions for a specific period have been recorded and the cash book has been balanced.

Transactions recorded by a banker in the pass book for the specific period given above with balances

- a) ~~Emphasos on~~ the pass book and the cash book balance in the beginning was the same.
- b) At the end of the period the ~~balances differ, the difference~~ occurs due to errors and ~~frauds~~ or for some other reasons. To know this bank reconciliation statement is prepared.

- Definition of a bank reconcilia-
tion statement :
- 1) It is a statement
 - 2) Prepared as on a particular date
 - 3) ~~to reconcile~~ the balances shown in the pass book and cash book
 - 4) to ascertain whether the dis-
agreement of balances is due to reasons/errors

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number 2
	Unit Number 2

Verbal narration

Sr
No

- ~~a) Ticking up common items appearing in the cash and pass book~~
 - ~~b) Unticked items, will show the reasons of disagreement~~
-
-

- ~~a) Unticked items entered in cash book but not in pass book are :-~~
 - ~~i) cheques issued, not presented or dishonoured~~
 - ~~ii) cheques sent for collection not collected or dishonoured~~
 - ~~iii) cheques entered in cash book not sent for collection~~

- ~~b) Unticked items entered in pass book but not in cash book are:-~~
 - ~~i) credit for interest on accounts, collection of interest on securities, dividend etc.~~
 - ~~ii) direct deposit by the third parties~~

- ~~iii) cheques collected, not entered in the cash book~~
- ~~iv) debit for bank charges/interest on over draft/payment of standing orders etc.~~
- ~~v) dishonour of discounted bills~~

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number	
	Unit Number	3

Sr
No

Utility of Bank Reconciliation Statement :

1) It helps in locating the reasons for disagreement of balances

2) It helps in ascertaining the accuracy of recording transactions

3) It helps indicating the errors, fraud, mistakes etc. if any

4) It helps the management to control the bank operations

5) It helps the audit-staff in verification of bank balances

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number
	Unit Number

Sr No

II Method

~~Balance as per pass book~~

Add :

~~1) Cheques sent for collection but not collected or dishonoured~~

~~2) Bank charges payments of standing orders, etc. debited by a banker~~

~~3) Dishonour of discounted bills~~

~~4) Cheques not sent for collection, but recorded in the cash book~~

~~Less :-~~

~~1) Cheques issued, but not presented or dishonoured~~

~~2) Interests, etc. credited by a banker~~

~~3) Direct deposits by a third party~~

~~4) Cheques collected, but not recorded in the cash book~~

~~Balance as per cash book~~

III Method

~~Credit balance (overdraft) as per cash book~~

~~The items added and subtracted are the same, which are given in II method~~

IV Method

~~Debit balance (overdraft) as per pass book~~

~~The items added and subtracted are the same which are given in I method~~

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number 6
	Unit Number 5

Sr
No

~~Practical application of the~~
~~bank reconciliation statement~~
~~will be done in the proforma~~
~~form, which is always used by~~
~~the institutions, for preparing~~
~~the statement and the exercise~~
~~will also be followed in the~~
~~same proforma.~~

SUMMARY OF THE LESSON

1. There are differences in balances of cash book as well as pass book due to various recognised reasons.
2. To reconcile this, Bank Reconciliation Statement is prepared on a specific date, to ascertain the accuracy of bank account.
3. The differences are generally due to the following reasons.
 - i) items recorded in the cash book but not in pass book
 - ii) items recorded in the pass book but not in the cash book.
4. Preparation of bank reconciliation statement start with :
 - a) Cash book balance
 - i) Add transactions which have reduced the balance and subtract which have increased the same;
 - ii) Add items which have raised the balance of the pass book and subtract items which have reduced the balance of pass book.
 - b) Pass book balance
 - i) Add items which have reduced the balance and subtract which have increased the same;
 - ii) Add items which have raised the balance of the cash book and subtract items which have reduced the balance of the cash book.

...

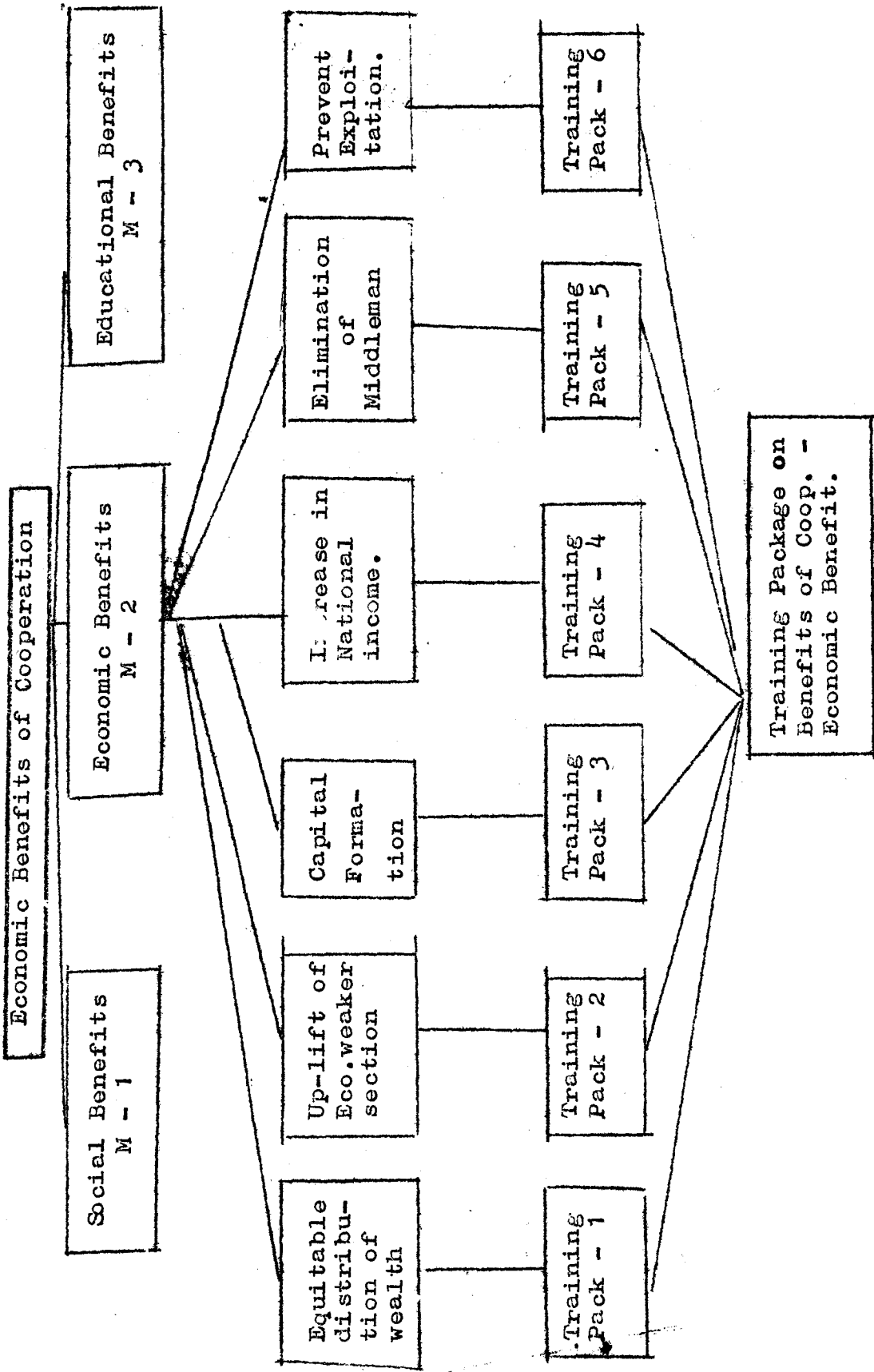
FORMAT

- | | |
|--|---|
| 1. Name of the Project | Benefits of cooperation |
| 2. Media | 1. Lecture method
2. Audio visual aids |
| 3. Language | English |
| 4. Producers of the training package | 1. Shri SB Singh
2. Shri SD Chopra
3. Shri RD Tejan
4. Shri ML Prajapati
5. Shri KS Sambyal |
| 5. Target population | Coop. Supervisors |
| 6. Age group | 25 - 25 years |
| 7. Ability | Can read, write and converse fairly well in English |
| 8. Main aim | To create awareness about the advantages of cooperation |
| 9. Attached documents | 1. Script of lesson
2. Posters, charts, cutouts etc. |
| 10. Reasons for choice of the medium of training package | |

Since the target population has a fair knowledge of English, the lecture method is adopted and to make the communication more effective, audio and other visuals are used.

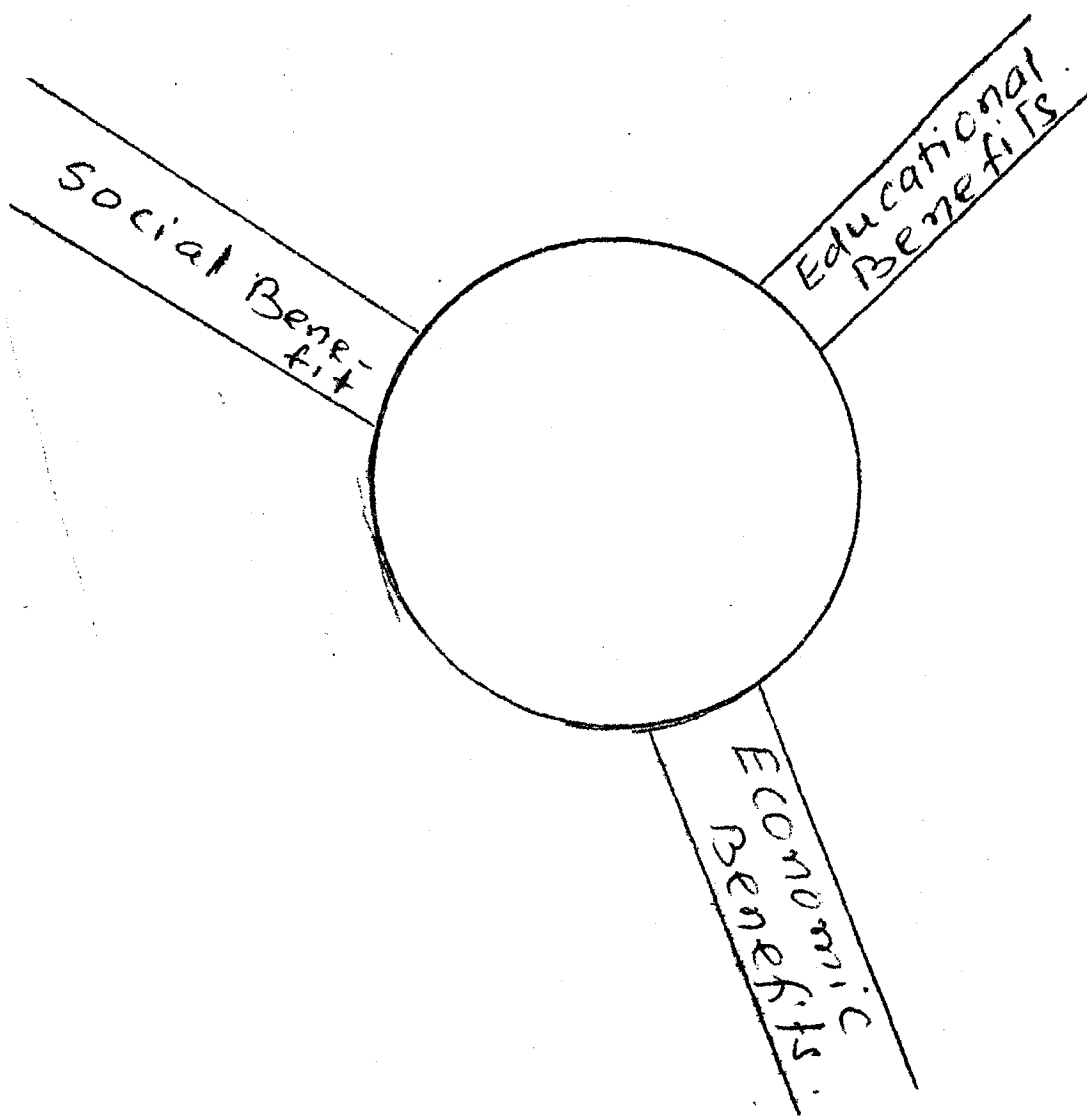
SB Singh
Group Chairman

SD Chopra
Group Reporter



Benefits of Cooperatives

Cooperation has the advantages of and socialism. The benefits of cooperatives could be classified in to 3 groups :



In this sessions, we shall take up the economic benefits of the cooperatives.

The economic benefit of cooperatives are as under :

- 1) Equitable distribution of wealth, 2) uplift of weaker section, 3) capital foration. 4) increase in National income, 5) Elimination of middlemen, 6) \angle exploitation.

(The above benefits may be shown on the overhead projector) \angle prevention

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	: Equitable distribution of wealth	Page Number	4
		Unit Number	1

Sr
No

- ~~a) there are 4 aspects of production which claim returns on wealth i.e. land labour, capital & enterpreneur~~
- ~~b) through association it is possible to regulate or to affect the distribution of returns~~
- ~~c) rent, interest and profit create a disparity in the distribution of returns on wealth~~
- ~~d) joining together the bargaining power increases. So competitive rent could be fixed at low level.~~
- ~~e) role of capital minimize by limiting the rate of interest~~
- ~~f) the profit or surplus is returned to the members so it does not go to a single man~~

~~Economic benefits of Coop.Up lift of Eco.Weaker Sections.~~

- ~~a) Those who do not have sufficient means to earn their livelihood~~
- ~~b) By pooling down their meagre resources, they can earn their livelihood~~

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Economic benefits helps in capital formation	Page Number	5
		Unit Number	

Sr No

a) capital formation is possible with help of savings

b) since unproductive units or non-viable units become viable units savings increases

Economic benefits increases in National Income.

a) National income of the country is the total production expressed in terms of value

b) Cooperation helps in increasing National income by way of

1. Reducing unemployment.
2. Providing various economic services which lead to increase in productivity and higher income.

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Economic benefits elimination of	Page Number 6
	unwanted middleman	Unit Number

Sr No

[Empty box]

a. all those who handle the product from producer to consumer are middlemen

[Empty box]

b. variation in the prizes paid by the consumer and received by the producer

[Empty box]

c. The coop. organisation in the form of a marketing cooperative society.

[Empty box]

1. eliminate the middleman by direct purchase from the members and selling to the customer.

2. this ensures higher prices for the producers.

ECONOMIC BENEFITS OF COOP. PREVENT EXPLOITATION

[Empty box]

a. how a farmer is exploited in the hands of money-lenders

b) exploitation on account of mal-practices of the traders

c) through credit cooperative get a loan at a reasonable rate

d) through marketing society; the farmer get rid of these malpractices.

389/79

385/79

Summary Note (Group No. 3)

For making a rational choice out of the three main types of economic system (capitalism, socialism and resultant system of economy i.e. cooperation) one will have to go into the relative benefits of these systems. The benefits of cooperation may be classified into three main groups :

1. Social benefits
2. Economic benefits
3. Educational benefits.

Economic Benefits : Cooperation has been defined as organization in which persons join voluntarily for the promotion of their common economic interests. The economic benefits of cooperation may be again grouped into six

- i) equitable distribution of wealth, ii) uplift of weaker section
- iii) capital formation, iv) increase in National Income ,
- v) elimination of middle man, vi) prevention of exploitation.

...

PROJECT FORMATGroup I

- 1) Name of the Project : Processing of Loan Application for composite loan - well cum pump set.
- 2) Media :
 - i) Lecture-cum-discussion method
 - ii) Audio-visual Aids
- 3) Language : English
- 4) ~~Professors~~ of Training Package :
 - S/shri
 - i) H.N. Dubey : Chairman
 - ii) A.K. Dey : Secretary
 - iii) B.L. Srivastava : Member
 - iv) C.S. Misra : Member
 - v) N.K. Yadav : Member
- 5) Target Population : Branch Managers of C.L.D.B./ Managers of P.L.D.B.
- 6) Age : 30 years to 40 years
- 7) Ability : Can read, write and converse fairly well in English
- 8) Other relevant factors :
 - i) Minimum qualification graduate with 3 years experience and post graduate with 6 months experience
 - ii) Preliminary knowledge of the supervising of the ~~land~~ Land Development Banks
- 9) Main Aim : To inculcate skill and expertise of loan application - scrutiny
- 10) Terminal objectives : After this training the trainees shall be able to do :
 - i) Table scrutiny
 - ii) Inspection and studies
 - a) Spot Inspection
 - b) Appraisal of loan cases - valuation of hypotheca
- 11) Attached documents :
 - a) Script of the lesson
 - b) Teaching notes.

12) Reasons of the choice of media

- 1) Target population is well conversent with the working of the Land banks and have in fair knowledge in English, lecture-cum discussion method is adopted.
- 2) The activities of the personnel are of practical nature, audio-visuals are used in the class room.

Chairman

Group I

...

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Processing of loan application for	Page Number
	composite loan well-cum-pump set.	Unit Number

Purposes

Sr
No

i) Minor irrigation - well-cum
~~pump set, tube well, field~~
channels etc.

ii) Land reclamation, levelling,
~~bunding, soil conservation.~~

iii) Purchase of agricultural
~~implements viz. tractor, etc.~~

iv) Plantation including horti-
~~culture.~~

v) Construction of houses and
~~godowns.~~

vi) Allied activities such as
~~animal husbandry, dairy,~~
sheep rearing, poultry,
fishery etc.

~~Agricultural Projects -
special features ;~~

a) self income generating

b) self liquidating

c) ability to meet out the
increased farm expases

~~Action before sanctioning of
the L.P. loan - study of~~

= economic viability

~~= technical feasibility~~

= financial analysis of the
project

= processing of loan application

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number
	Unit Number

Sr
No

What is processing of loan appln.?

- i) checking of & examination of the required papers to be submitted along with loan application.
- ii) verification of facts including security as mentioned in the documents.

Objectives

- i) Investment in the project is justified
- ii) cultivators will be in a position to repay the loan and to meet out the increased farm expenses

Stages of processing of loan application

- i) Table scrutiny (by accountant/legal assistant and manager/branch manager)
- ii) Field inspection/study (by inspecting officer, L.V.O. and manager/branch manager/

Table scrutiny means :

- = ensuring the attachment of required papers/documents
- = verification of the correctness of documents.

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Page Number 3
	Unit Number

Papers required to be attached with prescribed loan application

Sr
No

- ~~i) records of rights & possession of land~~
- ~~ii) Estimate of the project~~
- ~~iii) Certificates~~
 - a) D.G.W. S. availability
 - suitability of water, distance, criteria
 - b) Govt. cooperative societies
 - commercial banks - regarding no dues.
- ~~iv) title deeds~~
- ~~v) photo copies~~
- ~~vi) encumbrance from subregistrar~~
- ~~vii) affidavit (in some states)~~

~~Field inspection & studies~~
~~points of consideration~~

- ~~i) location of field~~
- ~~ii) type of soil - its suitability for the crops~~
- ~~iii) soundness of the project~~
 - a) cost Benefit Ratio (C.B.R.)
 - b) repaying capacity
 - c) valuation of hypotheca
- ~~iv) technical appraisal of the well, depth, radius, distance cost.~~
- ~~v) availability of inputs~~
- ~~vi) creditworthyness of the applicant.~~
- ~~vii) verification of the possession of the land.~~

~~Willingness of the cultivator to complete the project. Urge.~~

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

	Importance of the processing of loan applications	Page Number	
Subject	A) Banker's point of view	Unit Number	
Sr No			
			<ul style="list-style-type: none"> = safety of money = knowledge of net surplus with the cultivators = fixation of instalment of the loan & period of loan = justification of investment
			<ul style="list-style-type: none"> B) Cultivator's point of view = expectation of net surplus = possibility of stabilization of his consumption limit = investment is justified & financially feasible for adoption
			Summary
			<ul style="list-style-type: none"> 1) purposes of loan - permanent improvement of land 2) processing of loan application does not mean delay in sanctioning the loan rather checking and examination of required paper. Correctness the 3) Stages of processing of loan <ul style="list-style-type: none"> - table scrutiny & field inspection and study 4) objectives of loan application <ul style="list-style-type: none"> a) justified investment b) project is economically viable, technically feasible and commercially remunerative 5) Importance :
			<ul style="list-style-type: none"> a) Bankers point of view ; <ul style="list-style-type: none"> safety of money, estimation of net surplus with cultivators, fixation of period and amount of repayment. b) cultivators point of view <ul style="list-style-type: none"> estimation of net surplus, stabilization of consumption limit, justification of investment.

Script

Processing of Loan Application for
composite loan - well-cum-pump set

The Land Development Banks advance the Long Term credit to the Agriculturists for permanent improvement of their lands - which means and includes minor irrigation, land reclamation, plantation, construction of godowns and houses and other allied activities - purposes. The investment of this long term credit in permanent improvement of land purposes, after economical and financial analysis form the agricultural projects - The main characteristic of these projects are that (i) These are self income generating and self liquidating (2) The surplus of these projects is enough to meet out (i) repayment of the loans - Principal and Interest (ii) meet out the increased expenses of the farm expenditure and a part of the increased expenditure of the farmers. Since this involves the advancement of huge amount for a longer period on the basis of landed property as a security primarily now shifted on production of the benefited area of the project and the valuation of hypotheca requires a legal and technical knowledge, hence the bank has to take precaution in advancing this type of loan as such the bank carefully processes the loan application.

The processing of loan application does not mean delay in sanctioning the loan. It means checking and examination of the required papers, and their scrutiny to ensure that the loan demanded is within the objective of the bank and is justified. It has certain aims and objectives e.g. project is technically feasible to take up, economically feasible and commercially remunerative resulting an increase in the farmers income.

In the processing of loan application one has to do the followings :

1. Table scrutiny
2. Field inspection and study

A table scrutiny is the function of ensuring (i) of the submission of all the papers required to be submitted along with loan application under the bylaw/manual of the bank and (ii) of checking their correctness. The papers required to be submitted are :

- i) prescribed loan application available from the bank on cash payment including membership form.
- ii) records of rights of land to be mortgaged as a security with the bank, survey number, area, type, rent, facility of irrigation available, if any
- iii) estimate of the project along with quotation of pump set
- iv) certificate from

A Ground water department

- i) availability of water in that area
- ii) water's suitability for irrigation purposes
- iii) distance criteria from well to another, one tube well to another.

B No dues certificate from

- i) Government
- ii) Cooperative society
- iii) Commercial banks and other leading banks within the area
- iv) Title deed in original in case acquired by
 - a) sale then sale deed
 - b) will then registered will
 - c) inheritance then records of rights from Talathi (Patwani)
- v) records of possessing the land
- vi) photo of loanee
- vii) E.C. certificate from Registrar's office - land to be mortgaged as a security is free from encumbrances - title is good.

2. The field inspection and study means going on the spot where the project actually will be taken up physically after informing the applicant so that applicant may help him in conducting inspection and study. This involves the verification of the facts submitted by the applicant along with loan application and study of the soundness of the project, its technical, economical and financial feasibility.

The following points are taken into consideration at the time of spot inspection :

- 1) location of the field where the project will be set up - taken up - its distance from the village
 - 2) type of the soil - its suitability for the recommended crops - cropping pattern
 - 3) soundness of the project - A economical - By an appraisal of the project - predevelopment income - post development income - surplus - thus the loan eligibility of the cultivator is taken out.
 - 4) calculation of repaying capacity of the applicant verification of the yearly farm and off farm income of the cultivator - expenses - (including consumption of all the family) then taking out surplus.
- B Technical appraisal - depth, radius, distance, cost
- 4) availability of inputs - to cope with the cropping pattern - he will adopt after development.
 5. creditworthiness of the applicant
 6. verification of the land - whether actually possessed ~~by~~ and cultivated by the applicant or not.

7. willingness of the cultivator - whether he is actually interested in the taking up of the project or not ?

The importance of the processing of the loan application can be seen from two sides - bankers and cultivator's -

Banker's point of view -

- 1) Safety of the bank's money - advancement is on sound lines - no legal complication in recovering the loan
- 2) knowledge of the surplus with the cultivator.
 - 1) bank has an assess of the yearly net surplus with the loanee - so that repayment instalment and period can be fixed
 - A) in case of big cultivator - period of repayment can be decreased - instalment can be increased
 - B) in case of small cultivator - period of repayment can be increased - instalment can be decreased
- 3) Soundness of the project - investment is justified economically ^{viable} and technically feasible.

Farmer's point of view.

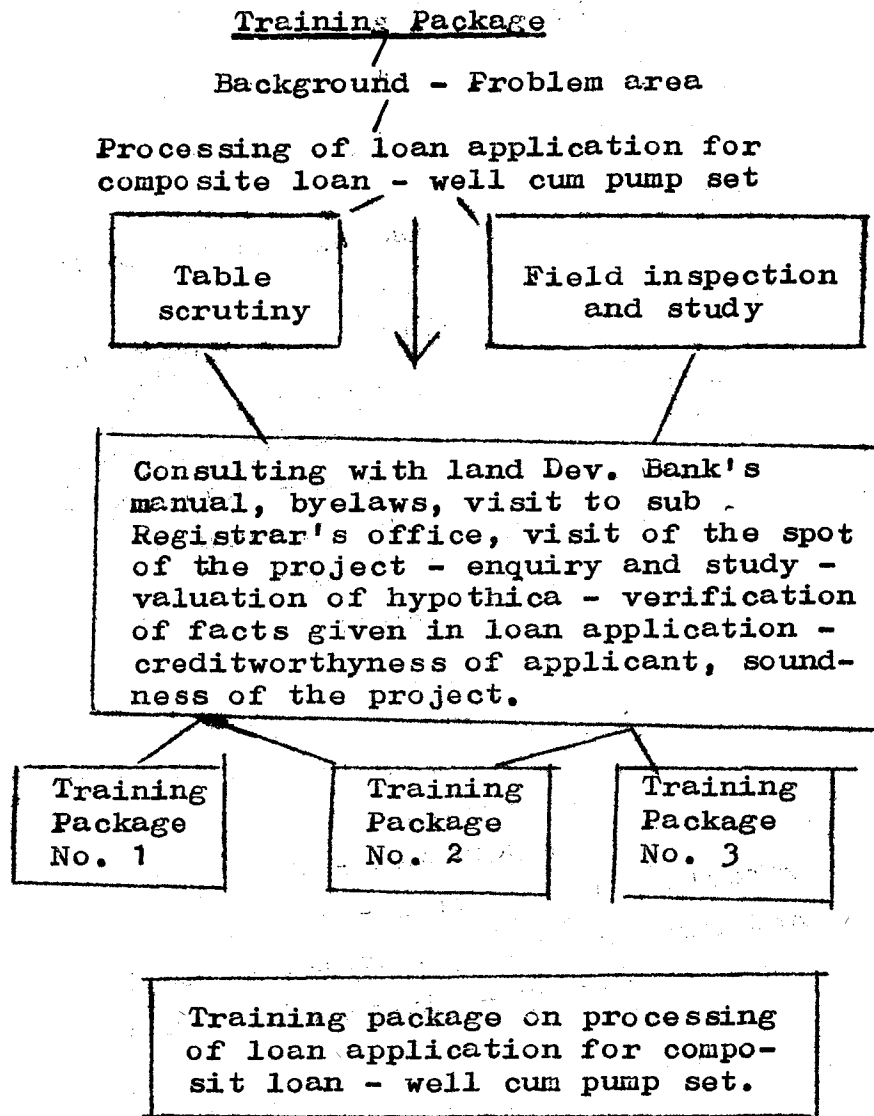
- 1) Expectation of net surplus income - to repay the loan - to meet the increased input of the project and increased expenditure of their own
- 2) in case of income (net incomes) requires to be diverted towards the repayment of the loan in a major portion :
 - A) the cultivator can establish his own consumption at his present consumption level or
 - B) increase his consumption level in case net surplus is more and requires to come up on the need base level.
- 3) Investment is justified and financially feasible to take up.

Summary

1. Purpose of loan : permanent improvement of land.
2. Meaning of processing of loan application - does not mean the delay in sanctioning the loan but ensuring that all the required papers and documents for loan have been submitted - verification of the correctness of the facts and figures submitted in the papers.
3. Functions of processing of loan application-
 - 1) table scrutiny, 2) field inspection and study
- 3) object of processing of loan application.
 - 1) project is economically feasible, commercially remunerative
 - 2) investment is justified.
5. Importance - bank's point of view - cultivator's point of view - safety of money - knowledge of net surplus with cultivator - keeping in fixation of loan instalment - diversion of major portion towards repayment of loan in case more net surplus is available thereby decreasing the period of repayment and vice-versa.

investment is justified - consumer can establish his consumption in case wants to divert a major portion towards repayment.

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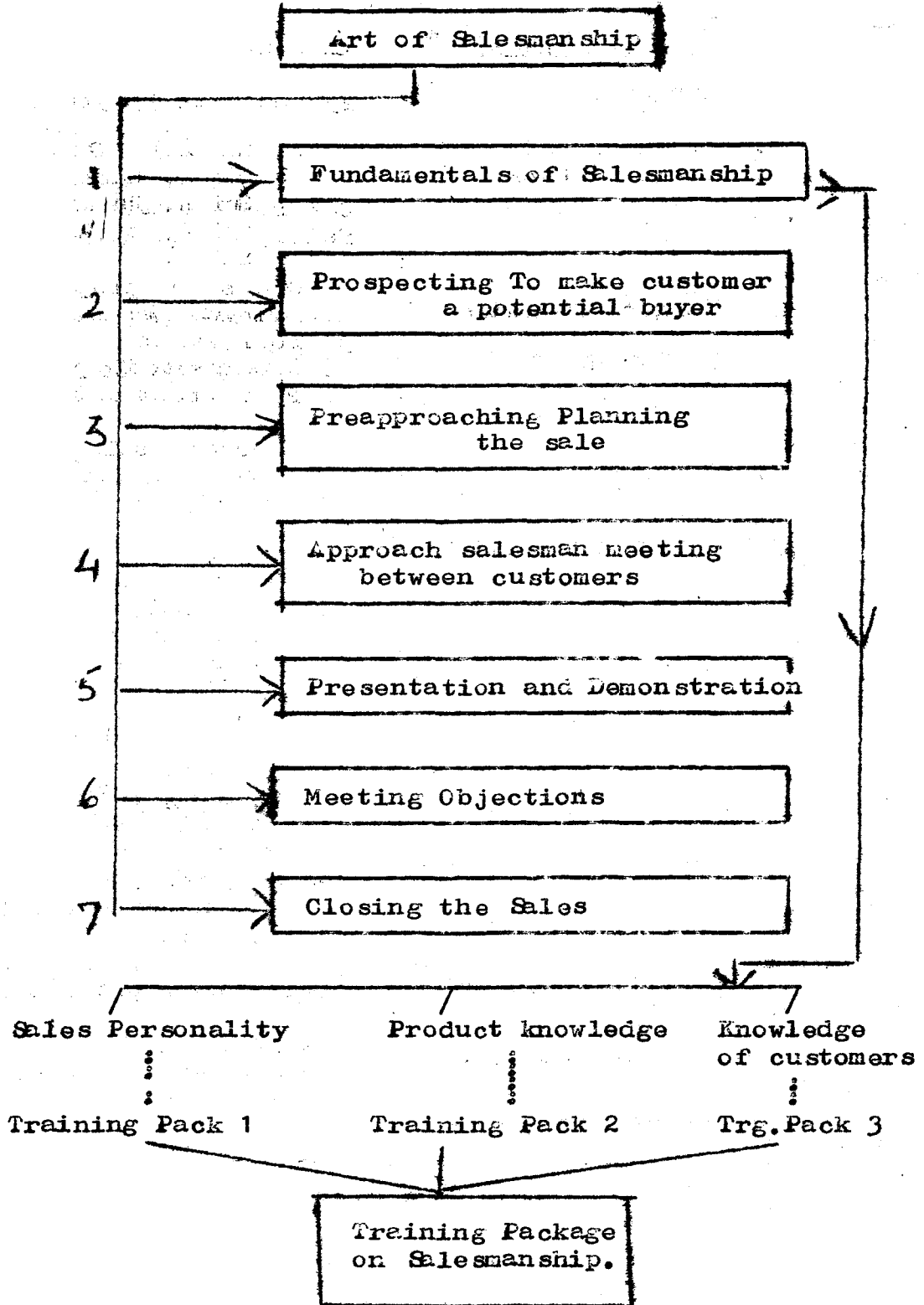
Lesson plan - over head projector -
transparent papers - flip charts -
black boards.

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PROJECT FORMATGROUP II

1. Name of the Project : Training of Counter Salesmen of Weavers Cooperative Society
2. Media : Lecture Method
Audio-Visual Aids
3. Language : English
4. Producers of Training Pack :
 1. Sri A.K. Sah
 2. Sri K. Chellappan
 3. Sri A. Ramakrishnan
 4. Sri P. Barua
 5. Sri G.A. Dar.
5. Target Population : Salesmen (20 in each batch)
6. Age group : 25 years to 35 years
7. Ability : Can read, write and converse fairly in English
8. Relevant factors :
 1. Goods are properly displayed
 2. Pricing has been done
 3. Poor sales
 4. Goods are in plenty
 5. Poor treatment to customers
9. Main aim : To increase sales
10. Terminal objective :
 1. To acquaint the art of salesmanship
 2. To maintain high degree of customer relationship
 3. To increase sales
 4. To increase the efficiency of salesmen.
11. Attached document : Sequence sheet cum script of lessons.
Teachers note
chart, transparencies etc.

A Training Package on Salesmanship in Weavers Cooperative Society.



SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Introducing the subject	Page Number	1
		Unit Number	

Sr
No

- ~~1. The art of salesmanship remains the same irrespective of types of business organisations - private, public and cooperative Textile, grocery, equipment etc~~
- ~~2. Salesman acts as a bridge between producers & customers~~
- ~~3. Salesmanship is an art to handle the people and solve their problems upto their satisfaction in positive manner~~
 - 1. concentrate on fundamentals of salesmanship first step
 - 2. A good salesman's career requires improvement in three dimensions :
 - i. pleasant sales personality
 - ii. adequate knowledge of product
 - iii. adequate knowledge of customers.
- ~~4. The art of salesmanship envelops seven areas of knowledge~~
 - i. fundamentals of salesmanship
 - ii. prospecting
 - iii. preapproaching
 - iv. approach
 - v. presentation & demonstration
 - vi. meeting objections
 - vii. closing the sales.

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject Sales Personality	Page Number 2
	Unit Number 1

Sr
No

1. Personality is the sum total of all traits a man possess. By these qualities he makes impression on others.
2. The qualities are of two types
 - i) positive qualities like loyalty, honesty, cooperation, kindness etc.
 - ii) negative qualities like dishonesty, ingratitude, discourteous etc.
3. These qualities may be inherent and they can be acquired also by association and development.

1. Personality traits may be grouped in four headings.
 - i. physical traits
 - ii. mental traits
 - iii. social traits
 - iv. character traits

1. Physical traits includes external appearances of a man
 - i. sound health
 - ii. good breath
 - iii. sweet voice
 - iv. attractive posture
 - v. smart appearance.

2. Mental traits - internal qualities
 - i. accuracy, ii. alertness
 - iii. imagination, iv. initiative
 - iv. memory, vi. zest-observation
 - vii. self confidence
 - viii. firm determination
 - ix. cheerfulness

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject	Adequate Product knowledge	Page Number	4
		Unit Number	2

Sr
No

1. Adequate product knowledge is a fillip to knowledge and personality gap :
 - a) inspires confidence
 - b) meeting consumer's objection
 - c) creation of interest in job
 - d) brighter future prospect.
 - e) development of skill and expertise
 - f) projection of good image

2. Salesman are required to know following aspects of a product
 - a) tangible qualities of product like physical features and make
 - b) intangible qualities of product like relative features - latest style, fashionable colour, etc.
 - c) the behaviour of goods in use like durability, easy to use
 - d) miscellaneous knowledge about organisation and its people.

3. Salesman can acquire product knowledge through following sources :
 - a) experience, b) advertisement
 - c) consultation with fellow worker
 - d) visiting the site
 - e) trade journals & literatures
 - f) trade meeting & exhibition
 - g) specialised education and training institutions.
 - h) manufacturers literatures and assistance.
 - i) customers remarks

SEQUENCE SHEET FOR AUDIO-VISUAL MATERIAL

Subject Adequate knowledge of customers	Page Number 5
	Unit Number 3

Sr
No

- ~~1. The third area of fundamentals of salesmanship is to read and identify the types of customers~~
- ~~2. The nature and psychology of man are different to each other. It depends on socio-economic background, education environment, sex etc.~~
- ~~3. Identification of nature and psychology of each customers is essential. Some idea can be formed by following process~~
 - ~~a) manners of customers in the shop~~
 - ~~b) clothes and appearance~~
 - ~~c) conversation, d) action.~~
- ~~1. Practically customers can be said put in four categories.~~
 - ~~A. Organisationally~~
 - ~~i) members~~
 - ~~ii) non members~~
 - ~~B. Sex : i) females, ii) males~~
 - ~~C. Age, i) children, ii) adult~~
 - ~~iii) old.~~
- ~~D). Nature & psychological set up~~
 - ~~i) friendly type,~~
 - ~~ii) talkative type~~
 - ~~iii) serious type~~
 - ~~iv) impulsive type,~~
 - ~~v) salient type,~~
 - ~~vi) aggressive type,~~
 - ~~vii) argumentative type~~
 - ~~viii) assertive type~~
 - ~~ix) handicapped type~~
 - ~~x) nervous type~~
 - ~~xi) Indussive type~~
 - ~~xii) snob type~~
 - ~~xiii) untruthful type,~~
 - ~~xiv) time waster type~~
 - ~~xv) in a hurry type~~
 - ~~xvi) sarcastic type~~

1. Salesman should try to know traits & tendencies of customers to apply pin pointed treatment to them to close sales successfully.
2. Some traits and tendencies of various types of customers and the way of their treatment are as follows. It is just a guidelines and rests can be done depending on salesman's knowledge, intelligence, tact and wisdom.
3. Guidelines under three headings :

<u>Types of customers</u>	<u>Traits and tendencies</u>	<u>Treatment</u>
1. Member customers	Sense of ownership, mastery movement, asking welfare, problems etc. cooperative mentality	Be courteous reply in gentle tone, show goods confidently, give him due care, importance in dealing
2. Friendly type	pleasant in conversation cooperative	Be friendly and lead him skill fully to the product.
3. Talkative type	Talking as habit, talking on various subjects	Allow him to talk, patiently and slowly bring to the product
4. Serious type	Serious look, talk less, purposive talk	Show respect & courtesy. Approach with smiling sales talk
5. Impulsive type	Actions are quick, jerky & impatient	Be active and prompt, give facts quickly and briefly
6. Silent type	calm, silence looking here and there, waiting	find out why he is silent, open his silence, preserve him & be friendly, arouse interest through demonstration, may cut intelligent jokes.

<u>Type of customers</u>	<u>Traits & tendencies</u>	<u>Treatment</u>
7. Aggressive or illmannered type	Aggressive and illogical in talks, stirical remarks, critic of every issue	Be patient, polite, and good nature let him talk and calm down to subject
8. Assertive or decisive type	confident in talk and action, logical approach	Allow him to talk, you listen feed his ego tactfully ask his opinions
9. Indecisive type or nervous type	Quick and nervous actions, instable talk, hanging in one goods to another.	Be positive, friendly, and inspire confidence to take decision. Show less goods and consive him by demonstration.
10. Argumentative type	Logical but dispute every issue hard to consive.	Be polite and patient, consive with proofs
11. Handicapped type	Physically handicapped	treat him as normal with required concessions
12. Snob type	Boasting nature, high talks	Feed his ego, use subtle flattery, ask his advice.
13. Untruthful type	clever talk and movement	Have knowledge of products & competitor. Be careful in talk
14. Sarcastic type	very annoying & makes wounding remarks	ignore the remarks, tact fully deal him
14. Time waster type	to pass his times	Let him look & have favourable attitude. Reply his querries

15. Hurry type	Impatient, looking at watch, hurry	Be prompt, brief in sales talk, attend and give goods quickly
16. Children	Naughty, childish action, easy to recognise	be good nature and keep him in good humour
17. Adult type	having some variety	Use respectful words, attend with courtesy, satisfy his variety and deal smiling.
19. Old people	Proudy, wise feeling, superiority complex	satisfy his proud, give weightage to his talk, ask advice, give him importance.
20. Women	easy to recognise having keen senses desires change, superior feelings may be irritable, needs variety etc.	treat her like a queen, appreciate her talks, allow her to look, lift, feel, fuddle and smell the article. Satisfy her whims in talk by putting the product. Appreciate the kids if accompanied.

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Group IITeacher's guide for using the training package on
Training Counter Salesman in Weavers Cooperatives

1. Aim of the Lesson : The broad aim of the lesson is to expose the counter salesmen in weavers cooperatives to the fundamentals of salesmanship with special reference to their personality traits, how to treat the varied types of customers and the need for product knowledge while selling their products.
2. The End-results of the Lesson : The terminal objectives of the lesson (i.e. at the end of the lesson) the participants should have developed adequate knowledge and skills in the areas of
 - i) his position and role as a vital organ in the salesforce of his organisation;
 - ii) the characteristic features of a successful salesman;
 - iii) read the minds of the prospects, diagnose them exactly and prepare himself to meet their behaviour;
 - iv) develop the degree of human behaviour and relationship that he has to cultivate with the varied types of customers
 - v) know wherefrom he can acquire the product knowledge and the need for using the same in his sales talk; and
 - vi) present himself properly before the prospects and thereby effect increase in sale of the goods.
3. Target Population : The training package is designed to impart knowledge and skills to the following target population.
 - a) Age : 25 to 35 years
 - b) Experience : Directly recruited salesmen in weavers cooperatives who have not completed more than 2 to 3 years of service in their position - salesman and Sales Supervisors can be admitted who can converse (read and write) in English.

Out of the 7 areas of the Art of Salesmanship, the fundamentals of salesmanship occupies the foremost place in the order of importance to be taught to the salesmen before entering to the other areas.

Tools and Techniques : To make the lesson more effective the following teaching techniques should be employed.

a) Role Play : Before the lesson is imparted a few participants will be allowed to act as salesmen and a few will be required to act as customers. The treatment of the salesmen will be observed and notes taken by the teacher for amplifying them in the course of his talk.

b) Practical Visit : The salesmen will be grouped into 4 groups of 5 each and sent to various big and important private shops in the city and they also should be sent to few weavers cooperative societies (branches of the society where counter sales is made) and they have to attempt a comparative picture on various aspects of salesmanship covered in the class room session.

c) Cases : Typical cases of the confrontation of salesmen with the customers can be prepared in different situations and the same could be discussed in the 4 groups. This will cross fertilise their ideas and serve as think tank exercise. This will in a way bring the field situation in the class room. Case studies of Apex societies, if any may be prepared and discussed to enable the participants to understand the various problems of marketing of handlooms goods produced by the weavers cooperatives.

Physical arrangements of the class room : The maximum number of the participants would be 20. They would be seated in the round/square shape leaving space for the lecturer's table and the teaching aids on one side.

Teaching aids required : Black board and chalk, magnetic board/
flannel board, flip chart board and over head projector.

Presentation : With the introduction by lecture, each module can
be presented in seriatum. At the end of each module, questions and
discussions can be held before proceeding to the next modules.
Before using the teaching aids, questions can be put and answers
elicited and written on the black board and relate them to the
modules prepared for imparting the subject by the teacher.

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NATIONAL WORKSHOP ON AUDIO VISUAL AIDS
1.5.1979 to 19.5.1979

EVALUATION FORM

A. 1. Coverage : (strike out which is not applicable)

- a) Your opinion on the coverage of the subject matter in the syllabi Adequate/inadequate/Excess.
- b) If you consider the coverage of the subject matter in the syllabi as to be inadequate what new topics you would like to be added :
- a)
- b)
- c)
- c) If you consider the coverage of the subject matter excessive in relation to your requirements which topics you would like to be dropped
- a)
- b)
- c)

A. 2. What is your opinion about the allocation of sessions to the following topics :

- a) Adult psychology Adequate/inadequate/excessive
- If inadequate, suggest number of sessions to be increased No. of sessions _____
- If excessive, suggest number of sessions to be dropped No. of sessions _____
- b) Communication ~~system~~ ^{process} Adequate/inadequate/excessive
- If inadequate - number of sessions to be increased No _____
- If excessive - number of sessions to be dropped No _____

- c) ~~Technique of film appreciation~~ Adequate/inadequate/excessive
 If inadequate suggest No. of sessions to be increased : No. _____
 If excessive suggest No. of sessions to be dropped No. _____
- d) Use and effectiveness of Audio visual aids : Adequate/inadequate/
 excessive
 - If inadequate, No. of sessions to be increased No. _____
 - If excessive, No. of sessions to be dropped No. _____
- e) Practical training in the operation and
 maintenance of Project Aids : Adequate/inadequate/
 excessive
 - If inadequate, No. of sessions to be increased No. _____
 (with name of the Project Aid)
 - If excessive, No. of sessions to be dropped No. _____
 (with name of the project aid)
- f) Technique and demonstration of preparing
 training package Adequate/inadequate/
 excessive
 - If inadequate, No. of sessions to be added No. _____
 - If excessive, No. of sessions to be dropped No. _____

B. Treatment and handling of subject (teak mark)

Subjects

- 1) Psychology of adult learning : Excellent/very good/
satisfactory/poor
- 2) Communication system and teaching :
techniques Excellent/very good/
satisfactory/poor
- 3) Salient features of projected aids: Excellent/very good/
satisfactory/poor
- 4) Salient features of non-projected
aids Excellent/very good/
satisfactory/poor
- 5) Role of audio visual aids in modern
teaching Excellent/very good/
satisfactory/poor
- 6) Concept of training package : Excellent/very good/
satisfactory/poor

- | | |
|--|---------------------------------------|
| 7) Demonstration of training package | Excellent/very good/satisfactory/poor |
| 8) Practical sessions on operation and maintenance of projected aids | Excellent/very good/satisfactory/poor |
| 9) Demonstration session on preparation of non projected aids | Excellent/very good/satisfactory/poor |

11) C-1 Skills acquired

Have you acquired the skills in the operation and maintenance of the following machines:

- | | |
|---|---------------------------|
| 1) Bell & Howell 16 mm projector | Fully/partly/not acquired |
| 2) RCA -do- | Fully/partly/not acquired |
| 3) Overhead Projector | Fully/partly/not acquired |
| 4) Slide Projector | Fully/partly/not acquired |
| 5) <u>SLM cameras</u>
Film strip projector | Fully/partly/not acquired |

(If the skills in the operation of any of the machine is not acquired give reasons for that)

G-2. Have you acquired the skills in the preparation and handling of the following non-projected aids :

- | | |
|---------------------------------------|---------------------------|
| 1) Flip over chart | Fully/partly/not acquired |
| 2) Overhead transparencies | Fully/partly/not acquired |
| 3) Flannel cut outs/magnetic cut outs | Fully/partly/not acquired |

(If the skills in any of the above technique is not acquired, give reasons for the same)

C-3 Have you learnt the technique of preparing a training package (If not, give reasons for the same) Fully/partly/not acquired

C-4 Have you acquired the skills (visuals) of preparing the training package (If not give reasons for the same) Fully/partly/not acquired

D. Effectiveness of Training package

- i) What is your opinion about the effectiveness of the technique of training package in teaching (delete which is not applicable) Highly effective/very effective/more rately effective/not effective
- ii) Do you feel that you could use the technique in your training situation Yes/No
- iii) If 'No' what are the problems that you visualise in its use :
a)
b)
c)

E - 1. General

- 1) Do you feel that the objectives of the workshop has been Fully achieved/partly achieved/not achieved
- 2) Do you consider that the knowledge & skills acquired by you during workshop will help you in making the training: Highly effective/effective/not effective
- 3) What is your opinion about the overall treatment and handling of the workshop Excellent/very good/satisfactory/poor

