

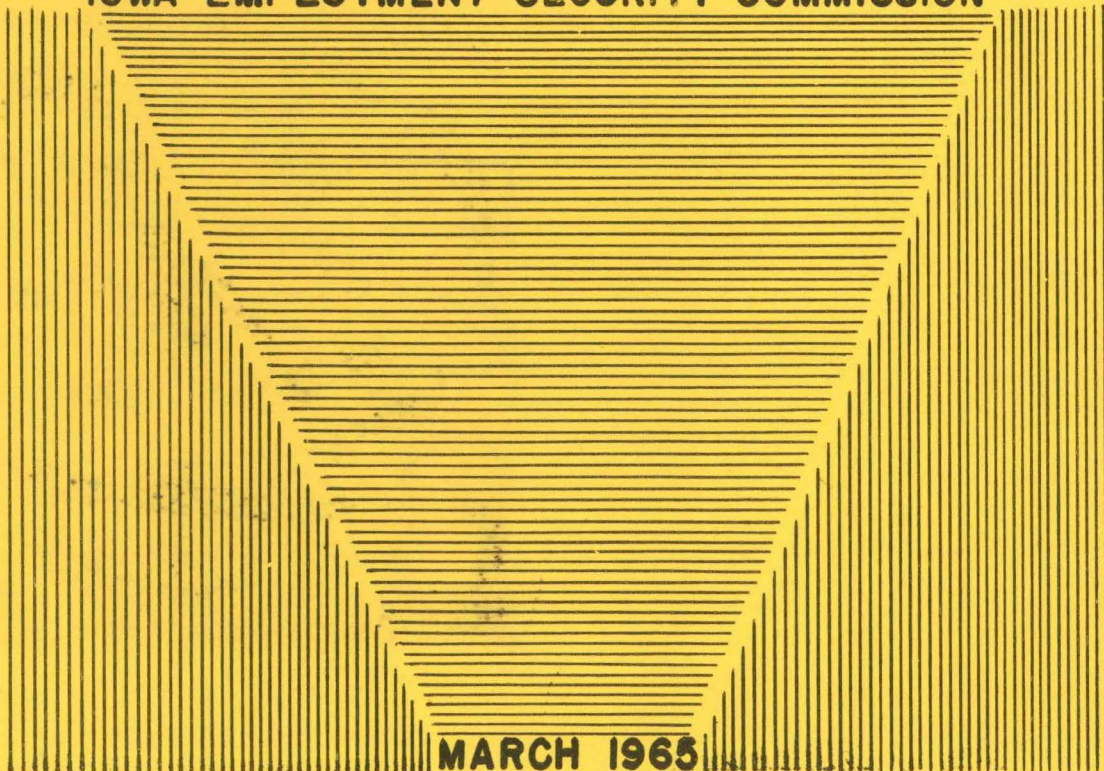
HF
5549.5
.T7
M48
1965

LIBRARY

Iowa Employment Security Commission
1000 East Grand Avenue
Des Moines, Iowa 50319

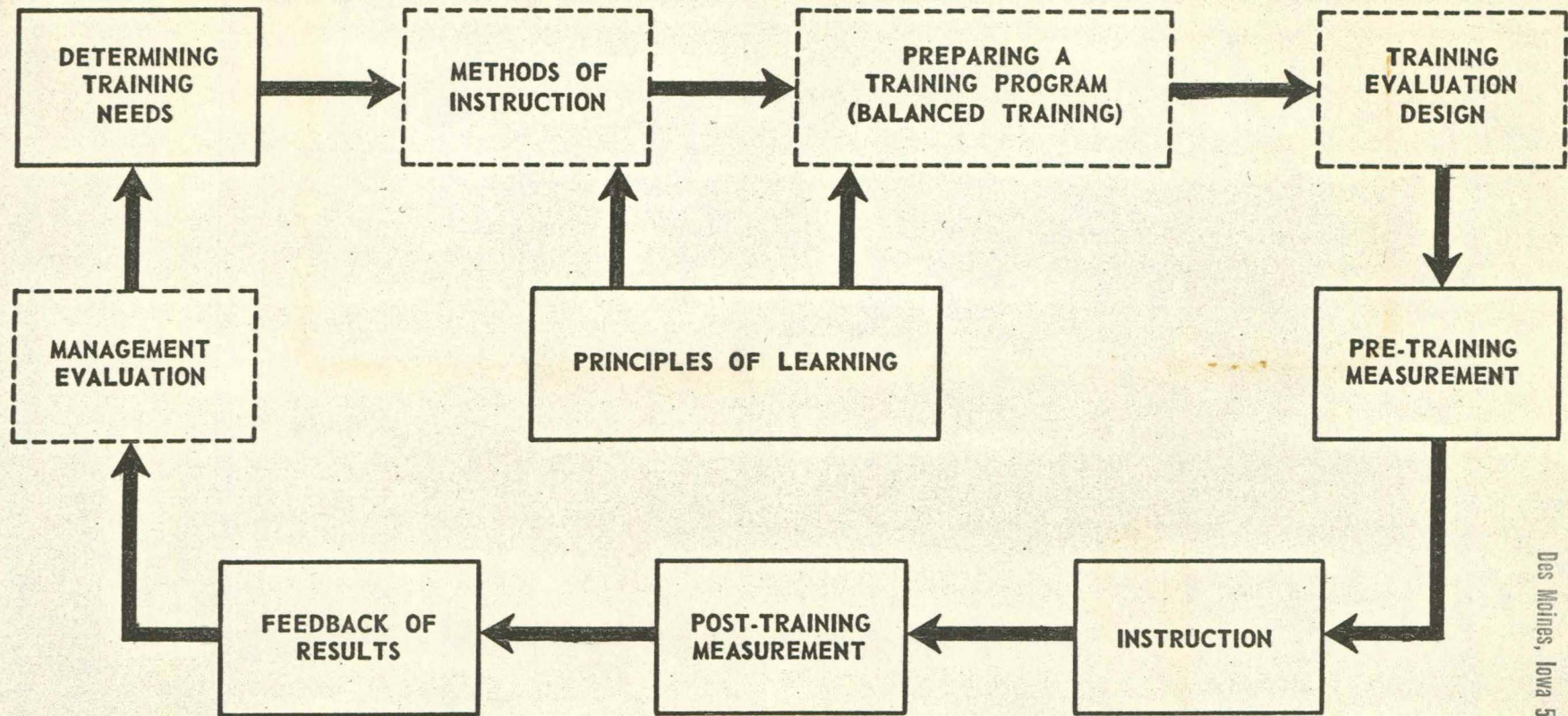
METHODS OF INSTRUCTION

* TRAINING DEPARTMENT
IOWA EMPLOYMENT SECURITY COMMISSION



658.31
low

THE TRAINING CYCLE



LEGEND

ACTION STEPS

THINK, PLAN, AND SET-UP STEPS

From Training: A Handbook For Line Managers By John H. Proctor and William M. Thornton, Copyright ©1961, The American Management Association, Inc., New York

Iowa Employment Security Commission
 1000 East Grand Avenue
 Des Moines, Iowa 50319

LIBRARY

CONTENTS

Foreword

Introduction

Purpose of Training	1
How to Determine Training Needs	2
Creating the Desire to Learn	5
Giving Information	7
Developing Employee Skills	9
Shaping Attitudes	10
Summary	11

Principles of Learning

Introduction to Fundamentals	13
Learning as a Process	14
1. Motivation	16
2. Objective	17
3. Doing	18
4. Realism	19
5. Background	20
6. Appreciation	21
Summary	22

Methods of Instruction

Introduction to Fundamentals	23
Student	23
Instructor	26
Five Stages of Instruction	28
1. Preparation	28
2. Presentation	29
3. Application	29
4. Examination	30
5. Discussion and/or Review	30
Four Principles of Instruction	31
Summary	32

Planning the Lesson

Introduction to Lesson Planning	34
Phases of Lesson Preparation	35
1. Determine the Objective	35
2. Selection and Organization of Subject Matter	36
3. Making Lesson Plans	36
4. Rehearse the Presentation	37
5. Checking Final Arrangements	37
Summary	40

Essentials of Effective Presentation

Introduction to Oral Presentation	41
Oral Instruction	41
1. Introduction	42
2. Explanation	43
3. Summary	44
Summary	48

Demonstration Method and Application Stage of Instruction

Introduction to Demonstration Method	50
Demonstration Method	50
Application Stage	54
1. Individual	
2. Team	
The Critique	58
Summary	59

Training Aids and Questioning Technique

Introduction to Training Aids and Questioning	60
Using Training Aids	61
Common Training Aids and Usage	62
Summary of Training Aids	66
Questioning Technique	66
1. How to Ask Questions	67
Summary	69

The Examination and Review

The Examination and Review Stage	70
Why Give Tests	71
Forms of Tests	72
Characteristics of a Good Test	73
1. Valid	73
2. Reliable	73
3. Objective	74
4. Discriminative	74
5. Comprehensive	74
6. Easily Administered and Scored	74
Administration of Tests	75
Summary	76
Review	77

FOREWORD

The basic responsibility of training employees is recognized as being a vital function of management. Those who are responsible for the successful accomplishment of the work of our agency are naturally also responsible for maintaining the effectiveness of the personnel who do that work. To that end all office managers, department and division heads, and all supervisors in both administrative and local offices have the responsibility of seeing that their staffs are adequately trained to function in the most effective manner.

To aid you in doing a better job of employee training we are providing this unit designed to give you information in those areas common to the "teaching--learning" situation. It is not a course designed on theory--but rather a short course providing practical, down-to-earth facts that have been tried and tested and found to be most effective in training others.

We hope that in the teaching others you will get the new employee started right.

We hope you will:

1. Establish a work climate that will encourage the new employee to do his best in learning his job and in developing as rapidly as possible.
2. Set standards of performance that the new employee accepts as fair but also regards as a challenge to his skills.
3. Give the employee the chance to show what he can do on his job.
4. Check as often as necessary to show that you are interested in the employee's progress.
5. Give the employee both the formal training and on-the-job training--"the special coaching"--he requires to meet your standards of performance.

INTRODUCTION

THE PURPOSE OF TRAINING

The training and staff development program of this agency seeks to develop in all agency employees those understandings, skills and attitudes which will increase efficiency and ensure courteous and effective service to our public.

All well managed organizations make it a basic policy to assist their employees to acquire the knowledge and skills needed to carry on the organization's work.

EXPLANATION:

This policy is sound, first, because the people who do the work in any organization must learn a great deal. We cannot often obtain employees who are ready-made and ready-to-work, the way we can buy a suit of clothes or a dress that is ready-made and ready-to-wear. We cannot employ people who have all the knowledge and all the skills they will need during their careers with our organizations.

This policy of training employees is sound also because the development of ability to carry on the work of an organization is too important a matter to leave to chance or solely to the initiative of employees. Although employees on their own initiative may pick up much of the knowledge and skill they need, this pickup method is generally inadequate and inefficient. It is slow, wasteful, often dangerous, and it frequently results in incorrect methods and habits of work.

Some organizations make each manager or supervisor fully responsible for the training of the people who report to him. Other organizations find it necessary to employ specialists whose chief business is to train. Even in these organizations the regular managers or supervisors also must train, because only they are in a position to teach a great many of the things that employees need to learn. These things are taught most effectively by having employees learn as they work under careful supervision.

How to Determine
Training Needs

It is generally agreed that the first requirement for efficient training is to consider carefully what training we need to do and what we aim to accomplish.

Present
Employees

Let's take a look at our present employees. Are they doing as good a job as they might? They may not be, even though they have been at the work for a period of time. Deficiencies may be remedied by training or they may not, for training is not a cure-all. An employee, for example, may not have the natural ability to develop the desired skill; and in this case it is as foolish to spend time training him as it would be to try to make a race horse out of a mule. On the other hand, it is quite possible that the effectiveness of some of our employees could be increased if they were to add to their knowledge and skill or improve their habits of work.

Even when employees have reached high levels of performance, additional training may be required. In many kinds of work it is necessary to keep moving forward to avoid slipping backward. We

Present
Employees
(continued)

must be sure, for example, that technical employees keep pace with advances in their fields. We must remember always to explain new or changed policies and procedures to employees whose work will be affected, and to be sure that these changes are understood and applied. When improved methods of doing a certain kind of work are developed, it is to our advantage as well as to the employees' to be sure that they learn the improved methods promptly.

Replacements

What about replacements? How seriously handicapped would we be if an employee suddenly resigned or became seriously ill? A frank answer to such a question may indicate the need for training certain employees for work other than their own. Key employees, like actors in a play, may need understudies, because "the show must go on."

And what about understudies for ourselves? Do we have someone trained to carry on our work without interruption in the event that we are selected for promotion? Or will we be paid the doubtful compliment of being considered indispensable in our present work? Even if the prospect of our own promotion is remote, we must be sure that someone is prepared to carry on when we are temporarily absent; otherwise we run the risk of being judged poor managers.

In addition to training for job fitness, there may be need for training in what may be called "organization fitness." The coach of a football team cannot stop with teaching each man to play his own position; the men also must be taught to play together as a unit. Every one of us who is in charge of a group of people can well afford to take a critical look periodically to see if there is room for

Replacements
(continued)

improvement in those things that go beyond narrow job skill.

Although training is not the correct treatment for all cases of inadequate organization fitness, training is likely to be needed when deficiencies result from insufficient information, inadequate understanding, or incorrect attitudes or habits of thought.

New Employees

So much for our present employees. The introduction of every new employee is the signal for asking: Will he have to learn anything before he can become a fully effective member of my working force? How can I be sure that he will learn, quickly and correctly, all he needs to know?

Rarely, if ever, do we employ a person whose knowledge and skill do not have to be supplemented. In some cases employees have much to learn about their jobs before they can begin to produce. In many cases, of course, the new employee is able to go to work with little additional preparation. The typist, for instance, knows how to type before she is hired. But even she must learn the local customs and procedures of the office.

The new employee needs to acquire more than narrow job knowledge. The football coach would not think of putting a new player, no matter how expert, into a game without teaching him the plays and the signals. Neither can we afford to bring in a new person without taking steps to fit him into the group - to teach him our "signals." The supervisor must help the new employee to learn and to conform to policies and regulations, to understand the functions of the

New Employees
(continued)

immediate unit and of the organization as a whole, to understand the relationship of his own work to the work of others, and to become accepted as a member of the group.

Need for training may be determined by either formal or informal methods. Generally both types are in common usage although the larger office or department tends to use more of the formal methods. We have listed below some of the techniques used in determining training needs:

Formal

Written Requests
Analysis of Records
Performance Appraisals
Tests of Examinations
Training Record Cards
Surveys
Supervisory Reports
New Programs

Informal

Oral Requests
Observation
Employee Counseling
Tape Recordings
Informal Office Visitations
Discussion of Operations
Training Sessions

Creating the
Desire to
Learn

Everyone is familiar with cases like that of the messenger who is too dull ever to do higher grade work, yet who can recite the name and batting average of every big league baseball player. This case emphasizes a simple yet far-reaching fact; namely, that people are much more likely to learn the things that they desire to learn. And this means that, as supervisors, we have the job of making employees want to learn that which they need to learn.

Recognizing
Deficiencies

People are most likely to develop a strong desire to learn if they recognize a deficiency, a need to learn. This recognition does not come about necessarily as a result of a boss' say-so. We have come to realize that genuine recognition is developed most surely when the

Recognizing
Deficiencies
(continued)

employee himself thinks through the facts and comes to his own conclusion. The wise manager or supervisor, therefore, instead of merely telling an employee, "You learn this," is likely to suggest, "Let's figure out together what you need to learn."

The desire to learn is strengthened when it is tied up with natural desires for personal recognition and for financial advancement, and the supervisor has every right to take advantage of this fact. He can do this best by demonstrating in practice that these rewards will be given when due.

Praise for
Progress

Since the desire to learn is sustained when the learner can see that he is making progress, wise managers or supervisors provide means by which progress may be shown. Scientifically conducted studies have proved that praise for progress made is one of the strongest incentives to further improvement. Experience bears out this fact, for we know what happens (or what doesn't happen) when we ignore the progress that an employee has made after weeks of hard work.

It is a cold matter of fact that praise is, in general, a far more effective incentive to learning than is reproof. This does not mean, however, that reproof is not occasionally a useful incentive. We know that there are times when a figurative crack of the knuckles is the best spur to improvement.

Reproof

Reproof is effective only when it remains an incentive - when it does not cause discouragement and break down the employee's confidence. It is doubtful whether we always fully realize how easily self-confidence is shaken. And we know that people don't learn when they

Reproof
(continued)

doubt their ability to do so or when they are upset and worried about themselves. As supervisors we have a responsibility for maintaining - and if necessary building - in our employees the self-confidence that makes them willing and able to learn.

Giving
Information

Although employees are paid primarily for what they do and not for what they know, it is worthwhile to give some attention to the question of imparting information and understanding before tackling the more complex problem of developing skill.

The development of skill - of the ability to do something expertly - is often the major purpose of training, yet we know that there are situations in which the development of knowledge and understanding is all that is required. A number of examples may readily be cited. An employee may be entirely competent in the skills required for his job and may need only to learn and understand the policies and regulations which officials have set down for his guidance. In many instances a free flow of information is all that is needed to assure coordination. If we are grooming an assistant or understudy, we will wish him to become familiar with all the work performed in the unit even though it may not be necessary for him to be able to do every kind of work.

Ingenious managers or supervisors find many ways of getting across information which their employees need. In addition to the obvious method of talking with an employee as the occasion demands, the following methods have been found useful. This list is not complete but it should serve as a reminder of the variety of ways in which

Giving
Information
(continued)

supervisors may impart information to their employees.

1. Reading assignments
2. Study of correspondence files
3. Routing of reports and letters
4. Routing of employees
5. Demonstrations
6. Staff meetings

No matter what methods of imparting information are used, a number of principles are worth keeping in mind:

1. Relate the new information to things that the employee already knows. Instead of merely presenting isolated facts it is much more effective, for example, to say, "You recall our procedure for reviewing applications. Well, after the application is reviewed, the next step is to . . ."
2. Tell why. People are much more likely to remember a fact or to do a thing according to instructions if they know the reasons for doing it that way.
3. In general, given information when it is about to be used. People learn facts more readily when they are confronted with an immediate need to use them; moreover, facts learned but not used are quickly forgotten.
4. Don't assume that learning took place. Check up without cross-examining, and if necessary present the information again.

Giving
Information
(continued)

In many cases our objective properly is to impart information and develop understanding, and we are justified in stopping at this point. Unfortunately, however, we often stop when we should go on to make sure that employees develop skill.

Developing
Employees'
Skills

By skill we mean the ability to do something expertly. That something may be to keep accounts, to run a machine, to write reports, or to manage an organization.

Much of what has been said about giving information applies also to developing skill, because a background of knowledge is needed for the skillful performance of most kinds of work. We all recognize, for example, that a surgeon must know a great deal about the anatomy and functioning of the human body before he can perform an operation expertly. Similarly, a mail classifier in a filing unit must have an understanding of the subjects with which letters deal before she can file these letters accurately.

Skill requires, however, much more than knowledge. All of us are familiar with the type of person who seems to know everything but who can accomplish little. It is one thing, for instance, to know all about the theories and techniques of management and quite another to be able to manage an organization.

Training for the development of skill is concerned primarily with filling this gap between knowing about a thing and being able to do it. Although many people can apply their knowledge without further assistance, they can make the application much more readily

Developing
Employees'
Skills
(continued)

and correctly when they are coached and guided.

There is a kernel of truth in the old chestnut about experience being the best teacher. This truth also is at the heart of successful training for skill. Here it is and it's simple: The most effective way to become expert in anything is to do it. No one can become a painter merely by watching an artist at work. Neither can a clerk learn to operate a calculating machine merely by being told how to operate it. Nor can a person become an effective supervisor without supervising.

Shaping
Attitudes

The development of skill and the development of attitudes are closely related because both essentially are concerned with building correct habits. An attitude is a habitual way of thinking that determines how a man will act when he is faced with a situation. We are all familiar, for example, with the attitude of resistance to change, for there are people who automatically and habitually react negatively to every new idea that is presented.

Importance

Although attitudes are often less clear-cut than skills, they are nevertheless exceedingly important from the point of view of effective operations. Personal morale is an attitude, though a complex one, and so is group morale. . Breadth of view, open-mindedness, readiness to learn, cooperativeness, and dislike of inefficiency are habits of thought that can be learned.

Managers and supervisors can influence the attitudes of employees to an important extent. When we as managers or supervisors give

Importance
(continued)

advancement or other rewards only to the people who have earned them, or show a sincere interest in the welfare of our employees, we are building favorable attitudes. When we encourage our people to think up new ideas, we are fostering the habit of improving work methods. On the other hand, when we approve slovenly work we are encouraging attitudes that result in poor work. If through thoughtlessness or hurry we neglect to correct unsatisfactory conditions, we are developing mental sit-down attitudes. These illustrations could be endlessly multiplied.

By-products

In itself, the process of training our employees for knowledge and skill yields valuable by-products in the development of correct attitudes. By giving an understanding of the important functions of the organization we contribute to morale. Through conferences in which the group works together to solve common problems, we get employees in the habit of working together and we develop a group spirit. The very fact that we show an interest in employees' development by helping them learn has a healthful effect on their attitudes.

It should be clear, then, that attitudes are learned largely through experience, and that the wise supervisor does what he can to direct this experience so that favorable attitudes will result.

SUMMARY:

This first chapter can be summarized by briefly outlining the methods and techniques which should be used by the manager or supervisor to assure that his/her subordinates learn the things they need to learn:

SUMMARY:
(continued)

1. He is continuously alert to training needs in his unit - to maintain or increase the effectiveness of experienced employees, to provide for replacements, to introduce new employees, to increase organization fitness.
2. He leads employees to recognize their shortcomings and clarifies his own mind and in their minds the knowledge, skills, attitudes, and personal qualities they need to learn.
3. He arouses in employees the desire to learn and to develop, and sustains their confidence in themselves.
4. He provides employees with or directs them to information they need; places them in situations in which they are sure to learn by experience; presents them with tasks or problems, at the same time showing them how to do the tasks and solve the problems; corrects them when they err; or by other methods assures that what needs to be learned is learned, quickly and correctly.
5. He utilizes all his contacts with subordinates to guide and develop their capacities.

PRINCIPLES OF LEARNING

Introduction to Fundamentals

The desired outcome of all instruction is for the student to learn! If you fail to learn during the class, I have failed to teach! You must be better equipped when you leave this class than when you arrived or no learning has taken place and I have fallen flat-on-my-face!

Most of you have conducted some type of training - youth groups, your own children, Sunday School classes or other workers. It is possible you conducted this training in an informal manner and possibly without the benefit of instructional training. This type of experience is helpful - especially if we utilize it as a basis for an organized approach. However, it may have a tendency to mislead you to a conclusion that teaching requires no special training. This is a misconception because if you will think back through your own experiences as a learner I'm sure you will recall that some teachers you have had were much more effective than others. One of the factors which probably contributed to their effectiveness as teachers was no doubt due to their knowledge and understanding of the Psychology of Learning - for our purposes we will speak of that portion known as The Principles of Learning.

Principles
of Learning

Prior to achieving a comprehensive view of the "learning situation" we need a background of knowledge pertaining to the Principles of Learning to use as a basis in the training process. We will consider

Principles
of Learning
(continued)

those fundamentals which deal with the nature of learning and the principles derived from it. They reveal the fundamental conditions under which learning takes place, and they indicate the methods and techniques that will create these conditions.

The Principles of Learning are used for many purposes. Once you have determined the objective and scope of a training unit, you will use them as a guide in visualizing the training problem; in collecting and selecting reference material; and in determining the arrangement of instructional segments for your outline.

During this period let's take a closer look at the Principles of Learning because it is through a complete understanding of them that we start our transition from an amateur to a professional trainer status. They serve as a foundation upon which we will build the remainder of the entire course, and I defy anyone to ignore them and become a good teacher!

Learning As
A Process

A. Learning can be defined as the process of acquiring new knowledge, skills, techniques and appreciations which enable the individual to do something that he could not do before. Learning is an active process. You will note that our definition places emphasis on the ability to do something. Students must be active both mentally and physically. A task of the instructor is to utilize various means of keeping the student active. The nature of the subject being taught will have a direct bearing on the means of keeping the

Learning As
A Process
(continued)

student active. The nature of the subject being taught will have a direct bearing on the means employed by the instructor in keeping the student active and participating in the instruction at hand. The five senses are the channels through which the individual is stimulated. Through these senses - sight, hearing, taste, smell and touch - he makes contact with things about him. The instructor should utilize as many of these senses as possible at one time. Particular emphasis should be placed on the sense of sight through the utilization of visual aids.

B. The only justification for instruction is learning. It is necessary that the instructor know what conditions help or induce students to learn. The conditions which stimulate learning have been developed into principles of learning. What actually causes a man to learn? What are the underlying principles of learning?

C. Fundamentals or principles of learning. From the nature of learning we can derive six generalizations which describe conditions under which learning takes place. These generalizations, or Fundamentals of Learning, are as follows:

1. Motivation
2. Objective
3. Doing
4. Realism
5. Background
6. Appreciation

Learning As
A Process
(continued)

Let's break these fundamentals down and examine each one individually.

1. MOTIVATION:

Few people learn by being exposed to information. People learn when they are physically, mentally, and emotionally ready to learn.

We must make a conscious effort to impart trainee motives leading to a sustained effort toward the training goal.

To motivate, show a need, maintain interest, encourage early success, give recognition and credit, remove emotional barriers, use competition and rewards.

When an instructor uses "rewards" to motivate, he appeals to the desire for gain, whether it be increased pay, prestige, comfort, or security. The average man will work voluntarily, or at least he will be reconciled to it, when he appreciates that something can be earned by the "sweat of his brow."

Normally, he wants to learn when he realizes that the instruction fills a personal need, when he is favorably influenced by his and the instructor's attitudes, and when factors favorable to learning predominate. You as a student in this course are motivated by a desire to prepare yourself for your present job. Motivation of your students may not be so readily attained. A knowledge of the objective will, in most cases, provide an appreciable degree of motivation.

Learning As
A Process
(continued)

2. OBJECTIVE:

A. Learning is more efficient when the trainee knows the objective toward which he should direct his efforts. He should know the long range, faraway goal, and should have a general idea of the intermediate goals. He should also know the relationship of all intermediate goals and how they fit together. Bit-by-bit learning, without understanding of how the bits fit together, is difficult and lacks significance.

Primarily, however, the trainee should know his immediate goal - the goal where the fruits of achievement may be harvested without delay. Even a donkey will move toward a desirable objective if it is held before him.

Instruction must let the student know exactly what he is to learn and what is expected of him.

*** EXAMPLE: Worker digging and refilling holes!

Personal Gain

B. Knowing what the objective is, what does he want to know next? He wants to know why it is important, what it means to him. Importance refers to the student's personal needs. There are many and varied basis for such needs. In the first place, a man sees a need for that which will contribute to his personal gain or welfare, or the welfare of the group to which he belongs. The student will strive to learn well when he sees that what he learns will be to his advantage. Even the person who avoids responsibility

Personal Gain
(continued)

if shown the personal advantages to be gained by becoming more proficient, may choose to apply himself to better himself.

Competition

C. When competition is introduced into a training situation, it opens possibilities for accelerating learning.

Rewards

D. Rewards motivate individuals to gain higher training objectives. Individuals will respond to the prospect of a special privilege, recognition, or intrinsic reward for meritorious performance in training. The same idea is tied in with competition.

Approval and
Recognition

E. Another basis for need is a man's pride. The average man wants his conduct and his accomplishments approved. This approval motivates some men to excel, others to be as the average, and some to avoid being the poorest.

3. DOING:

A. Doing or practice is another fundamental of learning. The purposes of practice are proficiency, retention, and proper reaction. They apply both to mental processes and physical processes. The high school student, for example, understands how to solve a quadratic equation after it has been explained and demonstrated. He verifies his understanding by solving an example. He may retain the knowledge after doing only one exercise for an hour, a day, or several days. The intention of his teacher is that he remembers it indefinitely. Accordingly, he is required to solve a large number of quadratic equations throughout the course so that the mental process will become well fixed in

Approval and
Recognition
(continued)

his mind. The physical skills are similar in treatment. Practice is necessary to develop a student's proficiency and cause him to retain it over a long period of time, so that in job performance he will react as his training has taught him.

B. Why is supervision essential during practice or on-the-job training? During practice the student requires supervision to avoid acquiring incorrect habits. It is realized how easily bad habits enter into office procedures.

*** Give examples.

Proper supervision prevents wrong learning. Correction of wrong habits is usually difficult. Supervision is important also in setting the pace of practice and directing efforts to the best advantage.

4. REALISM:

A. To maintain interest and aid understanding it is necessary to present realistic situations (usually by verbal and graphic illustrations). Learning situations should approximate actual situations. For example, in teaching benefit rights in the classroom, the use of actual case studies is an effective means of illustrating the practical value of the subject being taught.

B. Instruction should be pitched at a level commensurate with the level of maturity and experience of the student. It is important to us as instructors to keep in mind the academic

Approval and
Recognition
(continued)

level of a particular class. Our language, our phrasing, should be geared accordingly. Along this same line, we must be careful about our use of technical terms which may not be familiar to students. This is particularly true in the case of new employees. A new interviewer, learning how to interview, will learn quickly in a "role-playing" situation in which he actually is required to obtain information from an applicant and records it in the proper spaces on a regulation application card.

*** Give additional IESC examples.

5. BACKGROUND:

A. In order to make effective use of motivation and facilitate understanding, it is necessary for the instructor to refer to the student's previous learning. Effective use of the employee's background is accomplished by the use of logical development and teaching from the known to the unknown.

B. In teaching from the known to the unknown, all learning must start at the point of knowledge already possessed by the individual. The small child forms letters with a pencil only after he has learned to hold the pencil and make controlled marks with it. The mechanical skills must have a relation to something already learned or within the capacity of the student to grasp. The principle of progressing from the easy to the difficult is about the same idea.

Approval and
Recognition
(continued)

C. New experiences can only be interpreted by a trainee based upon his past experiences. A savage from the Amazon jungle when seeing an airplane for the first time may describe it as a strange bird. A trainee acquires learning by building on what he already knows - to disregard a trainee's background and knowledge is like trying to build a house without a foundation.

6. APPRECIATION:

A. Learning is complete only when the learner has acquired the attitude, appreciation, interests, and habits of conduct which will enable him to apply correctly the things learned. The appreciation developed by the student should be a direct result of previous planning and premeditated effort on the part of the instructor. In preparing his subject, the instructor should determine those appreciations that would be desirable for the student to acquire. In the presentation, an all-out effort should be made to drive these points home. To give an example of a practical approach to the principle - consider the M1 rifle. The instructor could instill in the minds of the students that the weapon is only as good as the operator; he could display the badges awarded for expert, sharpshooter, etc., to create a desire to become a good marksman; combat examples of soldiers lives being saved by efficient disassembly would impress upon the student the importance of this phase of instruction.

B. When intermediate results are satisfying to the trainee, he learns more quickly. He is encouraged to go ahead. But learning

Approval and
Recognition
(continued)

is not complete until he has acquired (1) emotional controls and (2) the attitudes, appreciations, interest, ideals and habits of conduct that will enable him to apply effectively the things learned. It is a matter of spirit rather than intellect. Every instructor must recognize that his ultimate goal is to train people and not merely to teach subject matter.

SUMMARY:

We, as instructors, must never lose sight of the fact that learning is an active process - to learn, the trainee must be kept active mentally, physically and emotionally with learning situations which will require maximum use of the senses. This can be accomplished if you, as an instructor, know and appreciate the value of the following fundamentals/principles of learning:

Keep in mind:

- (1) These fundamentals are generalizations.
- (2) All of them are mutually supporting.
- (3) They identify the fundamental conditions under which learning takes place.
- (4) They apply, in varying degrees, to all teaching situations.
- (5) If utilized properly, a large portion of our instructional problem is resolved.

You must remember these fundamental principles of learning:

- | | |
|---------------|-----------------|
| 1. Motivation | 4. Realism |
| 2. Objective | 5. Background |
| 3. Doing | 6. Appreciation |

METHODS OF INSTRUCTION

Introduction to Fundamentals

During the preceding period we took a close look at the nature of learning and the fundamental principles of learning. Now we should become better acquainted with the fundamental elements of any instructional situation:

- (1) The student or trainee
- (2) The instructor; developing instructional strengths and overcoming weaknesses
- (3) Development of instruction through its five stages (teaching process).

At this point, I would like for you to imagine yourself in an actual teaching situation and try to determine what a knowledge of these fundamental elements would mean to you.

A. The Student:

1. First, let us discuss the instructor-student relationship. Let us remember that learning is a "two-way" proposition between the instructor and the student. Prior to preparing a lesson, an instructor should know something about his student (if he is not familiar with the student's background) their approximate level of maturity (age), educational level school status, previous experience, etc. This information is helpful when determining the approach to be used and the speed of presenting material.

Information about the student assists the instructor in determining the elements of his instruction which need particular emphasis. For the same reason, a public speaker desires to know something about his audience before he speaks. In your instructional situations in your offices or departments every effort should be made to know your trainees personally - to know something of their individual problems and previous experience. We all know that any group of persons will contain various types of individuals. However, it should be borne in mind that there are certain characteristics common to most trainees:

- a. Practically all the trainees with whom we work in each local office or department possess an appreciable degree of mental, emotional and physical maturity. We should deal with them with that in mind.
- b. Most trainees have a serious purpose and are eager to get the most from their training if they are motivated properly.
- c. They are keenly interested in the practical application of what we are teaching them. Sometimes the practical value is not apparent to them. They are interested in the why and how of what they are asked to do.
- d. Trainees are quick to recognize good instruction, and just as quick to detect poor instruction. They respect the instructor who gives an effective presentation.

e. Most students are capable of learning when properly taught.

2. Tips to instructors. The following elements of instruction should be followed by the instructor in dealing with his students.

a. Never bluff to cover lack of knowledge. If the instructor doesn't know the answer to a student's question, he should be frank and say that he doesn't. However, he should find the answer and give it to the class as soon as practicable. Honesty and frankness bring respect, while bluffing is one of the surest roads of gaining the reputation of an ineffective instructor.

b. Avoid profanity and obscenity. The use of profanity and obscenity brings a loss of dignity and class respect. This is particularly important in dealing with the young trainees. They acquire distasteful language too rapidly without any help from instructors. There was a time when our schools in the military service permitted the extensive use of vulgar stories as interest factors in class. However, now such practices have diminished to a great degree. Proper language is important in creating a suitable atmosphere for learning.

c. Don't be sarcastic and don't ridicule the student. Normally he is helpless to retaliate, but he can resent it privately and as a result close his mind to learning. When a student gives an incorrect answer before the class, he should be corrected in such a way that he is willing to accept the proper answer as given by the instructor. Sometimes this can be accomplished by giving the

student credit for any minor element that was only remotely and partially related to the correct answer. This will assist in making the student receptive to further instruction.

d. Never talk down to your class. What does this mean? Make your class feel that you consider yourself fortunate in having acquired experience and knowledge which you wish to share with them. Don't give the class the impression that you are doing them a big favor in letting them in on the "know". The instructor can be confident without giving the impression that he considers himself one of the "select few".

e. Don't lose patience. Your presentation may not be as readily understood as you think to some members of your class. There may be a shortcoming in your presentation which would result in a need for repetition of certain items presented or additional instruction for certain members of the class.

f. Use every opportunity to impress the trainee with the importance of what is being taught. The purpose of training is to insure success in our everyday activities. The student should know how the instruction at hand fits into the over-all purpose of the agency.

B. The Instructor

We have been looking at the student, now let us see what the qualifications of a good instructor are.

??? What are some of the qualifications of a good instructor?

1. Knowledge of the subject
2. Knowledge of methods of instruction
3. Good personality
4. Leadership
5. Professional attitude (interest in his work).

Will you examine yourself in light of these qualifications? Do you have any thoughts as to how you may improve? How can an instructor improve?

- a. Develop an appreciation for basic elements of good instruction. Learn what good instruction is composed of.
- b. Observe other instructors. Don't try to imitate them, but pick up ideas from them and try to think of better ways to present material.
- c. Self-analysis. Evaluate yourself. Determine where your weaknesses lie. Don't get in a rut; analyze your own performances from time to time.
- d. Seek help from associates. Request their help for improvement. Ask other instructors to observe your classes and evaluate your presentation. Be receptive to ideas presented by experienced instructors in your office or department.
- e. Make constant effort to improve. Improvement comes through practice. Don't let yourself be

entirely content with your presentation; try to concentrate on improving on at least one phase each time you present a training.

C. Five (5) Steps or Stages in Instruction Development:

We have discussed characteristics of the student and instructor qualifications which lead to effective instruction. Now let us examine the five stages of instruction. Think for a moment of some instructional activity in which you have been engaged. In carrying out this class successfully, the following factors were involved:

1. The plan (preparation)
2. Issuance of instructions to trainees
(presentation)
3. Execution of the instructions by trainees
(application)
4. Success or failure of the trainee (examination)
5. Determination of ways of improving in next training session (discussion and/or review)

These same factors apply to all instruction.

/??? What must an instructor do before he actually appears before his class?

1. Preparation. What is included in this stage? Some of the factors to be considered are these:
 - (a) The instructor must determine just what is to be taught;
how the available time will be used; areas and facilities

available; methods to be used in the instruction; materials, equipment and assistants needed. (b) The instructor must carefully study the subject he is to teach (this calls for digging into references and drawing from his experiences and experiences of others); prepare a lesson plan to guide his instruction (the lesson not only insures coverage of all aspects of the scope but leads to a logical sequence of presentation); (c) Rehearse. The instructor should rehearse to the point of convincing himself and his superior that he is ready to appear before the class. Why is preparation such an important element in the stages of instruction? It is important because all other stages depend on it.

2. Presentation. What are the things the instructor must consider in the presentation stage? (a) He must provide a proper introduction which will motivate students and give them a guide concerning what will follow. (b) He must select the method which best presents the material to the student. His selection will be determined by the nature of the material and the facilities available. These are types of presentation which may be employed: lecture, conference, demonstration, or combination of these. (c) The instructor must select a type of presentation best suited to the particular group concerned.
3. Application. Most instruction stresses application. Why? We learn by doing. Application is considered the most effective form of learning because it is the natural and easy way to learn.

As is true with many other activities, many of our agency subjects cannot be learned by any other means. We teach our children to drive the family car by putting them under the steering wheel. The automobile mechanic learned his trade by working in an automobile repair shop. It is important to remember that this doing phase must be properly supervised to prevent the acquisition of improper techniques by the student.

4. Examination. Why is examination included as a stage of instruction? The examination enables the instructor to determine whether or not he has been effective and to detect points which may require further instruction. The examination may reveal that certain students need individual instruction in certain areas.
5. Discussion and/or Review. Each period of instruction should be concluded with some form of summary discussion or review. This may include the mentioning of key points covered during the period, questions from the students on points that were not made clear and a statement regarding the value of the subject covered during the period and suggestions.

D. There are four principles that underlie all effective instruction.

These principles are:

1. Based upon good psychological foundations and much experience.

2. When properly and appropriately used are a simplified approach to teaching many things - especially those involving manipulative or problem solving activity.
3. The four principles - and their characteristics - are as follows:

Step 1 - Prepare the Learner (or Group)

Put him (or group) at ease.

Find out what he (or group) already knows about the lesson at hand.

Get him (or group) interested in learning the lesson.

Place learner (or group) in correct position to receive your instruction.

Step 2 - Present the Lesson (Following the "Lesson Breakdown and Plan Sheet")

Tell, show, illustrate, and question carefully and patiently.

Stress key points.

Instruct clearly and completely, taking up one point at a time - but no more than he (or group) can master.

Step 3 - Application or Tryout

Test learner (s) by having learner (s) present the lesson.

Have learner (s) tell and show you.

Have learner (s) explain key points of the lesson.

Ask questions and correct errors.

Continue until you know HE (or group) knows.

Step 4 - Checking, Testing and Follow-up

Put him (or group) on his (or their) own.

Check frequently.

Designate to whom he (or group) goes for help.

Encourage questions.

Get him (or group) to look for key points as
he (or group) progresses.

Taper off extra coaching and close follow-up.

SUMMARY: During this period we have discussed the characteristics of the student, the qualifications of a good instructor and the student-instructor relationship. The instructor should keep in mind that each student is an individual in the position where he needs the assistance that the instructor can offer. The instructor should demonstrate an interest in the student and be happy to render the required assistance through proper instruction.

More simply said the instructor must:

Know his students.

Motivate his students (make them want to learn).

Prepare and present ideas so that students will
understand them.

Make sure students retain the instruction.

Preparation Application

Presentation Examination

Discussion and/or Review

PLANNING THE LESSON

Introduction to Lesson Planning

Careful and detailed planning is a "must" in most all of our worthwhile life activities -- and instruction is no exception. With this idea in mind we will, during this part, rehash some points previously made but tie them into a neater package and label them "Planning the Lesson." This phase of instruction is important because how well you perform as an instructor will be determined, to a great extent, on your preparation of a Lesson Plan.

Throughout our careers with the Iowa Employment Security Commission, if we are classified as managers or supervisors, we will be faced with the responsibility on many occasions, of instructing trainees. If we know the techniques of good lesson planning, we can get the job done in the most effective manner.

A systematic approach will insure rapid progress. Now, let's briefly discuss the general factors involved in lesson planning; then we will study a lesson plan format and consider its content and application.

A. /??? What is the importance of a lesson plan to the instructor?

/*** Get oral responses from trainees.

BB / (Have prepared on blackboard)

1. It is an aid to the instructor.
2. Gives the instructor confidence.
3. List important things to be covered in a logical sequence.
4. Tells the instructor when to stress certain points.
5. Keeps lesson objective constantly before the instructor.

B. First, let us consider the general procedure in lesson planning. A systematic approach will insure rapid progress. Then there are five steps designed to carry us progressively toward superior instruction as follows:

1. Determine the objective.
2. Selection and organization of subject matter.
3. Making the lesson plan.
4. Rehearse the presentation.
5. Checking the final arrangements.

Let us consider each briefly in turn beginning with determine the objective.

1. Determine clearly the training objective or mission.
This includes both the over-all training mission and the immediate objective of the particular class being prepared. The letter should contribute directly to the former.

2. Analyze the subject. What type of activity is involved? What manner of presentation would be most effective? Conference? Demonstration? In addition this analysis should determine the essential training points to be put over to the class.
3. Equipment, facilities, and training aids. What is required? What is available? What items must be ordered in advance?
4. State of training of the trainees. The state of prior training of the students affects the level at which we will pitch our instruction.
5. Time available. Can an application phase be included? Must instruction be condensed?
6. Training conditions.
7. Need for additional instructors.

Our second step in this procedure is the selection and organization of our subject material. We must arrange our subject material in its proper order of sequence to insure our lesson has the properties of cohesion, progression, and continuity.

The third major step is to make our lesson plan. By now we have the raw material at hand. We have decided on the manner and order of presentation. What remains is to get all this

data recorded in an effective, convenient form. Hence, the lesson plan has many useful purposes.

???? What are some? (From students)

1. Insures proper organization.
2. Insures complete coverage.
3. Provides a convenient check list.
4. Can be used as an outline for our presentation.
5. Provides a record for future reference.

We will go over a lesson plan format in a moment. But first let's look at the last two steps in our procedure:

Fourth is the rehearsal. It must never be omitted. It must be complete -- a real dress rehearsal with aids, assistant instructors, and an audience, even if this be only one man to review or give a critique. The rehearsal insures proper timing and establishes self-confidence in the instructor.

Fifth is the final check. Just before the appointed time, but early enough to take care of any possible oversight, check for:

1. Physical set-up
2. Aids
3. Instructional materials
4. Other

C. Types of Lesson Plans:

We now know all the important points in preparing a lesson.

We will now get into the theme of actually preparing the lesson plan.

/??? Actually what is a lesson plan? (CALL ON STUDENTS FOR THE ANSWER.)

*** A LESSON PLAN IS A WRITTEN OUTLINE OF THE COMPLETE DETAILS PERTAINING TO THE CONDUCT OF THE LESSON.

Construction of the Lesson Plan.

Lesson plans are written in outline form, either topical or sentence.

1. Topical outline is the most common used.
The main points and sub-topics are notes or brief phrases or single words. EXAMPLE:
Characteristics of a good message. Accuracy, Brevity, Clarity.
2. Sentence outline: Each point is a complete sentence.
3. Instructor's Manuscript: Everything that is to be said is written out. Good to refresh your memory, and it is especially valuable to a new instructor preparing to take over an established unit of instruction.

A lesson plan consists of two major parts:

The heading, and lesson outline.

1. The heading lists the title, time, method, training aids, references, and other essential information.
2. The lesson outline portion of the plan outlines the subject matter together with the teaching procedures to be used.

Lesson Outline:

1. Introduction.
 - a. Attention and need step, and scope
2. Explanation.
 - a. This is the main body of the outline and presents and develops the main points.
3. Application
4. Examination
5. Review and discussion
 - a. Clarify points by asking students questions.
 - b. Summarize the lesson.
 - c. Close with a strong point.

A lesson which does not contain application or examination stages will number only those stages employed and omit the others. In the case of a lesson which employs only one stage of instruction,

the main divisions of the outline will be:

1. Introduction
2. Explanation
3. Summary

SUMMARY:

This period we have discussed the steps in planning a lesson and the construction of a lesson plan. Remember the five steps in preparation and planning your lesson and these will give you an orderly and systematic procedure to follow in planning your future classes. Remember that careful planning is always the first and most important step of instruction. In nearly every case the student's failure to learn can be traced to the instructor's inadequate planning. The only solution to this problem lies in an orderly and systematic approach to all planning activities.

Remember to:

1. Prepare
2. Plan
3. Organize
4. Rehearse

ESSENTIALS OF EFFECTIVE PRESENTATION

Introduction to Oral Presentation

There is nothing more disconcerting to an instructor or wasteful to students than an inability to establish rapport and "hold" an audience.

Very often a large portion of your presentation to trainees will have to be accomplished by oral presentation. In order to be a successful instructor in this respect, there are certain well-defined techniques which, if utilized, will be of value to you in presenting oral instruction. In this respect, it is highly important to have the best possible organization and to use those speaking techniques which have been proven most effective in the past.

Oral Instruction

Whether the instructor uses a lecture, a conference, a short explanation with other methods, or a combination of methods, his oral instruction is divided into three parts: the introduction, explanation, body, or substance of the presentation, and the summary. In the case of a lecture or conference it is necessary to tell the class what you are going to tell them; then, tell them; and, finally, tell them what you've told them. In a demonstration, it is necessary to tell them what you're going to show them; show them; and tell them what you've shown them. Whether the body of a lecture or

conference is short or long it is preceded by an introduction and followed by a summary.

/??? What is the purpose of the introduction?

/Ans./ It is used to arouse the student's interest and to prepare his mind to receive instruction.

A. Introduction. As pointed out in a previous hour, to be properly motivated, a student must understand at the outset what he is to learn and why he is to learn it. Therefore, an introduction to a lecture or conference serves three purposes: It establishes contact and refers to previous instruction; it arouses interest; and it discloses and clarifies the lesson objective.

1. The good introduction arouses interest. In it, the instructor sets the stage for the individual's learning. The use of a pointed story or experience, a question, a startling statement, a quotation, a humorous anecdote, or an illustration arouses the student's interest and directs it toward the main ideas of the lesson. The introduction also relates the lesson to previous instruction or experiences. It ties in the lesson with what the student already knows by previous instruction or personal experience. It tells the individual what is going to happen and what is expected of him. Once the student knows what he is expected to learn, he can

devote full attention to the instruction. His mind is ready to learn.

2. A good introduction is brief and to the point. However, it may vary in length according to the teaching situation. For example, if thirty minutes are allotted for the lesson, generally not more than two or three minutes are used for introducing the subject matter. If it is a fifty minute lesson, never more than ten minutes and generally not more than five are used for the introduction.

B. The explanation or substance develops the main subject matter to be taught, and in a lecture it consists mainly of talking. Therefore, it must be so organized that the students can follow the presentation and this factor will also limit the number of topics which can be presented.

In getting from point to point the well organized lesson progresses smoothly through the use of transitional words and phrases. Reference to things the student already knows and to the lesson objective helps him to make a smooth transition. Vitalize the material to insure high interest. Repetition of important points and frequent summaries are also valuable teaching aids and help the student maintain a certain continuity of thought. Rhetorical questions may also be used to advantage, and finally, it is well to enumerate points you wish to stress, or list them on a chart or other training aid.

To maintain interest your explanations should be as concrete as possible because the general and the abstract are too hard to follow. A good story or a personal experience is excellent. A true but stranger than fiction story will make an indelible impression. Illustrations, pictures, and other training aids are among the things the instructor may use to maintain interest and get his teaching points across.

C. The summary is a restatement of the main points of the presentation. Brief summary statements at appropriate intervals keep each part of the presentation related to the lesson objective. They aid in moving from one main topic to another and in tying together each point presented. That is, when one main topic has been covered, the instructor lets the class know it by recapitulating the important points in one or two statements before moving on to the introduction of the next topic. In this way, the instructor helps the class stay with him. A final summary is used to conclude the complete presentation. It gives the class a brief, unified word picture of the entire lesson covered. In effect, it amounts to a restatement of the lesson objective.

D. In brief, every presentation -- lecture, conference, or demonstration -- has three basic parts: An introduction, a body, and a summary. Used properly these parts give color, meaning, and direction to the instruction.

E. The instructor's manner, his attitude, and the way he talks and conducts himself, has a great deal to do with winning and holding the student's interest. It is not within the scope of this instruction to produce polished public speakers. However, here are a few ideas that can help improve any instructor's manner.

1. Your job as an instructor is not to make a speech.

Your job is to put across certain ideas and information in a direct, effective manner by conversation talking. Do not talk down to the class. Talk with individuals in the class. Know what you are going to say, how you are going to say it, and say it so that each individual in the class is convinced that you want him to understand what you are saying.

Be alert, and if you are, you will look alert.

Think of the idea. Then, feel the idea. With the idea in mind, start to speak it slowly. Reach out with your voice and with your eyes. Contact each individual in the class by projecting your voice to his ears, by focusing your eyes on his eyes. Make him feel that you want him to understand every word.

Sometimes you may be nervous. This indicates your awareness of your class and your concern as to the impression you are going to make. There are several ways in which this initial nervousness can be

dispelled. One of the best ways is to be thoroughly prepared. You are then on certain ground -- and even your best student can only equal your knowledge but never surpass you. That certainty in your mind makes it easier to adopt the proper mental attitude toward yourself and your students, knowing that you do not fear the student but his opinion of your instruction. Have your initial remarks well in mind, review some of the previous instruction, tell a story. The story must fit; it must have a purpose, be related to the subject. Try to appear unhurried; be deliberate. It creates confidence.

Because people react to everything they see as well as to what they hear, instructors must meet standards of appearance, bearing and bodily control. Posture, bodily movements and gestures can be very expressive. Any movement or gesture which attracts attention to itself is a distraction and therefore a hindrance. The movement must be free, natural and spontaneous. As an example, a cowboy sits his horse with a certain ease and grace unmatched by any other rider and when his horse moves off, his movements blend in with the movement of his mount and the two appear as one. But try to shake your head from side to side and say "yes" at the same time. It does not fit. The conductor

"Mantovani" uses bodily movements in addition to his hands, arms and head which make for an exceptionally graceful effect. This creates a pleasing result when heard with the graceful and beautiful music which is played. Distracting mannerisms must, of course, be eliminated, and one of the best ways to do this is to rehearse before a mirror or an associate.

Since the voice is the instructor's best teaching tool he must make the most of it. The quality of your voice can be improved through practice. Avoid nasality, hollowness or hardness or any other unpleasant quality, but in addition to being heard you must be understood. The right word in the right place is the keynote of effective speech.

Use terms common to the students' vocabulary. Your job is to make clear, not confuse. The rate of speech should be adapted to the difficulty of the subject matter and the ability of the class. Moreover, it should vary. In general, if an instructor talks faster than 160 words per minute the students have difficulty keeping up with him, and if he talks slower than 90 words per minute he will lose the interest of his class. Pauses provide the punctuation of speech and if used correctly are most effective.

To enunciate clearly and pronounce your words correctly makes it possible for students from all parts of the country to understand you -- and they appreciate you for it. Learn to think on your feet. Be one thought ahead of your words. This adds a great deal to your ability as an instructor because you have then overcome that fatal hesitance which causes lack of confidence in you. Make no excuses for a bad speech, but analyze it, establish your standards and then practice.

SUMMARY:

Understanding the fundamentals involved in presenting a lesson facilitates presenting the instruction in an effective manner. Every lecture, conference, and demonstration has an

- (1) introduction
- (2) body of explanation and
- (3) summary.

Maximum learning requires maximum class attention which is gained best by making the class comfortable, and by making your manner pleasing and the things you say interesting. No two instructors are alike. Use the instructional methods and techniques that suit you best!

Remember the preparation is important, it helps to:

1. Provide an interesting approach.
2. Know your subject thoroughly.
3. Learn the sequence of ideas you intend to present.
4. Speak aloud with confidence.
5. Carry out a dress rehearsal.

INTRODUCTION TO DEMONSTRATION METHOD

Because the objective of training is proficiency in doing, and doing is emphasized as the principal means of reaching our objective, the instructor must show or demonstrate, as well as tell. This "showing" concept does not complete the learning process (imagine trying to drive a car without getting into one). This then leads to the second concept -- that of "doing" or the application stage of learning.

This period we will consider these two stages of learning:

First, the demonstration as a method in the presentation; and second, the application stage or that part which normally follows the presentation.

EXPLANATION:

A. THE DEMONSTRATION METHOD

The effectiveness of demonstration comes from the seeing factor. We learn faster what we see than what we hear. Yet, demonstrations must be good. A poor one can be a terrible boomerang! There are three things we must understand in order to use this method effectively:

1. For what instructional tasks is the demonstration adaptable?
2. The various types or forms of demonstration.
3. Points to be observed in giving a demonstration.

First, let us consider the types of subject matter to which demonstrations are particularly appropriate. I might mention here that training aids are usually needed to put on a

demonstration, and we will go into more detail on the use of training aids in a subsequent period.

- a. Manipulative Operations. Mechanical skills of many types fall into this category. Demonstrations of this type must be broken down into simple steps -- a "by the numbers" technique.
- b. Principles and Theories. In certain technical fields, demonstration frequently lends itself to very effective presentation. This is especially true when we consider movies as a form of demonstration.
- c. Procedures. Team procedures, e.g., a group of technicians, or a staff section.

4. Forms of the Demonstration:

The second matter we want to consider is the forms or types of demonstrations.

- a. Procedural. This is the type used to explain (DEMONSTRATE) basic skills, functioning of equipment, or various special technique. This type would frequently be integrated with the explanation method.
- b. Displays. These range from the simple display board or showcase up to the large "employment service" type (DEMONSTRATE) of displays.
- c. Field Demonstrations. We are all familiar with this type which involves the use of troops. Expensive but effective!
- d. Motion Pictures. Sometimes the most efficient of all methods if handled correctly. But can be abused!

e. Skits. Effective for showing operation of small teams, staff sections, etc. Frequently skits lend themselves (DEMONSTRATE) to demonstrating the wrong way, which is often an extremely effective way of driving home the right way. Care must be used to insure there is no confusion and that the right way is obvious.

5. There are several advantages to be gained through the use of a demonstration. You may use the actual object about which you are talking -- you have it here before the class and it is the exact size and color that has been described. You can demonstrate how it works and everyone will be convinced because this is it.

6. Because a word picture is not as good as a real live picture, you stimulate the student immeasurably by showing him a picture of what you have described, or show him how to perform a certain skill. There is a certain dramatic appeal to the demonstration found in the form of a wrecked automobile -- showing what happens when gasoline and liquor are mixed. There are many types of demonstrations suitable for classroom use that have dramatic appeal.

7. Finally, a demonstration sets high standards, because it has, of course, been thought out carefully and thoroughly rehearsed, and therefore the standard established in the demonstration will probably not be equalled by the students.

8. Conduct of the Demonstration: There are certain precautions to be observed in using a demonstration in your instruction. The

instructor must realize that it requires a great deal of careful preparation including rehearsals which all take considerable time. If the time is not available to him he should omit the demonstration rather than put on a poor one. If the equipment necessary is too extensive to obtain, or to set up, or if the available space is insufficient to accommodate it, the instructor would do well to use another method of presenting the material to the class. Be prepared to give a great deal of time and effort.

- a. There are certain specific points to be observed in connection with a demonstration. It must be carefully planned. It often requires a great deal of detailed planning -- but it is worth it! The location of students must be studied to insure all can see and hear. A written plan -- the lesson plan -- is at least as important here as in other types of presentation. The demonstration should be progressive and should bring out one point or operation at a time.
- b. Next, the students must not be neglected while the instructor becomes absorbed in the mechanics of the demonstration. Are the students getting the instruction? Have questions arisen that need to be cleared up at the time?
- c. Most demonstrations include a measure of explanation or discussion. Explain what is happening as the demonstration progresses. Bring out the sequence and continuity of the activity.
- d. Finally a demonstration should be concluded with a summary, reviewing the main points, stressing the sequence of events, and clearing up any questions.

e. The main thing to remember about a demonstration is to use it properly. It normally -- movies excepted -- takes more work, more equipment, more detailed planning than the conference type class. But it is also vastly more effective. One of the first steps in lesson planning after your analysis of subject matter should be a decision selecting the subject matter which is readily adaptable to demonstrations to see if our lesson fits one of these categories. If so we should then pick the type of demonstration most appropriate to our needs and then go to work!

/??? Are there any questions?

B. THE APPLICATION STAGE:

The second part of our class is devoted to the Application Stage of instruction. Application is learning by doing; it is the acid test and an absolute essential phase of instruction. To illustrate, consider the task of teaching a group to swim. We might present an effective, interesting explanation; then present a demonstration by experts showing the various strokes and how each is done; next we show a movie of Olympic swimmers going through their paces, thereby instilling an appreciation of the skills involved. We could finish this off with a written examination and critique to the point our students were experts on all the theories of swimming. But if we were to then take our group to the river and have them swim across, what would be the result? -- Catastrophe! There is no substitute for proper application -- application that is logical and progressive,

that starts with basic fundamentals and increases as the skill and proficiency of the students develop.

/BB/ Write on blackboard -- EXPLANATION - 10%) Ratio of
DEMONSTRATION - 25%) Teaching
APPLICATION - 65%) Time

We will discuss the various ways of conducting the application stage and some of the principles involved. This is a next step in our teaching technique now that we have covered the various elements involved in presentation.

1. First, let us see the part played by application in the over-all teaching process. This (blackboard) represents the percentage of time spent on the stages. Remember that explanation and demonstration often go together and are both part of the Presentation Stage.
2. Most instruction involves the teaching of a skill. This process involves establishing the proper mental concept in the student's mind through presentation, and next developing the physical processes through application, initially "by the numbers" and then by repeated practice into a near perfect skill.
3. In considering the methods of application we can divide our methods into two main groups; first, those involving the individual and his skills, and secondly, those involving team or cooperative activities.

In the first group we have three subdivisions:

a. The Controlled Method. In this type all men do the same thing at the same time. It is especially adaptable to teaching the fundamentals of manipulative operations. This method affords maximum control of the group, facilitates on-the-spot correction. But it is slow and is limited mainly to the "by the numbers" phase of application.

b. Next we have the Independent Method which allows the trainee to work at his own rate of speed. Here the trainee learns to develop skills to the point they become automatic.

c. And last we have the Coach and Pupil method, which enables the instructor to maintain a degree of indirect supervision through the coach. The coach, in turn, learns by helping the pupil.

4. Our second major group is the Team activities. These, of course, are used to teach members, such as those of the Benefits department, teamwork involved in processing a heavy claims load to meet a deadline.

Here, again, we find the method falls into two two phases. The "by the numbers" phase, called here the technical phase, where fundamentals are mastered. And next, the tactical phase, where the group learns to function as a team up to the desired degree of speed and proficiency. Time permitting, this stage should be continued, rotating members of the team through the various positions

until all know the job of all the others. This provides depth to our abilities so that, if one team member is out, a less critical member can step up to take his place, or the work can be accomplished by "doubling-up".

5. Next, let us consider some of the general principles involved in the conduct of practical work.

- a. Present specific directions. Be sure the trainee knows what is expected of him. Be sure the trainee makes a correct start. Set definite objectives.
- b. Repeat instruction when needed. Evaluation of trainee progress must be continual. Inform trainees of the quality of their performance. Use extra repetitions on knotty phases.
- c. Achievement standards are progressive. Keep a higher goal always before the trainee, but instill a sense of accomplishment. Use competition. Trainees may compete against their past records, or with each other, or with standards set by the instructor.
- d. Conditions should be realistic. Realism generally enhances positive motivation.
- e. Teach by practice. Things should be applied as taught. Incorrect practice, which develops bad habits, must be guarded against.
- f. Indirect assistance is best. Trainees should be trained to think through a problem for themselves. Resourcefulness and

initiative are thereby developed.

g. Constant supervision is imperative. Be sure that practice does make perfect. The fact that trainees are busy and attentive is no guarantee they are learning anything.

h. Examine the trainees' work. Each step must be learned before moving on to the next. Insure yourself that the slow trainee isn't becoming lost.

C. THE CRITIQUE:

And the last thing we want to consider is the critique. Application should be followed by a critique. This enables the trainees to get an evaluation of their performance and clear up any difficulties they might be having.

1. In the conduct of the critique the following points should be observed:

- a. Criticize in private.
- b. Ask questions to get instructors viewpoint.
- c. Bring out good points first.
- d. Explain how a different approach will do better.
- e. Point out errors.
- f. Suggest practical method of correcting errors.
- g. End with an encouraging note.

SUMMARY:

The application of subject matter cannot be left to chance. The instructor must plan some application of the material he presents as soon after its presentation as possible. Learning by doing is efficient only if it is accompanied by intelligent guidance and supervision to insure correct procedures and progressive learning. In the application stage the student acquires the type of learning that pays off in efficiency. The application stage should always be followed with a critique to insure that teaching points are emphasized and to make on-the-spot corrections. A properly conducted critique ties the entire lesson into a neat and complete package and stores it indelibly in the trainees' minds.

TRAINING AIDS AND QUESTIONING TECHNIQUES

In order to make any lesson effective the instructor must present it in a manner that arouses a student's interest and stimulates a desire within him to want to look, listen and learn. As brought out in the "Principles of Learning" conference, to stimulate the student's understanding the instructor must utilize the maximum capacity of the student's senses. This, of course, means that the more senses the instruction appeals to, the more rapid and thorough is understanding. What then could be a better method of utilizing the trainee's senses than the use of training aids?

Illustrating instruction through the use of actual equipment, charts, blackboards and projection devices, is one of the most effective ways of presenting thoughts and ideas to a class. We can conclude, therefore, that training aids are imperative to almost every class we are called upon to instruct.

The purpose of this conference is to give a clear understanding of the more common types of training aids available to instructors and adaptable to DES instruction including how to select, use and procure them.

Each of us can probably arrive at a suitable definition of the term "training aid" and a simple one is: "A device or means which assists the instructor in focusing the student's attention on the instruction or imparting understanding by appealing to more than one physical sense."

EXPLANATION: A. /??? Why do we use training aids in agency instruction?

/BB/ (Write on blackboard)

1. Appeals to the senses
2. Interest the learner
3. Develop understanding
4. Save time

Note: "Mnemonic" device A I D S.

/??? What are some of the items which you would include in devising a checklist to assist you in selecting a training aid?

(List responses on blackboard, then erase and project on overhead.)

- a. Appropriate: Is it relevant to the lesson? Is it suitable to the background of the class? Can it be displayed at an opportune time?
- b. Simple: Can it be easily understood without detailed explanation? Is the aid more attractive than the subject matter?
- c. Accurate: Are the facts given according to latest procedures?
- d. Portable and durable: Is it light enough to be transported to another classroom if necessary?
- e. Manageable: Is it easy to operate?
- f. Attractive: Does it have student eye appeal? Is it neat?

- g. Necessary: Is it merely eye-wash? Will instruction be just as effective without it? Does it illustrate essential material?
- h. Available: Can it be obtained in time? Must it be reserved in advance? Can it be improvised or purchased?

B. Let us discuss some of the more common training aids and their uses.

It would be extremely difficult and time-consuming for us as instructors in a class on Benefit Forms to try to explain by words alone the various parts of a form. We could give many characteristics of the form, but a trainee who has never seen the form will have only a vague idea of it. If we make the actual item available, then everyone knows what we're talking about. I can hold up an IBM Machine Panel Board and you will all have a general idea of its shape and you can estimate its weight, but if I try to point out some of the more detailed features, most of the class cannot see them and interest will be lost. So the best way to use an item such as a panel board, a piece of communications equipment or a map is to distribute it throughout the classroom so that everyone can see. So actual equipment can serve as an excellent training aid.

Models prove particularly valuable in explaining a technical subject. They are used when it is not possible or desirable to use the actual object. A large plastic model of a panel board would be more effective for display or demonstration before a large class. Miniature forms, figures, and the like made of cardboard, plastic, rubber or soap are

useful in identification. They must be accurate and give a convincing representation of the actual object.

Forms may frequently be shown on a chart with equally good effect provided there is no need to show working parts. There are many types of charts which are available or which we can design. A type frequently used is the graphical training aid (GTA). They are, however, difficult to store and not very durable. Word charts, such as the one we are using are plentiful, cheap, easy to construct and can be varied easily. We can use strip charts, the window shade type, the venetian blind, slot type charts or a simple poster.

The blackboard is one of the simplest and commonest types of aid. It is always a good idea to have a blackboard, chalk and eraser available at all classes. We should always start with a clean board. All material should be printed in block letters high enough to be readable by everyone in the class. A goodly space must be left between letters and lines and ideas should be expressed in as few words as possible. Use key words. When you finish a segment and can make a clean break, erase completely. If you intend to show anything complicated, either draw it before the class begins or practice it several times. Another method is to pencil in a drawing and chalk it in during class. This technique can be used to assist the instructor in remembering long lists, etc. When using the blackboard, stop talking, go to the board and print, then turn back to the class and resume your remarks. This gives the class a moment's rest from your voice and emphasizes what you are writing.

The overhead projector is a very convenient device for showing graphical material which you have provided beforehand. The transparency is usually a flexible sheet of acetate, on which the desired material is drawn in some opaque medium such as India ink or grease pencil. Commercially prepared transparencies produced by a photographic process are also available. Cartoons, diagrams, and any other type of chart material may be shown in this way. Of course, the instructor must see to it that the overhead is perfectly focused, preferably on an elevated screen which is tilted toward the viewer. Lights in the back of the room may be left on, but the amount of light in the front of the room should be diminished for the best result. This arrangement allows enough light for the students to take notes, and permits the instructor to control his class.

(DEMONSTRATE HERE.)

Transparencies for the overhead are available within our agency from previous years of instruction, and in many cases may be procured through the Training Department. Moreover, it is very simple for the instructor to make his own transparencies on acetate, cellophane, glass, or any transparent material, with grease pencil or drawing ink. (DEMONSTRATE) It is also very simple for any instructor to reproduce drawings and diagrams out of books and manuals. Merely place a sheet of acetate over the illustration and trace its main outlines on the acetate with drawing ink -- starting at the top, so as not to smear the ink. Any type of cartoon, sketch, or picture can be reproduced.

In addition there are simple photographic-type reproduction kits which are easy to use and can be accomplished in a lighted room with a

minimum of equipment. Through this process black and white or colored pictures can be placed on a transparent film and mounted for permanent use on overhead projectors.

The overhead has certain limits. It becomes monotonous if overused, and tends to distract the instructor from his class, as does any other type of chart material. It also makes the instruction somewhat choppy. It is helpful to use an assistant instructor, in which case the employment of the transparencies must be rehearsed.

Hundreds of excellent films have been prepared on all types of subjects. Planning ahead is the main consideration here. At the start of each training unit, review the film catalog to select films which will be particularly helpful. Select your films, and make a requisition calendar, so that you order the films at least two weeks in advance of the showing date. This gives the film library time to fill your order, or advise you if a particular film is not available at this time.

Preview your film in every case, before you show it to any class. This will take an hour sometime before the class. Watch for any detail in the film which may be out of date or in error. Also watch for the main points which you want your students to get from the film. Check the operation of the projector and the film before class.

Have the film and projector all set up before the class. Have your assistant check the projector to see that picture and sound are correctly adjusted, and that the right film is correctly mounted. These precautions save much embarrassment and needless waste of class time.

Introduce the film to the class with a brief explanation of the subject, quality, and purpose of the film. Tell them what you expect the students to get out of the film, in other words sell the film to them. Also point out any discrepancies. Warn that the examination will include some material from the film.

After the showing, summarize the film and answer any questions. Point up those items which you consider important enough for the examination.

NOTE: Point out our efforts to obtain training film for our own library as well as establishing other sources for procurement.

C. Summary of Training Aids:

To summarize the use of training aids, let's once again review the considerations which should be kept in mind.

Remember that a training aid is an adjunct to instruction. The aid must be simple, accurate and interesting. Time your presentation so that the training aid is an integral part of the lecture. Ingenuity, a little time and a rehearsal can produce excellent instruction.

D. Questioning Technique:

Before we conclude this class let us discuss another subject very briefly -- that of questioning technique. Planned questions should be used at various points to stimulate interest or to emphasize main points; these questions should be shown in the lesson plan.

Extemporaneous questions should be used whenever they appear desirable.

A good question should:

1. Have a specific purpose;
2. Be understood by students;
3. Emphasize one point;
4. Require a definite answer;
5. Discourage guessing.

The question should be addressed to the entire class. This motivates thinking. After a pause a student is called upon by name and his answer is evaluated. The question should be asked in a natural tone and not confined to superior or interested students. An instructor must be interested in the student's response and should try to draw out or suggest an answer. When the student has given his answer the instructor should thank him and repeat the answer if the class did not hear the response. If it is necessary to report the student's answer, it is best to rephrase it. Never ridicule a student for an incorrect answer.

There are several types of questions used by instructors. Some are good and some poor. A good question should be thought provoking. Study the questions and develop a good questioning technique.

A good tip: When you ask a trainee a question and he gives you an "I don't know" answer, try to draw him out. Give him a hint so he can answer. The reason for this is twofold.

Some trainees use the "I don't know" method as an easy way out. Once they learn you won't take "No" for an answer, you will have better class

participation. By drawing a trainee out he feels better and gains confidence in being able to answer questions. He will try harder next time.

The trainee who, when called upon to answer a question, asks you to "Please repeat the question" has been taking a free ride and is stalling for time. It is just as well to call on someone else at this point.

1. How to ask questions.
 - a. Pre-plan your question before asking it.
 - b. State the question; pause, then call on someone by name.
 - c. Don't always call on those who raise their hands.
 - d. If the answer is "I don't know" draw an answer out of him even if you have to suggest the answer.
 - e. Rephrase or evaluate a trainee's answer and thank him for his answer.
 - f. Be interested in the answer.
 - g. Don't abruptly say "No, that's wrong."
 - h. Encourage them to ask you questions but be careful they don't do this to "kill time."
 - i. If a trainee asks a question, if possible, ask another trainee to answer the question.
 - j. Do not ask the whole class to answer a question in chorus.

- k. Distribute your questions around the class. Do not call on those you know can answer every time.
- 1. Do not ridicule a student for giving a wrong answer.

SUMMARY:

The proper use of training aids and questions requires thorough preparation on the part of the instructor. Training aids and questions should be a planned part of the instruction in all subjects. Their effectiveness is not determined by complexity, but by the assistance they provide the student in developing an understanding of the subject. If student learning is not facilitated, they are not an aid but are a distraction.

THE EXAMINATION AND REVIEW STAGE IN THIS BOOKLET

We have covered many topics and ideas in this booklet. A number of ideas have been discussed concerning what is involved in training techniques. We have discussed the things a good instructor is supposed to be and what he is expected to do. We have demonstrated numerous teaching aids and techniques. We have discussed the Principles of Learning and methods of achieving Motivation.

In this last session we will discuss the Examination/Evaluation stage of instruction -- the last major step in the teaching plan. WHY evaluate, and HOW?

As instructors and supervisors of instruction we are continually faced with the problem of evaluating the effectiveness of instruction and determining overall training progress. Frequently we are concerned with arriving at relative trainee standings. The only satisfactory method of accomplishing these things is to give tests.

During this period we will discuss the reasons for giving tests, the various forms of tests, the characteristics of a good test and the administration of tests.

EXPLANATION:

The use of tests or examinations to evaluate trainee performance is a necessary step in the teaching process. Within our agency, dealing primarily with adult learners, we will find various reactions to test taking, the most common of which are:

- (1) fear of embarrassment,
- (2) distaste for anything representative of "schoolroom atmosphere," and
- (3) an idea that testing is not a "part of learning."

A. /??? Why give tests?

We achieve many desirable results by giving tests. First, they help us to improve instruction. They do this by showing gaps in learning which can be corrected both for the class in session and for future classes. They emphasize main points and help to increase learning on those points covered in the test. They help us to evaluate instructional methods.

Tests provide an incentive for learning. During the course of instruction the trainee should be made to feel responsible for learning. The knowledge that he will be tested on the subject matter being presented certainly should go a long way toward achieving this.

At times we have the necessity of assigning marks. They are required by most schools and are also needed to assist in the selection of trainees for particular job assignments. Tests provide the basis for accomplishing this requirement.

This leads us directly into the fourth and last use of tests, to provide a basis for selection and guidance. There are many tests designed specifically for this purpose. Proper consideration of all tests gives the instructor and the supervisor considerable help in

selecting men for certain duties, promotions and so forth and determining those who need special help in certain phases of training.

Looking back briefly, we have seen that tests are used to help improve instruction, to provide an incentive for learning, to provide a basis for assigning positions and a basis for selection and guidance.

B. Forms of Tests:

The three forms of tests are oral, written, and performance. No one of these is necessarily any better than the others; each has its uses and is the best for that purpose. Oral tests are used continuously throughout all instruction to spot-check learning and maintain interest. Questioning techniques have already been reviewed in another period of instruction. They apply, of course, to this type of test.

Although for most agency training programs the performance test is the most widely used and best adapted, I suspect that in our program you will find that most of your tests will be the performance test, and as consequence we will not spend time examining written tests.

In order to accurately and directly measure abilities and appreciations we must use, almost exclusively, the performance tests. In the evaluation of performance we must remain as objective as possible -- and, in order to do this, we must divide performance into characteristics to be evaluated:

Examples:

Accuracy

Aptitude

Speed

Industrious

Safety	Reliability
Care of Equip.	Resourcefulness
Neatness	Cooperation
Workmanship	Interest
Dexterity	Conduct

NOTE: Do not attempt to evaluate too many traits in one examination.

So much for the three forms of tests: Oral, written, and performance.

/??? Any questions?

C. Characteristics of a good test:

A good test should have six characteristics. It should be valid, reliable, objective, discriminative, comprehensive, and easily administered and scored. Let's look at these characteristics in some detail.

First, validity. The test must measure what it is supposed to measure. This characteristic is often important in determining the form of test to use. For example, you can't determine how well a man can interview by giving him a written test on the principles of interviewing. To test this ability, a performance test must be used.

A reliable test measures accurately and consistently. This characteristic is particularly important when the achievement of several trainees must be compared. Other things being equal a long test is more reliable

than a short one. The conditions under which a test is administered also affect its reliability.

In order to be objective, a test must be so constructed that the opinion and individual judgment of the instructor are not a major factor in grading it. Now of course you run into difficulty here with performance tests where frequently the judgment of the instructor is the only factor in scoring. But that doesn't mean that the performance test is therefore a poor test. It simply means that a greater burden is placed upon the instructor to make his scoring as unbiased and objective as possible and points up the desirability of having observations made by more than one person wherever possible.

A good test should be discriminative. In other words it should measure small differences in achievement. This is particularly important when you are interested in assigning grades or in ranking trainees. As was the case with reliability, a long test is, in general, more discriminating than a short one.

A test should be comprehensive; that is it should sample all phases of the subject matter being tested.

Finally, a test should be easily administered and scored. In order to determine how easily a test can be administered, have three individuals within your shop take the test. By this means you can determine misunderstandings and verify timing. Scoring is so self-explanatory that it needs no further discussion.

To review quickly then, a good test is valid, reliable, objective, discriminative, comprehensive, and easy to administer and score.

/??? Questions?

D. Administration of Tests

Not the least important part of testing is the administration. There are several points to be borne in mind here. First, make sure all materials are ready. This is of special importance where performance tests are being given and a considerable amount of equipment may be needed.

When assistants are needed, insure that they have been properly trained. Again, the performance test usually requires greater emphasis here. It is particularly important when assistants are used in observing and grading trainees performance that their training be thorough and uniform.

Unless it is specifically intended to test trainees under adverse circumstances, the best possible testing conditions should be provided. Quiet, comfortable, well-lighted classrooms are needed and trainees should be physically and mentally rested and at ease to the maximum extent possible.

Give the trainees a good start by insuring that they thoroughly understand all the instructions and conditions pertaining to the administration of the test.

Conduct the test carefully. Insure that quiet is maintained and if the test is timed, be sure it is timed accurately and the trainees are aware of how much time they have.

Conduct a critique of every test. This is very important if the full value of the test as a teaching instrument is to be obtained. It insures complete understanding and reduces the possibility of mistakes in scoring escaping notice.

Adherence to these procedures will insure smooth administration of tests.

/??? Are there any questions?

SUMMARY:

In brief, to build and conduct a good test or rating scales, the instructor must determine "what to measure" and "how to measure"; he must consider the characteristics of a good test and organize the test accordingly; before using the test it must be reviewed thoroughly and necessary changes made; proper arrangements must be made for administering the test and conducting a final discussion or critiques; finally, the results of the test must be analyzed to determine causes of deficiencies and methods of correcting them.

Examinations and tests are the means the instructor has of applying the examination stage of instruction. Examinations and tests therefore, are definite parts of the teaching process. The main purposes of testing are twofold; one is to review and impress the essentials of the instruction on the mind of the student; the other, to determine whether or not the student understands and has the ability to apply his understanding. Tests and examinations may take the form of oral, written, or performance type tests; however, in our training the proper use of performance tests cannot be over emphasized. Tests and

examinations must be built and used according to a few simple rules in order to insure their effectiveness as a part of the process of instructing trainees. For after all, a poor test is worse than no test!

REVIEW

It is our fond hope that the requirements of this particular slide have been met; however, based on the theory that you might be in need of some clarifications, we will now entertain questions on any phase of the instruction given during the past few days.

*** "Open Question and Answer Period"

(If no questions materialize -- the instructor should utilize this period to give a resume of the course interspersed with oral questions directed at the trainees.)

BIBLIOGRAPHY

- Wood, John H. Methods of Instruction.
Missouri Division of Employment Security,
Jefferson City, Missouri, 1963.
- Rhode Island Department of Employment
Security, Techniques of Instruction.
Providence, R. I., 1962.
- Department of the Air Force, How to Instruct.
Washington, D. C., 1952.
- McGhee, Wm. & Thayer, Paul W. Training
in Business and Industry. New York: John Wiley &
Sons Inc., 1961.

STATE LIBRARY OF IOWA



3 1723 02117 0469