The third of three volumes of appendixes to the final technical report of the Great Lakes Region Special Education Instructional Materials Center contains materials related to the final report's chapter on media, materials development, and workshops. Included are the following materials: "Yours for a Better Workshop"--a booklet and report on dissemination data; an evaluation of a workshop on workshop leadership; workshop coordinator kits and evaluations; "You Are..."--a booklet addressed to inservice workshop leaders; a sample Info-Pak (selected readings on the education of parents of handicapped children); an analysis of responses to a survey on learning disorder terminology; a leader's guide and the results of use of Braille code recognition materials; an evaluation of visual training cards; evaluations of workshop training kits; workshop training kits--an introduction and some samples; and some final evaluations of various aspects of the media and materials development unit. (DB)
Appendixes to the

Greys Lake Region
Final Technical Report of the
Special Education
Instructional Materials Center

VOLUME III
Appendix C (pp. 891-1408)
"Yours for a Better Workshop": Booklet and Report on Dissemination Data
YOURS--
FOR A
BETTER
WORK-
SHOP

TED WARD & S. JOSEPH LEVINE
Michigan State University

USOE/MSU REGIONAL
INSTRUCTIONAL MATERIALS CENTER FOR
HANDICAPPED CHILDREN AND YOUTH
This booklet was prepared by the USOE/MSU Regional Instructional Materials Center for Handicapped Children and Youth in cooperation with the Special Education Service Area, Michigan Department of Education. The material presented herein was developed pursuant to a grant from the U.S. Office of Education, Bureau of Education for the Handicapped. The opinions expressed do not necessarily reflect the official policy or position of the U.S. Office of Education and no official endorsement is implied.

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Regional Instructional Materials Center
for Handicapped Children and Youth
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East Lansing, Michigan 48823

October, 1971
YOURS — FOR A BETTER WORKSHOP!

Ted Ward and S. Joseph Levine
Michigan State University

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Here are some hints that can be useful in planning and conducting an effective teacher-training workshop. Most in-service workshops are active processes of communication and interaction. Thus it pays for the workshop leader to put to work some good strategies for communicating and interacting. The real trick in the design of a workshop is to include the best uses of the right strategies! Hopefully, this booklet will help you design and prepare a really top-notch workshop. To make the best value from the booklet, you should use it to plan and also in assessing what has gone on at a workshop. This will help in refining plans for future workshops.

COMMUNICATING WITH TEACHERS

In-service education is concerned with the matter of communicating with teachers about the means they can use to communicate with pupils. The first thing to remember is that the way you communicate with teachers at a workshop becomes, for some of them, a model for communicating with their pupils. If you use a lecture approach you are, in effect, suggesting to the participants that they should lecture to their pupils. And it doesn’t really solve the problem when you tell them to do as you say, not as you do! The tendency is for teachers to teach as they were taught. Thus you must be
concerned with the content of your workshop and with the way in which you communicate the content.

A teaching message is shaped by the medium that is used to communicate it. When a particular instructional technique is presented to teachers through a medium other than that suggested by the technique itself, we find that understanding of the technique becomes confused. For example, when a clever motion picture is used to demonstrate team teaching, we find that the discussion following is concerned with the techniques used for the filming rather than the content of the film. Team teaching gets lost in the shuffle! The participants are more tuned to the medium than to the message that the medium is trying to convey. If, instead, a workshop actually used team teaching to "tell the story" about team teaching, the medium and the message support each other. Effective communication with teachers calls for the medium and the message to be consistent with each other, and to mutually support each other. Thus, if you are interested in communicating about new uses of motion picture film, the means to use (the medium) would be a motion picture film. If you are interested in demonstrating a new discussion technique you should utilize the new method of discussion that you are trying to share. Thus, effective communication about teaching should involve that very teaching procedure to demonstrate itself, if at all possible.
KNOW YOUR OBJECTIVES

If the leader isn’t sure where he would like the participants to go (i.e., what they should achieve) there is a very low probability that they will get there. The leader and the participants must understand the objectives and see how the workshop and the materials can logically contribute to these objectives. Sometimes the objective of a workshop is less to teach a procedure or an understanding than to explore the meaning of a problem and to gather viewpoints and insights. When this is the case and the objective of the workshop is thus of an exploratory nature, then the leader must make sure that the participants understand this. Whether the objectives are for skills or shared opinions, there is a greater probability that the participants will achieve them if they know what they are!

One of the underlying motives in most workshops is to help the participants set goals for themselves. People will not set goals for themselves simply because you give opportunity. They have to become motivated to do so, and they likely need guidance or help. Your example in having and sharing goals and your willingness to involve the participants in subsequent goal-setting activities are important steps. Thus, especially if you want others to learn to set goals for themselves, there is no substitute for clearly thought through goals and objectives of your own.
ACTIVE PARTICIPATION

Obviously a certain portion of any workshop is devoted to talking. Or, as is often the case, lecturing. When a lecture is in progress there is only one really active participant—the lecturer. Increasing the number of people who are taking an active part in the workshop also increases the number of people that will leave with your message. (Don't jump to conclusions, we aren't suggesting that everyone should start lecturing!) We're aiming for participation through activities that call for everyone to take part in an active manner. Participants should truly be participating.

Design the activities so that the participants can receive the message through the activity and not be entirely dependent upon you and your personality for receiving the message. When good teachers work with pupils they attempt
to make learning an active situation. There is a higher probability that the desired learning will occur when encountered in an active manner. Design your workshop as you would like teachers to design for their students!

A standard rule of thumb is if there is to be a passive role for learners, it should come after an active period. Involvement, first; passive roles second. Save your own "messages" for the end. Never start in a passive mode.

PROMOTE DISCUSSION

Never try to start a discussion session by saying "now let's discuss it". Instead, start discussing the matter yourself and involve others by inviting other opinions and comments as you go along. As soon as momentum picks up reduce your own role to a minimum. Discussion is a sweeping function. You don't turn it on or off. It's either there or it is not there. The best way to get it started is often with substantive questions.

Try to avoid "yes" or "no" questions. Unless, of course, you are ready to immediately follow the short response with a related substantive question.

"Why?" is a good word to remember while stimulating a discussion. A leader's "why?" to a participant's unsupported point can often save a discussion from degenerating into a bull-session.
VARIETY

The longer you expect a group of people to work together, the more variety there must be in what they do while they are together. We understand this idea very clearly in terms of children; yet, in fact, it applies to all learners. (Be sure that you think of the participants at your workshop as learners.) Different types of activities, all related to your objectives, can keep the participants alert and active in their learning. Participants will not regard two hours of role-playing as having variety, even if each role-playing represents different characters. A role playing situation, along with a discussion, a movie and a game is more likely to be perceived as having variety. In other words, the message may be the same but the medium is varied.

RESPECT THE PARTICIPANTS

Operate in such a manner that you show the participants you respect them. Be aware that they can make or break you as a leader! Approach your group with a great deal of respect for what they can do to you as well as enthusiasm for what they can do with you! (Not fear, but respect.) Communicate your respect by sharing your intentions, sharing your goals, honoring and respecting people by listening to them, and being flexible within limits. There is such a thing as losing respect if you let yourself get pushed around by every little thing that comes up.
ORGANIZATION

A well-organized workshop is thought through well in advance. Sometimes educators attempt to run off-the-cuff workshops; they seldom achieve their objectives. If you would like the participants to feel you are at ease and comfortable while directing the workshop, take the necessary time to plan exactly what you will be doing at each step. The best way to insure a casual presentation is through detailed planning. Only through good planning can you have the luxury of making immediate changes as they are needed. Good planning allows you to sit back and observe the interaction of participants and spot the places where your intervention is needed and where your plan can be "tuned up" on the spot.

Take seriously the organization and management problem. You have two separate functions to carry out: The first is planning. This entails the design, the procedures, the approaches, and most important—the goals. Planning a workshop calls for elaborate "lesson planning"! The second function of organization is preparation. This means that you will have all the right things at the right place at the right time. A workshop that is well planned and well prepared shows that the leader is interested in the participants. The leader has made a real investment—himself!

Through organization you will be able to reduce the fatigue factor so often associated with workshops. Sometimes tasks and jobs that should have been the responsibility of the
leader end up being done by the participants. Arranging chairs, preparing materials, and the budgeting of time are properly chores for the leader. When a person attends a play he doesn’t expect to help in the construction of the stage props! At a workshop, the participant does not expect to carry out organizational details that are the responsibility of the leader. You must assume that the participant has come to your workshop to learn. Your job, then, is to fulfill this expectation in the most direct and unencumbered manner.

Be realistic in the amount of material that you expect to cover in your workshop. A leader adds to the fatigue factor by attempting to cover too much material. Scheduling extra sessions in the evening or longer sessions during the day is one solution; reducing the amount of material you hope to cover is another. If you can’t fit it into an acceptable and scheduled time for the workshop, delete some of the material.

MODELS

We often provide models of behavior for participants. Make sure that when you provide a model you also provide alternative models. There is a great tendency to adopt models without thinking through alternatives. Participants will often expect the leader to provide the “perfect” way of doing something. This is often impossible for the leader. Besides, if assumes that there is one correct way of doing something! By providing alternative models the participants will better understand that they must make choices in order to find the procedures most appropriate for themselves.
TIME SCHEDULING

Establish a time schedule for your workshop and stick to it (within reason and sensitivity). There is nothing more frustrating for participants than a time schedule that is not followed. Carefully think through the activities that will be conducted at the workshop and accurately assess the amount of time needed for each. If you are in doubt, add some time—but never provide too little time.

If you establish a time-orientation at the very beginning of your workshop the participants will come to expect you to stay on schedule. If, in turn, you stay on schedule they will learn to make the best use of available time. Without a clearly defined time schedule there is a great probability that the participants will spend inordinate amounts of time on petty tasks. Participants like to feel productive. A clearly outlined schedule promotes productivity.
PROVIDING CLEAR DIRECTIONS

There is no substitute for clear directions in helping the participants to achieve the objectives of the workshop. Attempting to provide verbal directions off-the-cuff almost always leads to confusion. Prepare yourself with clear and concise written directions for any activity prior to the workshop. When writing directions, have someone else read them to judge their clarity.

When you want the participants to listen to the reading of some directions, make sure that no other activity is going on to distract them. In particular, do not pass out any reading material while giving directions. The visual distraction will surely interfere with the verbal presentation.

An effective procedure for communicating clear directions is to provide both oral and visual directions. Prepare a copy of the directions for each participant. Then read the directions aloud while the participants are also looking at the directions. A general rule is to ask for questions at the end of the directions in order to provide clarity where needed.

If an overhead transparency is used in conjunction with printed directions, make sure the transparency is identical to the printed material. Participants can then choose to either look at their printed directions or direct their attention to the projected transparency. If they are identical, there will be no concern for "missing" something that is not on the transparency.
EXPECT THE UNEXPECTED

The leader of the workshop should be alert to the participants at all times. People at workshops seem always to be doing the unpredictable! The more inclined you are to predict that they will all do a certain thing, the more apt you are to be surprised. You must expect the unexpected and be sensitive to it. Good workshop planning and organization allows for the unpredictable. Good planning does not mean that everything has been predetermined to the exclusion of individual needs and differences. You must be able to expect and be sensitive to those times when you must veer from your plan.
PHYSICAL SURROUNDINGS

Carefully go over the plan for your workshop and select physical surroundings that will enhance rather than detract from the workshop. Ample lighting, seating and work space should be provided so that the participants can engage in the workshop activities in a comfortable manner. If a blackboard or overhead projector is needed, make sure it is there in the room. And, if you are using an overhead projector, don't forget the projection screen! (Carry an extra “3-pole to 2-pole plug adapter” in the glove compartment of your car; they are crucial and usually missing!)

Make sure the room is arranged in the way you would like it to be used, before the first participants arrive. A well-organized room sets the stage for a well-organized workshop. It shows that you care! Roll a few “mod” posters or “graffiti” panels into a tube to take with you and add a last-minute touch of nuance to the environment.

EXPERTISE

Be an expert in what you are saying. The participants expect this of you and it is a role that you must assume. To be expert does not mean that you flaunt knowledge in the face of the participants. To be an expert means that you truly understand the topic area and are willing to communicate it to others. Protect your integrity—don’t present opinions as facts—but don’t be shy about responsible professional opinions.

Prior to the workshop it is a good idea to go over in your mind (better on paper!) the questions that might be asked by the group. Be sure you have meaningful answers to these questions. Don’t try and fool people into believing that you
know something you really don’t! Don’t try and communicate something you don’t understand. Take time prior to the workshop to gain a more full understanding of your topic.

**OBSERVATION**

A good workshop includes some procedure whereby you can “step back” and observe what is going on. Sometimes a leader will design himself into a trap; he gets so involved and the action depends so much on his dominant leadership role at every step that it is impossible for him to truly observe what is going on. A well designed workshop allows the leader time when he is free of any direct input responsibility. The leader needs to be able to survey calmly what is going on and thereby to plan any revisions that might be needed during the remainder of the workshop or for future workshops.

A well-planned and organized workshop has times for the leader to observe and reflect built in just prior to each point in the workshop where decisions are to be made about alternative routes to be taken. Through observation the leader assesses the group and decides on the best alternative.
RESPECT THE NEEDS OF THE GROUP

Develop your workshop in response to observed or reported needs among the teachers with whom you are working. Be certain that topics for workshops are directed toward concerns and needs of the teachers. Never conduct a workshop "for the fun of it".

When assessing teachers' needs, be sure to look at perceived needs and real needs. Sometimes the perceived needs of teachers are not their real needs. The real needs are those which most closely affect the learning of the pupils. Sometimes it takes a pair of workshops: one to help teachers learn more about themselves and the needs of their pupils, another to make plans and develop the basic skills to meet those needs!

In-service workshops can be fun. When teachers learn and have an enjoyable experience at the same time you know that your workshop is a winner!

You're on!
QUESTION #1:

The two most valuable ideas in the booklet:

a. Our workshop should be a model for the teachers to use.
b. Observing what is going on so that you may revise your next workshop.

a. Objectives.
b. Needs of the group.

a. Know your objectives.
b. Keep organized.

a. Emphasis on participation of those attending.
b. Suggestions for ways to start discussion.

a. Do what you are telling them to do.
b. Expect the unexpected.

a. The way you communicate with teachers at a workshop becomes, for some of them, a model for communicating with their pupils.
b. Respect the needs of the group, real and perceived.

a. The value of communication.
b. The importance of presenting models.

a. Communicating with teachers.
b. Know your objectives.

a. Active participation.
b. Models---understanding no "one way."

a. Objectives clear.
b. Needs of group.

a. Organization.
b. Know your objectives.

a. Active participation - "Doing".
b. The organization of the booklet giving you the thing you must think about in getting ready for in-service.

a. Importance of a clear time schedule and sticking to it.
b. Objectives.

a. Time scheduling.
b. Know your objectives.
a. Organize and carefully plan your objectives to meet the needs of the group.
b. Clear directions coupled with active participation following a structure of built in timing leads to effective workshops.

a. Know your objectives.
b. Active participation of group members.

a. Stress placed on leaders awareness of the objectives of the workshop - setting appropriate goals.
b. All activities and media must relate to the message.

a. Organization.
b. Respect the needs of the group.

a. Communication with teachers.
b. Knowing your objectives.

a. Observation--allow time to evaluate dynamics of workshop interaction.
b. Active participation.

a. Communicating with teachers.
b. Active participation.

a. There are no two ideas that are more valuable than others. Each item is dependent on the others for a successful workshop. Therefore, all items are important in the sequence.

a. Workshops must be designed, planned and executed with the needs of a particular group of people constantly in mind.
b. Workshops must involve the learners in a learning situation, with the highest probability that they'll leave with the message!
QUESTION #2:

What should have been included?

More on assessing real and perceived needs of teachers.

Purpose of the book or preface so that people with no previous training won't expect to find all of the answers for giving a workshop.

Finalizing and evaluation.

How to get back if losing contact with group.

Something about follow-up.

A list of suggested varieties as a reminder that one might review when planning.

More specific tips, hints and examples of leadership skills and techniques, although many have been given. I guess just more of what has been included in the booklet, is what I mean. I thing it will be very helpful to us in preparing for our workshop.

Pre-planning techniques with administrators.

Projection of leader as a part of the overall team working with teachers and administrators to help their students.

Some sort of summary. Consistent with the theory professed should be some sort of organizational scheme by which reader can—at a glance—assure himself that he is aware of all principles involved in the booklet.

State objective of booklet.

Physical surroundings: lots of big ashtrays.

Preface—including purpose of booklet.

Preface—stating purpose of booklet in front of book structuring the guide.

Some of the information presumes a workshop or background of previous experience. So there is no need to include a complete background. Definite techniques in keeping a workshop vital and alive.
"Minimize" the role of the leader in a separate paragraph.
Importance of "follow-up."

Some good "ice-breaking" techniques.

Better techniques for communicating with teachers.

Suggestions for follow-up or mention of importance of openings for follow-up built into presentation.

Evaluation.
Feedback.

What do you do when your workshop is obviously falling flat and the message is being lost?
The message or lesson needs to be once again driven home in a rap-up evaluation type session at the end.

Some alternatives when based with poor facilities.

Basic objectives of the book.

Include some mention of need for introductions.
Perhaps a sample time schedule.
Suggestions for arranging soon to avoid the "schoolroom desk" look.
QUESTION #3:

What isn't said clearly enough?

Expect the unexpected.

What is said is clear and concise! Congratulations!

The sections about perceived needs and real needs. It appears to me that the administration has been left out and certainly all those involved at the administrative level are concerned with children.

Perhaps the discussion on active participation could be more slanted toward "goal directed" participation--i.e., is there a measurable product that could be assessed along with a process that is understood?

Expect unexpected--weak.

Respecting the needs of the group. Perceived vs real needs.

Needs of group--real vs perceived.

Expect the unexpected.
Respect the needs of the group.

Appears well done in all areas.
Brief and to the point.

How do leader actively influence participants to set goals in their own teaching. Is example enough?

A better understanding of writing objectives and/or presenting of these goals or objectives.

More specific in area of promoting discussion.

Feedback.

Feedback from your participants.

Participants that do not respond or refuse to become involved.
Problems and Hints: An Evaluation of a Workshop
AN EVALUATION OF A WORKSHOP
at the 1972 CEC International Convention

S. Joseph Levine
Lynn Kinzel

May 3, 1972
On March 23, 1972 a workshop titled "Workshop on Workshop Leadership" was presented at the 50th Annual CEC International Convention in Washington, D.C. The workshop was designed and conducted by Ted Ward and S. Joseph Levine. The goals and objectives of this workshop were:

**GOAL:** TO FOCUS ON THE WORKSHOP LEADERSHIP PROBLEMS OF THE PARTICIPANTS,

**OBJECTIVE:** THE PARTICIPANTS WILL RAISE AND FOCUS PROBLEMS IN TERMS OF PRIORITY AND/OR URGENCY,

**OBJECTIVE:** THE PARTICIPANTS WILL SHARE EXPERIENCES ON THE SOLUTION OF THESE PROBLEMS,

**OBJECTIVE:** THE PARTICIPANTS WILL RELATE GIVEN RESOURCE MATERIALS TO THESE PROBLEMS,

**GOAL:** TO PROVIDE TACTICAL ASSISTANCE IN IMPLEMENTING SOLUTIONS TO WORKSHOP LEADERSHIP PROBLEMS,

**OBJECTIVE:** THE PARTICIPANTS WILL DELIMIT PROBLEMS,

**OBJECTIVE:** THE PARTICIPANTS WILL UTILIZE MATERIALS AND PROCEDURES TO DEVELOP A WORKSHOP PLAN.

**THE WORKSHOP**

The workshop consisted of two structured experiences.

**Experience #1  "Problems and Hints"**

An activity that allowed the participants an opportunity to share their concerns relating to getting started as an in-service educator. Rather than just raising issues, the activity structured participant answers for the issues.

A series of short "identify-write" rounds made up the activity. A time schedule was provided at the beginning of the activity that established the procedure for each round.

**Experience #2  "Workshop Planning"**

Teams of participants were provided with a set of cards that had been designed as a "Workshop Planning Kit." The participants were asked to select a simulated problem that was provided and then utilize the Kit to lay out the necessary steps that would have to be taken to properly plan the workshop. A total group discussion was held at the conclusion of the activity.
THE CONCERN

All participants at the workshop were asked to thoroughly read the stated goals and objectives and then specify in writing their own personal objectives that they hoped would be achieved during the workshop. At the conclusion of the workshop the participants were asked to rate their personal objectives in terms of the level of fulfillment for each. (See Appendix A)

This procedure was designed to yield answers to two separate questions:

What personal objectives did the participants have?

It was hoped that this question would yield information about the entry behavior of the participants that might be utilized in the design of future workshops for a similar audience.

What personal objectives were met by the workshop?

This question was designed to provide feedback of the participant's perception of the workshop content. It was hoped that such a question would clarify exactly what information was "delivered" during the workshop.

THE RESULTS

A total of 61 participants attended the workshop and responded to the request for stating their personal objectives.

Sixty-one (61) participants wrote 155 personal objectives.

These objectives can be grouped into nine categories.

The participants entered the workshop with the following types of concerns:

I. Learning "How To" Organize and Structure a Workshop (with Intentions of Using Information in Conducting Own Workshop) (n=43)

examples: "Gain new ways of presenting an effective workshop"
"Learn something about workshops"

II. Raise and Focus Problems in Terms of Priority and/or Urgency (n=20)

examples: "Focus on urgent current problems"
"List problem areas that are present in a workshop situation"
III. Develop Techniques for Interaction and Group Participation
   (n=18)
   examples: "teach techniques for fuller participation in a workshop.
              "promote fuller participation in the part of participants"

IV. Competency as an Effective Workshop Leader
    (n=17)
    examples: "be more effective"
               "be able to present material in an interesting manner"

V. Share Experiences with Other Participants
    (n=12)
    examples: "interact with others"
               "exchange techniques and ideas with other participants"

VI. Resource Materials
     (n=12)
     examples: "Learn about materials useful in changing teaching behavior"
                "Know where to get it as a help to other needs"

VII. Miscellaneous (primarily specific to a particular topic area)
     (n=12)
     examples: "Learn ways of counseling parents"
                "Learn to describe a workshop accurately and attractively"

VIII. Meeting Needs of Teachers
      (n=11)
      examples: "Conduct more meaningful in-service faculty meetings"
                 "What are the qualifications of teachers and how
to determine their potential"

IX. Understanding and Using Objectives
    (n=10)
    examples: "Stating clear objectives"
              "Involve group in developing objectives"
At the conclusion of the workshop:

41% (64) of the objectives were COMPLETELY fulfilled
35% (54) of the objectives were SOMEWHAT fulfilled
24% (37) of the objectives were NOT fulfilled

The following areas of concern WERE MET by the workshop:

I. Learning "How To" Organize and Structure a Workshop
   (with Intentions of Using Information in Conducting
   Own Workshop)

V. Share Experiences With Other Participants

The following areas of concern WERE PARTIALLY MET by the workshop:

II. Raise and Focus Problems in Terms of Priority and/or
    Urgency.

IV. Competency as an Effective Workshop Leader

VIII. Meeting Needs of Teachers

IX. Understanding and Using Objectives

The following areas of concern are QUESTIONABLE in terms of
being met by the workshop.

III. Develop Techniques for Interaction and Group Participation

VI. Resource Materials
<table>
<thead>
<tr>
<th>AREA OF CONCERN</th>
<th>NUMBER OF PERSONAL OBJECTIVES IN AREA</th>
<th>NUMBER OF PERSONAL OBJECTIVES COMPLETELY FULFILLED</th>
<th>NUMBER OF PERSONAL OBJECTIVES SOMEWHAT FULFILLED</th>
<th>NUMBER OF PERSONAL OBJECTIVES NOT FULFILLED</th>
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<tr>
<td>I. Learning &quot;How To&quot; Organize and Structure a Workshop (with Intentions of Using Information in Conducting Own Workshop)</td>
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<td>26</td>
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<td>2</td>
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<tr>
<td>IV. Competency as an Effective Workshop Leader</td>
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<td>V. Share Experiences with Other Participants</td>
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<td>IX. Understanding and Using Objectives</td>
<td>10</td>
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CONTRACT

I have read the statement of the goals and objectives for this workshop. In light of this, I will attempt to fulfill the following one, two, or three "personal objectives". (These personal objectives need not be the same as the objectives listed by the leaders.)

Personal Objective #1

Personal Objective #2

Personal Objective #3

--- STOP ---

Do not open this page any further until instructed to do so !!

Did you fulfill your personal objectives?

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<tr>
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<th>COMPLETELY FULFILLED</th>
<th>SOMEWHAT FULFILLED</th>
<th>NOT FULFILLED</th>
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<tbody>
<tr>
<td>Personal Objective #1</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Personal Objective #2</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>Personal Objective #3</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>

COMMENTS:

(NOTE: The bottom portion of the form was folded up and stapled so that the participants were not aware of fulfillment questions until the end of the workshop.)
WORKSHOP COORDINATOR KITS AND WORKSHOP EVALUATIONS
Summary: In-Service Workshop Evaluation
"Design and Use of Instructional Objectives"

1. Listed below are the responses and the frequency with which each appeared:

- informative (5)
- interesting (3)
- needed (2)
- objectives (2)
- thought-provoking (2)
- personal involvement (2)
- valuable (2)
- inspirational (2)
- organized (2)
- performance (2)
- good (2)
- evaluation (2)
- helpful (2)
- stimulating (2)
- defining (2)
- motivating (1)
- entertaining (1)
- guiding (1)
- creative (1)
- eye-opening (1)
- clarifying (1)
- cooperative (1)
- constructive (1)
- planned (1)
- learning (1)
- discussions (1)
- possibilities (1)
- outcomes (1)
- attitude (1)
- time (1)
- audience (1)
- make sense (1)
- direction (1)
- educational (1)
- idea provoking (1)
- important (1)
- useful (1)
- timely (1)
- relative (1)
- introspective (1)
- originality (1)
- creative (1)
- group (1)

2. Method of presentation and content tended to be rated equally interesting by the participants, while the use of instructional media seemed least interesting.

3. Of the 11 participants, 3 showed a significant change of behavior; 5 indicated a moderate change, while 3 remained stable.

4. Out of the 11 participants, 4 who had previously used the material, indicated that this workshop helped to clarify its use.

5. All participants indicated a more comfortable feeling about the material.

6. Participants felt that the content of the workshop was more important than the method of presentation and felt the use of instructional media to be of least importance.

7. The responses could be broken down into the following categories:

- writing Instructional Objectives (6.5)
- use of Objectives (2.5)
- Mager (2)
- Instructions in kits (1) (kit 4)
- How to help teachers gain skills (1)

8. Responses indicate that participants feel comfortable about conducting in-service training.
Results

Teaching Workshop Evaluation
"Design and Use of Instructional Objectives"

This evaluation is intended to provide the Workshop Coordinators feedback regarding your reactions to the workshop. The results will be used to help plan future in-service activities.

1. The three descriptive verbs that describe today's workshop are not very descriptive! You gave only 5 minutes!

(See summary)

2. Please rate each of the activities in terms of how well they accomplished what you felt they should do. Check the appropriate blank after each activity.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Interesting</th>
<th>Interesting</th>
<th>Not Interesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Content</td>
<td>9</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B. Method of Presentation</td>
<td>10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>C. Use of Instructional Media</td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

3. a) How much did you know about this (method, technique, instructional material) prior to this workshop?

<table>
<thead>
<tr>
<th>Amount</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate amount</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Considerable amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) How much do you feel you now know about it?

<table>
<thead>
<tr>
<th>Amount</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td></td>
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<tr>
<td>Small amount</td>
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<tr>
<td>Moderate amount</td>
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<td></td>
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<tr>
<td>Considerable amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Had you used this (technique, method, instructional material) prior to this workshop?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

If yes, did this workshop clarify its use?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>
5. How comfortable do you feel about the materials, techniques, and instructional materials?

<table>
<thead>
<tr>
<th></th>
<th>Very Comfortable</th>
<th>Comfortable</th>
<th>Somewhat Comfortable</th>
<th>Not Comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Comments:

(See attached sheet)

6. Please rate each of the activities in terms of their importance to you. Check the appropriate blank after each activity.

<table>
<thead>
<tr>
<th></th>
<th>Very Important</th>
<th>Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Content</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>B. Method of Presentation</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>C. Use of Instructional Media</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

7. What aspects of today's workshop did you find particularly difficult to understand? (What skills and understandings are you aware that you need to build?)

(See attached sheet)

8. Assuming that you will be expected to conduct inservice training with teachers, how comfortable do you feel in the role of a teacher-trainer?

<table>
<thead>
<tr>
<th></th>
<th>Very Comfortable</th>
<th>Comfortable</th>
<th>Somewhat Comfortable</th>
<th>Not Comfortable</th>
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</tr>
</tbody>
</table>

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Responses to Question Four

Question: How comfortable do you now feel about using this (technique, method, instructional material)?

**VERY COMFORTABLE**

Very worthwhile - helped me to see the need of activity planning and mini-teaching instead of instruction objective writing, as the end goal.

**COMFORTABLE**

I will appreciate the extra time I will have to review the material.

Following re-reading of distributed material

Have used Mager in college workshop classes but had a week or so - not a few hours - does make me think.
Responses to Question Seven

Question: What aspects of today's workshop did you find particularly difficult to understand? (What skills and understandings are you aware that you need to build?)

Writing objectives - I tend to generalize.

Some difficulty in understanding directions for afternoon session. Need to develop skills in preparing educational objectives. This workshop and the Mager reference should help.

Mager, Phase II

Need to develop strategies in aiding teachers move from writing objectives to planning activities.

Getting objectives that both relate to the problem as such and also to the "leader" and his interest or ability.

Discriminating between general objectives, specific objectives and teaching activities. Practice and time will help me to better discriminate, not between the terms themselves, but to what I actually see written as an objective.

Working out a workable objective - need ability to adequately think through objectives.

Whether to make participants aware of the instructional objectives before conducting said activity.

Area 3 - Instructions limited. Limitation of topic. Creative needs.

Mager's concepts - not fully explained and developed.

Writing clear understandable objectives that can be evaluated.
WORKSHOP COORDINATOR KIT

THE WHY OF OBJECTIVES
Toward An Understanding Of Instructional Objectives

S. Joseph Levine

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TIE WHY OF OBJECTIVES
Toward An Understanding Of Instructional Objectives
--An Inservice Teacher Training Activity--
S. Joseph Levine

This activity is the first in a series of four activities designed to create
a total teacher workshop experience in the need for, selection, design and use of
instructional objectives.

Activity 1 - The Why Of Objectives
Activity 2 - Objectives Have To Make Sense
Activity 3 - Knowing What You Are Teaching
Activity 4 - Objectives-Oriented Instruction

Each of these four activities can be used individually as a single workshop,
or they can be combined in groups--depending on the amount of time available for
the workshop. The activities, however, should be used in sequence.

OBJECTIVES

--to provide an experience highlighting learner's perceptions of instructional
objectives.

--to understand the need for clearly expressing instructional objectives to the
learner through the instruction.

MATERIALS NEEDED

*A set of five information sheets for each of three participant-teachers.
*A "Perceived Objective Form" for each participant.
*A "Teaching Objective Form" for each of the three participant-teachers.
*An overhead transparency. (To assist in discussion period.)
An overhead projector and screen.
Chairs to provide seating for participants in "auditorium" style.

*The pages in this booklet may be used as masters for Thermofax processing into
ditto masters or transparencies.
PROCEDURE

Prior to getting your workshop started, select 3 participants to assist you as participant-teachers. Provide each with a teaching objective and copies of the five information sheets about the Island of Musu. These teacher-participants should have at least 20 minutes to prepare their teaching session. They should be provided with space away from the rest of the participants. The participant-teachers should not work together as a team. They are to work independent of each other. (NOTE: You'll want to select these 3 and get them "working" prior to the beginning of the workshop.)

Introduce to the participants the general format for this workshop. They will experience three separate teaching situations. For each, they must write what they feel the teacher's objective(s) was. (Perceived Objective Form). They must also specify how the teacher indicated the objective to them.

Call for the first participant-teacher. Introduce this person to the group and turn the workshop over to him/her. Make a note of the time and allow 3 minutes for presentation. It is sometimes helpful to have a chalkboard or overhead projector available for the participant-teacher's use.

As each participant-teacher completes a presentation, he/she can be seated with the rest of the group.

TIME REQUIREMENTS

20 minutes (prior to workshop) teacher-participant preparation.
15 minutes - teacher-participant presentations.
30 minutes - discussion.

DISCUSSION

Following the three presentations, use an overhead transparency to focus the discussion of the activity. (The next page can be used as a master for this transparency.) Use a piece of paper to block out the transparency when projected. Then, uncover and discuss a single point at a time.
DISCUSSION

Following the three presentations, use an overhead transparency to focus the discussion of the activity. (The next page can be used as a master for this transparency.) Use a piece of paper to block out the transparency when projected. Then, uncover and discuss a single point at a time.

You may want to list on the transparency the different objectives that were perceived by the group.
1. What are some of the teacher objectives that you entered on your list?

   Teacher #1:

   Teacher #2:

   Teacher #3:

2. How does a learner perceive what a teacher's objectives are?

3. What does it suggest when a large number of objectives are perceived in the short time span of this sort of short lesson?

4. How can we insure that our objectives are transmitted to the learner?

5. What is the value of objectives in instruction?

6. What is the difference between a list of objectives and a list of topics or items covered? Which did we list in the first task above (Question #1)?

7. Convert some of the topics or items to objectives.

8. What is the difference between a teaching activity and a learning objective?
Teacher #1 - Teaching Objective:

You are a teacher. You are about to teach the group about the Island of Musu. The attached information about the Island is provided to assist in your assignment.

Your objective is:

To have the members of the group develop an understanding of the geographical features of the Island of Musu.

Prepare your material carefully, you will have only three minutes to teach the group. You should not discuss your objective with the other two "teachers." Treat the group as the people they are. This is not a role play where they will be pretending to be young learners.

Teacher #2 - Teaching Objective:

You are a teacher. You are about to teach the group about the Island of Musu. The attached information about the Island is provided to assist in your assignment.

Your objective is:

To have the members of the group develop an understanding of the economic background and make-up of the Island of Musu.

Prepare your material carefully, you will have only three minutes to teach the group. You should not discuss your objective with the other two "teachers." Treat the group as the people they are. This is not a role play where they will be pretending to be young learners.

Teacher #3 - Teaching Objective:

You are a teacher. You are about to teach the group about the Island of Musu. The attached information about the Island is provided to assist in your assignment.

Your objective is:

To have the members of the group develop an understanding of the historical background of the Island of Musu.

Prepare your material carefully, you will have only three minutes to teach the group. You should not discuss your objective with the other two "teachers." Treat the group as the people they are. This is not a role play where they will be pretending to be young learners.
PERCEIVED OBJECTIVE FORM

For each teacher, enter in the appropriate space below what you as a learner feel the teacher's objective(s) is (are). Do this during and directly following each teacher's presentation.

Teacher #1 -

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________

Teacher #2 -

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________

Teacher #3 -

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________

Objective: __________________________________________________________

How did the teacher indicate this objective? _____________________________
FACT SHEET -- ISLAND OF MUSU

Musu is situated in the South Atlantic approximately 300 nautical miles from Badora. The population (6,785 - 1967 census) is centered around the three major cities. The Island's primary industry is fishing. Four fish processing/canning facilities are located in the west coast of Kutuba. Tourism ranks second to fishing and is centered around the city of Ultrim in the southern portion of the country.

The Island of Musu established a democratic government in 1647 with the downfall of the Rulu tribe which had ruled the island since early in the 13th century. The island has a representative form of government with a "Council Head" elected every fifth year as the leader. Island meetings of the representative senate occur on the first Tuesday of the even numbered months.

Musu is independent of any affiliation with other sovereign states. They maintain a ceremonial guard which also serves as the Island's sole army. Due to the rough coastline of the Island and the protected harbor at Kutuba, the Island has never been involved in external fighting. Musu maintains diplomatic relations with all nations represented at the United Nations, yet maintains no official ambassador.

The first international trade agreement was entered with Scotland in 1837. This marked the beginning of fish exporting as the principle export. As a result of this early agreement, the Island has adopted the kilt as the "native costume." Scots day is celebrated on July 4th of every year in recognition to the Scottish people and their help in developing the economic potential of the Island. Other holidays include School Day (October 4th) marking the closing of the last educational institution on the Island; Harvest Day (March 27th) celebrating the end of the annual harvest; and Rest Day (February 3rd, 17th, April 5th, 23rd, July 18th) when the Island population joins in prayer for the "rest" of the world.
Due to the hard working of the residents of the Island, there is great concern for relaxation and recreation. The government maintains 18 golf courses, 12 yacht clubs, 7 miniature golf ranges and 438 swimming pools. There are professional leagues in football, baseball, soccer, and hobbill (a native game found only on Musu.)

There are no banking facilities on the Island. This is made possible by the fact that there has been no reported crime for 238 years. Islanders utilize the cresant sea shell as their form of currency. (Seventeen cresant shells equal approximately $1.23 U.S.)

Pirates Lighthouse is situated in the southwest corner of the Island. It is named for the bands of pirates that frequented the area in the early 1800's. The lighthouse serves as a combination tourist sight and grain silo. The light has not operated since 1927 when the last ship was seen in that section of the Island.

The Island maintains an excellent highway system, though cars are not permitted. Highway A-1 runs north from Kutuba around Lake Ho-o to Ultrim. A donkey drawn railroad car is used for the transport of heavy goods between cities.

Mount Muji. Mount Muji is located between Kutuba and Aftmer. The mountain contains a volcano that is now considered inactive. The last major eruption was in the winter of 1839. A cable car provides a spectacular view of the volcano. For the past 2 winters, the residents of Musu have enjoyed skiing on the mountain due to the government's importation of snow from Colorado.
Kutuba. Kutuba is the capital city of Musu. It is located on the Ho-o River and is known for its fishing fleet. Located within the city are the Scots Monument, the State House, and four modern factories owned by the Musu Fishing Corporation.

Aftmer. Aftmer is located in the extreme northern section of the Island. The city is the heart of the agricultural section of the Island. Wheat and hops are the major grains that are grown. All of the Island's vegetables and fruit are also grown in the area. The Aftmer area contributes approximately 20% to the economic strength of the Island.

Ultrim. Ultrim, located in the southeastern section of the country is the Island's livestock center. Beef and lamb find excellent grazing in the lowlands that surround Ultrim. Pigs are not raised due to an ancient dietary custom of the Musu people. Located in the center of Ultrim is the Musu National Opera House. The opera house is the home of the Musu Opera Company, the Musu Symphony Orchestra and the Musu International Circus.

Further information regarding Musu can be obtained by writing to the Musu Information Service in New York.
AID FOR MUSU

The United Nations Emergency Relief Fund has announced today a special airlift of medical supplies to assist in the aftermath of last week's eruption of a volcano on the South Atlantic island of Musu. The island, one of a group of independently ruled small islands, was reported in economic trouble due to the severe loss of facilities for the canning of fish—the island's chief industry. Unconfirmed reports from Moscow indicate possible air shipments of replacement machinery for the ruined canneries.
1. What are some of the teacher objectives that you entered on your list?

2. How does a learner perceive what a teacher's objectives are?

3. What does it suggest when a large number of objectives are perceived in the short time span of this sort of short lesson?

4. How can we insure that our objectives are transmitted to the learner?

5. What is the value of objectives in instruction?
6. What is the difference between a list of objectives and a list of topics or items covered? Which did we list in the first task above (Question #1)?

7. Convert some of the topics or items to objectives.

8. What is the difference between a teaching activity and a learning objective?
WORKSHOP COORDINATOR KIT

OBJECTIVES HAVE TO MAKE SENSE
Toward An Understanding Of
Instructional Objectives

Ted Ward

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OBJECTIVES HAVE TO MAKE SENSE
Toward An Understanding Of Instructional Objectives

--An Inservice Teacher Training Activity--

Ted Ward

LEADER'S GUIDE

This activity is the second in a series of four activities designed to create a total teacher workshop experience in the need for, selection, design and use of instructional objectives.

Activity 1 - The Why Of Objectives
Activity 2 - Objectives Have To Make Sense
Activity 3 - Knowing What You Are Teaching
Activity 4 - Objectives-Oriented Instruction

Each of these four activities can be used individually as a single workshop, or they can be combined in groups--depending on the amount of time available for the workshop. The activities, however, should be used in sequence.

OBJECTIVES

--to provide a set of criteria for selecting sensible instructional objectives.

--to provide an opportunity to experience a structured situation, where the selection of sensible instructional objectives is stressed.

MATERIALS NEEDED

*A copy of the two worksheets for each participant.

*An overhead transparency.

A set of time placards. (Example is provided.)

*The pages in this booklet may be used as masters for thermofax processing into ditto masters or transparencies.
MATERIALS NEEDED (cont'd.)

An overhead projector and screen.

Tables and chairs to provide seating for groups of four.

PROCEDURE

1. Provide a space conducive to small-group work. (Preferably around tables.)

2. Divide the participants into groups of 4 persons each. (It is preferable to use a procedure that will "mix" the group so that close friends and associates are not in the same group. Suggestion: count the total participating: divide by four; use the resulting number as a "count off" series—as, for example, 34 participants, divided by 4 equals 8 and 2 left over, count off by eights: "1-2-3-4-5-6-7-8--1-2-3-4-5-6-7-8," etc. All the "ones" sit together over here; the "twos" over there, the "threes" over here, etc.) Make a group of two or three for the "left overs" or place them in certain groups to increase these groups to five. Under no circumstances should there be a group of six or more.

3. Provide each person a copy of the two worksheets. Allow time for them to be read carefully. Written work is not to start yet!

4. PLEASE SERVE AS THE TIMEKEEPER. Indicate the "start" moment for each step and indicate what step is underway. Give "thirty seconds", "fifteen seconds" and "stop" notices, out loud or by use of large placards to prepared transparencies on the overhead.

Placards -- very large, at least the size of a piece of paper.
5. Instruct participants to keep item 5 on the worksheet confidential. (It will be used for a later exercise in this series: "Objectives-Oriented Instruction.")

6. Discussion: Item 6 on the worksheet is the basis for the discussion that you will conduct. This discussion phase is designed to be a culminating activity. It should provide the participants with a sense of closure relating to the necessity for carefully selecting objectives. Conduct the discussion in the following manner:
   a. Writing cues for discussion: (please ask your participants to jot down on their worksheet, "What makes an objective sensible?" (Item 6)
   b. Overhead to stimulate discussion:
      Criteria for selecting sensible objectives.
      Objectives have to make sense:
      ....a) must concern things the teacher knows something about (or is willing to join the pupils to discover.)
      ....b) must concern things the pupils have not already learned.
      ....c) must concern things the pupils want to learn.
      ....d) must concern things the pupils are capable of learning.
   c. Expose one item at a time on the transparency and ask the participants to volunteer to read from their papers. In effect, you are asking, "Who has listed this item or something related to it?" and also, "How did you express this idea?"
   d. Call attention back to the procedure of the exercise: During the two "INVESTIGATE" periods what happened to your ideas? What helped your plan become more sensible or more specific? (Be sure the participants look at their worksheets to be reminded of what they actually did.)
7. Conclude by reading the criteria from the transparency and suggest that the participants copy them onto their worksheets in the order of importance that each person sees for himself.
OBJECTIVES HAVE TO MAKE SENSE

WORKSHEET

The times indicated will be rather closely observed, because the task otherwise becomes long and somewhat repetitious. Make every minute count!

During the several steps in this exercise you will be able to decide on something that you can teach the other people in your small group. This exercise is intended to provide a "walk-through" of the several steps in planning an instructional experience. The unrealistic part of the exercise is that you will, in a subsequent exercise, have only 5 minutes to teach whatever it is you have planned.

1. PLAN--(5 minutes). Work independently on a. and b.
   a. What are some likely topics, skills or information you could teach your team members?
   Possibilities:
   1. ___________________________  2. ___________________________
   3. ___________________________  4. ___________________________
   b. First, you need to make sure it is something they don't already know. What questions will you ask to find out if they already know?
   __________________________________________________________?
   __________________________________________________________?
   __________________________________________________________?
   __________________________________________________________?

2. INVESTIGATE--(1 minute per person). Ask the questions in lb or others to the members of your team.

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3. PLAN--(2 minutes).
   a. On the basis of your investigation, what seem the most likely two
      or three things you could teach the other members of your team?
      Can you be more specific now than you were in 1a?
   b. Try to get information that would help you decide which of these
      you will teach:
      What can you ask that will determine the relative interest in
      the possible learnings?
      ________________________________________________?
      ________________________________________________?
      What do your learners, the other members of your team, already
      know that would provide a basis for what you want to teach them?
      ________________________________________________?
      ________________________________________________?

4. INVESTIGATE--(1 minute per person). Ask the questions in 3b, or others.

5. CONCLUDE--(3 minutes). What have you decided to teach.
   ________________________________________________
   Why?____________________________________________
   (The information you put into this item is confidential--do not reveal.)

6. DISCUSSION--What makes an instructional objective sensible?
   ________________________________________________
   ________________________________________________

7. CONCLUSION:
CRITERIA FOR SELECTING SENSIBLE OBJECTIVES

Objectives have to make sense.

Sensible objectives--
--a) must concern things the teacher knows something about (or is willing to join the pupils to discover.)

--b) must concern things the pupils have not already learned.

--c) must concern things the pupils want to learn.

--d) must concern things the pupils are capable of learning.
WORKSHOP COORDINATOR KIT.

KNOWING WHAT YOU ARE TEACHING
Toward An Understanding Of Instructional Objectives

Ted Ward
S. Joseph Levine

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This activity focuses on the three ingredients necessary for making an instructional objective meaningful.

1. Mager's Criterion #1 - Does the statement describe what the learner will be doing when he is demonstrating that he has reached the objective?

2. Mager's Criterion #2 - Does the statement describe the important conditions (givens and/or restrictions) under which the learner will be expected to demonstrate his competency?

3. Mager's Criterion #3 - Does the statement indicate how the learner will be evaluated? Does it describe at least the lower limit of acceptable performance?
OBJECTIVES

--to investigate a set of instructional objectives and select those objectives that are most meaningful.
--to express in writing the three ingredients of a meaningful instructional objective.

MATERIALS NEEDED

*A copy of the introduction page for each participant.
*A copy of each of the three worksheets for each team.

PROCEDURE

The leader of this activity should take time prior to the workshop to become thoroughly familiar with Mager's book (direct reference is made in the introduction.) It is also suggested that the participants be advised to read Mager prior to the workshop.

Participants are teamed together in groups of 4 or 5. Each group should be seated around a table.

Take time to fold up the bottom flap of the three worksheets prior to the workshop. A single staple will assist in "hiding" the bottom statement (Mager criterion) from view. This statement provides the participants with feedback and should not be consulted by the participants until after they have completed all 3 worksheets.

*The pages in this booklet may be used as masters for thermofax processing into ditto masters or transparencies.
PROCEDURE (cont'd)

Instruct the participants to read the introduction and then, as a team, complete the three worksheets. They may complete the worksheets in any manner that their team feels is appropriate. When they have finished the worksheets they can check their responses by pulling open the bottom portion of the paper. Allow 15 minutes for this team activity.

Conclude the activity by discussing the three Mager criteria with the total group. Ask for individual groups to relate their experiences.

--What criterion was the hardest to define?
--What criterion was the easiest to define?
--How can meaningless objectives be made meaningful?
Contemporary educational technology takes the position that clearly defined instructional objectives have three major values:

1. The planning of instruction can be made more rigorous and more likely to succeed if the objectives are clearly defined and used to guide the planning.

2. The evaluation of instruction can be more precise and more useful in leading to improvement of the instruction when it is based on the assessment or achievement of the specified objectives.

3. Learners are more apt to learn effectively and efficiently if they are made aware of clearly specified objectives early in a learning experience.

4. They make it possible for the teacher to communicate to other professionals what he is trying to achieve.

Thus, teachers who want to become more effective are encouraged to master the craft of specifying instructional objectives. The most widely used book on this craft is Preparing Instructional Objectives, by Robert F. Mager (Fearon Publishers, Palo Alto, California, $1.75). Mager's book is in the form of programmed instruction and is designed for individual self-instruction. You are encouraged to study his book.

For our exercise today we pick up the three central propositions from Mager and help you begin to apply them. This exercise is intended to guide you through the major factors in specifying an instructional objective. You are asked in the three worksheets to identify the three criterion that Mager states are necessary for clearly specifying an instructional objective.
Distribute one per team.

Criterion I

All but one of the following objectives are defective in terms of one of the three "Mager Criteria." (Two have the same important weakness.)

1. Learners will spell correctly 20 of the 30 words on the specified list.

2. Each learner will be involved in class discussions at least once each hour. A rating scale of 1-5 will be used. A score of 3 or higher will be acceptable.

3. Given a drawing of the grasshopper, the learner will label correctly any three of the following four:

   antenna, eyes, legs, wings

Which is the most clearly worded objective?

What is the major weakness of the other objectives?

Mager's Criterion #1 - Does this statement describe what the learner will be doing when he is demonstrating that he has reached the objective? BEHAVIORAL SPECIFICITY

(Objective #3 most clearly has behavioral specificity.)
Distribute one per team.

Criterion II

All but one of the following objectives are defective in terms of one of the three "Mager Criteria." (Two have the same important weakness.)

1. After the spelling lesson, all learners will write 20 words with correct spelling.

2. Each learner will participate in class discussions no less than 3 times during the two-hour session by initiating remarks, answers, or questions relevant to the learning tasks.

3. The learner will label the parts of the grasshopper. Acceptable performance will be 75% accuracy.

Which are the two poorly stated objectives? _________ & _________

These two objectives are not specific enough. What do they lack? _________

Mager's Criterion #2 - Does the statement describe the important conditions (givens and/or restrictions) under which the learner will be expected to demonstrate his competency?

SPECIFIC CONDITIONS OF PERFORMANCE
(Objective #2 most clearly specifies conditions of performance.)
Criterion III

All but one of the following objectives are defective in terms of one of the three "Mager Criteria." (Two have the same important weakness.)

1. Without the use of a dictionary, all learners will write, with correct spelling, 20 or more of the 30 words on the specified list.

2. Each learner will participate in class discussions by initiating remarks, questions or answers.

3. The learner will correctly label the parts of a grasshopper.

Which is the most clearly worded objective?

What is the major weakness of the other objectives?

Mager's Criterion #3 - Does the statement indicate how the learner will be evaluated. Does it describe at least the lower limit of acceptable performance?

ABLE TO BE EVALUATED.

(Objective #1 is best able to be evaluated.)
WORKSHOP COORDINATOR KIT

OBJECTIVES-ORIENTED INSTRUCTION
Toward An Understanding Of Instructional Objectives

Ted Ward

The work presented herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.
OBJECTIVES-ORIENTED INSTRUCTION
Toward An Understanding Of Instructional Objectives

--An Inservice Teacher Training Activity--

Ted Ward

An exercise, in the form of a cooperative game, through which a teacher will gain experience in translating an objective into a specific plan for instruction, teaching a micro-lesson and evaluating the learning.

This activity is the fourth in a series of four activities designed to create a total teacher workshop experience in the need for, selection, design and use of instructional objectives.

Activity 1 - The Why Of Objectives
Activity 2 - Objectives Have To Make Sense
Activity 3 - Knowing What You Are Teaching
Activity 4 - Objectives-Oriented Instruction

Each of these four activities can be used individually as a single workshop, or they can be combined in groups--depending on the amount of time available for the workshop. The activities, however, should be used in sequence.

OBJECTIVES

--to spell out the design of two alternative instructional procedures for accomplishing a given instructional objective. (This procedure is accomplished for each of two objectives.)

--to assess the probable effectiveness of each of the two instructional designs for accomplishing a given instructional objective.

--to teach a five-minute micro-lesson to achieve an objective.

--to evaluate learning achieved in the micro-lesson.
PROCEDURE

Divide the teams of four (as grouped in Activity #2) into two sets of two persons each. (Ask teams to divide themselves.)

*Project the transparency of objectives.

Give each pair of participants a supply of forms:

*"Instruction" form (1)

*"ABC" forms (2)

*"D" forms (2)

*"E" forms (2)

*"F" forms (4)

Time required: approximately 120 minutes, including discussion. An overhead transparency should be used to structure the discussion.**

IMPORTANT

It is necessary for the leader to be of help to the participants during Step 1. Experience has shown that most participants will write objectives that are far too vague. (This is true even of many people who have studied Mager's book.) Circulate among all the pairs of participants; look over shoulders; be ready to respond to the slightest question; initiate challenges and questions yourself. Following is a list of the questions and comments that you will need to use:

"Can you really teach that in 5 minutes?"

"Will you be able to evaluate that after 5 minutes?"

*The pages in this booklet may be used as masters for thermofax processing into ditto masters or transparencies.

**An overhead transparency is provided to assist you in reinforcing these questions. It should be used at your discretion. It shouldn't be necessary to draw the participant's attention to the transparency. Just projecting it will usually do the trick.
"Can you think of a way to state it more specifically?"

"Would that meet Mager's three criteria?" (Indicate which criterion is missing.)

"Are you asking for more transfer than you can expect in this situation?"

"Wouldn't you be satisfied in 5 minutes with just the verbal association rather than asking for such thorough comprehension?"
THE ABC's (and D's, E's and F's)
OF DESIGNING OBJECTIVES-ORIENTED INSTRUCTION
--An Instructional Exercise--

Ted Ward

(Distribute one form to each set of two people.)

This exercise gives the participants experience in planning more than one instructional activity for a given objective. The objectives determined in the second exercise, "Objectives Have To Make Sense," are used by pairs of participants to design alternative instructional activities, assess the plan, select, teach and evaluate the learnings.

Each team of two people is to be given:

- One Instruction Form
- Two ABC Forms
- Two D Forms
- Two E Forms
- Four F Forms

1. Each of you are to write your objective from Exercise 2 ("Objectives Have To Make Sense") on an ABC Form. You should share with your partner the information that you have held as confidential up to now. Ask his help in preparing the ABC Form.

2. For EACH objective that you have written, plan with your partner TWO different possible learning activities. (Use one D Form for each of the learning activities.) Each activity should be designed so it could stand alone as an instructional experience adequate to accomplish the objective. (Remember: There will be only 5 minutes for the micro-teaching!)

3. After you and your partner have completed the four D Forms, use the E Form to assess the instructional options. (Work together with your partner on this step.)
4. Based on the assessment, each of you should select the instructional option that you will actually teach.

5. Working again with your partner, plan a post-test or other evaluation procedure that will establish whether or not your instructional objective has been met. Please refer back to the specification of your objective on the ABC Form, particularly the material at B.

6. If you plan to use a written test, prepare it now, in duplicate, on the F Form. (You will use a copy of this test for each of the two people you will teach.

7. Prepare to teach the micro-lesson. Prepare your materials as required by the D Form option that you have selected. Your "pupils" will be the other two members of your original group.

8. Re-group in your original set of four participants. Take turns teaching your micro-lesson. Your planning partner will keep time. Do not exceed five minutes.

9. Evaluate. After all teaching, and in the same order as the teaching, each of the four of you should conduct your evaluation as planned.

10. Discuss the total experience within your group of four participants. Prepare for the total group discussion. It will focus on these matters:

   1. What is the most creative (or potentially creative) part of the series of operations? - A, B, C or D -

   2. What were your sources of ideas for D?

   3. How can you increase your creative potential for doing D?

   4. Did the evaluation of the learning reveal anything you had misjudged? How could you have planned more precisely?
DESCRIPTION OF AN OBJECTIVE

What do you want the pupil to learn?
I want the pupil to learn to________________________________________

How will you know the pupil has learned it?
When the pupil has learned it, he will be able to________________________ (active verb)

Select one

When confronted with:_______________________________________________
When asked to:_____________________________________________________
When given:________________________________________________________

What must the pupil have already learned in order to be able to learn A?
1. _________________________________________________________________
2. _________________________________________________________________
3. _________________________________________________________________
4. _________________________________________________________________
ETC.
INSTRUCTIONAL OPTION #1

Description of the activity:

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Individual/pair

Independent/teacher-led

Time required: 5 minutes

Equipment required:

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Previous learning or physical skills required* in order for the pupil to participate:

1. ______________________________________

2. ______________________________________

3. ______________________________________

*In addition to those indicated on C.

INSTRUCTIONAL OPTION #2

Description of the activity:

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Individual/pair

Independent/teacher-led

Time required: 5 minutes

Equipment required:

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Previous learning or physical skills required in order for the pupil to participate:

1. ______________________________________

2. ______________________________________

3. ______________________________________

*In addition to those indicated on C.
### FACTORS

<table>
<thead>
<tr>
<th></th>
<th>#1</th>
<th>or</th>
<th>#2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation to Objective</td>
<td>2</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Clarity of Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency (in terms of use of time and resources)</td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Likely to Teach the Specified Learning</td>
<td></td>
<td>or</td>
<td></td>
</tr>
</tbody>
</table>

---

**E**

Name of originator of the objective:

Check the better option:

**INSTRUCTIONAL OPTIONS**

---

**F**

Evaluation of the Learning.

Pupil: ____________________________

---

fold and tear

---

**F**

Evaluation of the Learning.

Pupil: ____________________________
"Can you really teach that in 5 minutes?"

"Will you be able to evaluate that after 5 minutes?"

"Can you think of a way to state it more specifically?"

"Would that meet Mager's three criteria?" (Indicate which criterion is missing.)

"Are you asking for more transfer than you can expect in this situation?"

"Wouldn't you be satisfied in 5 minutes with just the verbal association rather than asking for such thorough comprehension?"
At the end of this exercise you should be able ....

...to suggest two or more instructional experiences that relate to the accomplishment of a given instructional objective;

...to list three or more factors that should be considered in selecting among optional instructional experiences in order to increase the probability of achieving given objectives;

...to judge comparatively among two proposed instructional experiences in order to select the one most clearly objective oriented.
Assuming that you will be conducting in-service training with teachers, how comfortable do you feel in the role of a teacher-trainer?

<table>
<thead>
<tr>
<th>Pre-Evaluation</th>
<th>Post-Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>Very comfortable</td>
</tr>
<tr>
<td>Comfortable</td>
<td>Comfortable</td>
</tr>
<tr>
<td>Somewhat comfortable</td>
<td>Somewhat comfortable</td>
</tr>
<tr>
<td>Not comfortable</td>
<td>Not comfortable</td>
</tr>
</tbody>
</table>

5 felt more comfortable after workshop

Perceptual-motor activities involve: (check one or more)

- eye-hand coordination (12)
- auditory reception (10)
- visual-motor integration (12)
- gross movements (11)
- recall of specific facts (6)

Perceptual-motor activities can be designed for: (check one or more)

- low vision students (14)
- concert musicians (12)
- taxi driver (12)
- culturally disadvantaged students (14)
- shoe salesman (11)

Materials for working with children with perceptual-motor problems can be obtained from:

- IM's 6
- MSU IMC 2
- Indianapolis IMC 3
- Fort Wayne IMC 3
- Publishers 7
- Local School Corp. 2
- Community 0
- Home 0
- Teacher-made 2
- Students 0
- Federal Surplus Warehouse 0
- Optometrist 1
- Anywhere 5

973
15 respondents

Identifying #

IN-SERVICE WORKSHOP - PRE-EVALUATION

"Toward an Understanding of Perceptual-Vocational Programs"

1. Assume the role of a teacher in a high school (check one or more)
   - 1. Very Comfortable
   - 2. Comfortable
   - 3. Somewhat Comfortable
   - 4. Not at all Comfortable

2. Personal characteristics of students (check one or more)
   - 12. eye-hand coordination
   - 10. auditory reception
   - 12. visual-motor integration
   - 11. gross motor ability
   - 6. recall of specific facts

3. Perceptual-motor activities as a designer form other out of school
   - 14. paint and drawing
   - 12. music and dance
   - 12. handwriting
   - 14. cutting and pasting
   - 11. block building

Materials

Indianapolis IMC - 3
MSU IMC - 2
Fort Wayne IRC - 3
Publishers - 7
Local School Corp. IMC's - 2
Materials Centers - 6
Anywhere - 3
Teacher-made - 2
Optometrist - 1
**In-service Workshop Evaluation**

"Toward an Understanding of Perceptual-Motor Programs"

This evaluation is designed to provide the workshop staff with feedback regarding your reactions to this workshop. The results will assist us in planning future in-service activities.

1. Using the following rating scale, indicate the extent to which you agree with the following statement:

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Mildly</th>
<th>LC</th>
<th>Mildly</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Disagree</td>
<td>Opinion</td>
<td>Agree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

1a. There was a wide range of questions and exchange of ideas during the workshop.

1b. Suggestions for classroom application were presented.

1c. Techniques were presented for evaluating the new classroom practices.

1d. The workshop content was presented in an interesting fashion.

1e. The workshop was well organized.

1f. The workshop content affected the method of presentation.

(See attached sheet)

2. What aspects of the workshop did you find particularly difficult to understand? What skills and understandings are you aware that you need to build?

(See attached sheet)

3. What helpful experience did you have in role play or a teacher-trainee?

(See attached sheet)
4. Assuming that you will be conducting in-service training with teachers, how comfortable do you now feel in the role of a teacher-trainer?

   1. Very Comfortable
   2. Comfortable
   3. Somewhat Comfortable
   4. Not Comfortable

5. Perceptual-motor activities involve: (check one or more)

   13. eye-hand coordination
   12. auditory reception
   13. visual-motor integration
   14. gross movements
   10. recall of specific facts

6. Perceptual-motor activities can be designed for: (check one or more)

   15. low vision students
   15. concert musicians
   15. taxi drivers
   15. culturally disadvantaged students
   15. shop workers

7. Intervene for children with perceptual-motor problems can be detailed later.

   IMC - 8
   Publishers - 5
   Home - 1
   Many Sources - 7

   Own creativity - 1
   MSU/IMC - 2
   Ft. Wayne IRC - 3
   Indianapolis IMC - 4
   Local School Corp. - 1
   Community - 3
   Students - 2
   Federal Surplus Warehouse - 2
   Teacher-made - 3

8. Suggestions:

   (see attached sheet)
Post-Evaluation

1. Using the following rating scale, indicate the extent to which you agree with the following statements:

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Mildly</th>
<th>No</th>
<th>Mildly</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Disagree</td>
<td>Opinion</td>
<td>Disagree</td>
<td>Disagree</td>
</tr>
</tbody>
</table>

1a) There was ample time to ask questions and exchange ideas during the workshop.
1b) Suggestions for classroom application were presented.
1c) Techniques were suggested for evaluating the new classroom practices.
1d) The workshop content was presented in an interesting fashion.
1e) The workshop was well structured.
1f) The workshop activities clarified the method of presentation.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Mildly Disagree</th>
<th>No Opinion</th>
<th>Mildly Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1a)                | 1              | 2          | 1            | 3             | 8             |
1b)                | 1              | 1          | 0            | 7             | 5             |
1c)                | 0              | 0          | 0            | 11            | 3             |
1d)                | 0              | 0          | 0            | 1             | 14            |
1e)                | 0              | 0          | 0            | 1             | 14            |
1f)                | 0              | 0          | 0            | 4             | 11            |
Post-Evaluation

1. What aspects of today's workshop did you find particularly difficult to understand? (What skills and understandings are you aware that you need to build.)

I will do more reading. Remain open minded.

2. What parts of today's workshop did you find particularly helpful? (What new understandings and/or skills will you take away.)

Other areas that I need more... Last part - Critical Incident Appraiser - either it's too early to date or I'm just still better understanding of task analysis. Better understanding of the effects of P-M programs. More sophisticated skills in conducting in-service session.

3. What aspects of today's workshop would you like to see again or have particular interest in? (Areas you will need to review.)

More particularly - perhaps some definitions for key people: PSYCHOMOTOR DOMAIN.

Terms - I would like a list of terms and definitions as they will be used, i.e. laterality, cognition, etc.

The difference in terminology was often confusing. Often people were discussing the same thing but the terms were completely different.

None. Help in identifying the learning problem.

4. Did you feel that you have been able to expand your knowledge and skills in understanding and teaching the P-M programs? If so, in what areas?

Yes.

5. If not, how has your perception of the P-M programs changed as a result of today's workshop?

I think I understand somewhat more about how people are taught in a more interactive manner.

6. In your opinion, what was the most useful activity today? Why?

The transfer of the concept of thought, activity, and design activities for P-M programs was most useful.

[Signature]

[Date]

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POST-EVALUATION

3. What specific applications can you make in your role as a teacher-trainer? (Cite one or two specific ways in which today's experience applies to your role as a teacher-trainer.)

Have the workshop well planned - scheduled and structured as this one. Do not allow tangents to be extended. Brainstorming is good.

1. Coordinator kit should be very helpful. 2. Better understanding of task analysis - especially as this relates to perceptual motor programs.

Utilization of this technique in teacher training.

Can use in faculty meetings to perhaps get teachers to look at kids and tasks in a different light. Get out of the lock-step. Through these meetings stimulate a more critical analysis of perceptual-motor activities and programs.

1. Show the teacher the role of the student. 2. Help teacher to always be aware of individual differences in learning. (I'm sure they forget this when they leave college.)

Will help me in working with teachers as I now have experienced frustrations similar to some they face.

I'm not a teacher-trainer but can use these later. Getting organized is of utmost importance.

I feel that I can spread this information to other potential trainers since I'm not involved in actual building work - by being able to present them with this material I will be able to spread the concepts presented today.

1. Provide training for primary regular class teachers in understanding perceptual motor activities such as the numbers and alphabet games and in providing time to learn vocabulary words such as cognition, perception, etc.
2. Provide time for special class teachers to order levels of activities so that they begin with easier tasks rather than difficult ones for their students.

Develop interest for perceptual motor training within my system. Assist in preparation of inservice workshops.

Will be able to assist other teachers and teacher trainers when specific questions concerning perceptual-motor programs arise...and they frequently do arise.

Active participation of trainees must be stressed - involvement of trainee in content of sessions.

Use of a group approach to problem solving rather than lecture presentations, i.e., discussions of cases and orientations of others. Learned about a good reference book.
Post-Evaluation

8. Suggestions or Comments:

Well done!!

Enjoyed the AP's activities - my time was well spent.

Excellent. Time parameters naturally limit some things.

Give us a list of what the specific behavioral objectives are for eg for the day. Instead of a 1-7 rating or 1,2,3 rating in items might be better to place on some way on a continuum.

The program was interesting, informative and certainly helpful.

What is the best school organization for remediating perceptual motor problems - the regular classroom, a L2 classroom - resource teacher??

Really enjoyed this session and feel it is one of a few meetings that presented something tangible.

Would like to see greater participation from area teachers.

Less material or more time

Great idea for the AP!!
WORKSHOP COORDINATOR KIT

WORKSHOP PLANNING KIT

Nancy Carlson

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WORKSHOP PLANNING KIT
Nancy Carlson

THIS WORKSHOP PLANNING KIT IS DESIGNED TO ASSIST WORKSHOP COORDINATORS IN MAPPING OUT ALL OF THE NECESSARY STEPS INVOLVED IN PLANNING A WORKSHOP. THE KIT CONSISTS OF A SET OF 48 SEPARATE CARDS.

FIRST-- Cut all of these sheets! There are 2 cards on the next green sheet, 4 on the pink page, and 6 each on the seven white pages following. (48 cards in all.) Cut marks have been included on the pages to show where the cards should be separated.

NOW THAT YOU'VE GOT YOUR DECK OF CARDS, YOU'RE READY TO USE THE KIT, BUT BEFORE USING IT . . . . .

You must have a definite workshop in mind! Take a sheet of paper and define the topic area or focus of the proposed workshop. This is your key towards effective planning.

NOW, YOU'RE READY FOR THE KIT.

Clear off a table. You'll need ample space to work on. Next, examine your deck of cards. There are three different types of cards:

Start Cards (green) - beginning points in the planning process.

Task Cards (white) - activities that must be considered to effectively plan a workshop.

Closure Cards (pink) - used to signify the completion of various planning phases.

Select the appropriate "Start Card" and then lay out in sequential order those "Task Cards" that must be considered for your workshop. (You may branch where necessary.) Insert the "Closure Cards" at the appropriate points. Many cards have options listed. Use a pencil to check the options that are necessary to your plan. (You can erase them when finished.) Blank cards can be used to write and insert any steps not included in the kit.

WHEN YOU'RE FINISHED YOU'LL HAVE A TABLE-SIZED FLOW CHART OF THE STEPS AND ACTIONS THAT WILL BE NEEDED TO SUCCESSFULLY CARRY OUT YOUR NEXT WORKSHOP. GOOD LUCK!
INITIATE IDEA
FOR WORKSHOP

RECEIVE REQUEST
FOR WORKSHOP
PLANS FOR PHYSICAL ARRANGEMENTS NOW COMPLETE

PLANS FOR HUMAN RESOURCES ARRANGEMENTS NOW COMPLETE

PLANS FOR COMMUNICATIONS ARRANGEMENTS NOW COMPLETE

WORKSHOP ACTIVITIES AND EVALUATION NOW COMPLETE
IDENTIFY TYPE OF PARTICIPANT

- special education
teacher
- regular education
teacher
- paraprofessional
- administrators

MAKE ARRANGEMENTS

FOR ADVANCE PUBLICITY

- School districts
- local IMC's
- local press
- other

MAKE ARRANGEMENTS

FOR WORKSHOP STAFF

- transportation
- lodging
- meals

MAKE ARRANGEMENTS

FOR MEALS

- pre-set menu
- arranged but variable menu
- list & map for "on your own"

KEEP SPEAKER OR PANEL MEMBERS INFORMED

Regarding:

- program
- time constraints
- local arrangements
- list
- approximate number and type of people attending

FOR OUTSIDE ASSISTANCE, TALK TO

- Special Education Directors
  (state, local)
- program supervisor
- Regional SEIMC
- local IMC's
- University personnel
- experienced teachers
- other
DETERMINE FOCUS OF WORKSHOP (CONTENT)

COLLECT MONEY FROM PARTICIPANTS

DETERMINE ALLOCATION OF FUNDS

- participants ______________________
- materials & supplies ________________
- speaker/consultants _________________
- workshop staff _____________________
- clerical ___________________________
- other ______________________________

DETERMINE WORKSHOP FORMAT

- large group participant interaction
- small group participant interaction
- panel presentation
- mediated presentation (video-tape, slides, films, etc.)
- lecture
- demonstration
- other ______________________________

MAKE ARRANGEMENTS FOR MEETING ROOM(S)

CHECK ON AMOUNT OF TIME AVAILABLE FOR WORKSHOP

- all day
- after school
- half day
- other ______________________________
DETERMINE IF PARTICIPANTS ARE TO BE FINANCIALLY REIMBURSED AND BY WHOM

- travel
- stipend
- meals
- all of the above

ARRANGE FOR SPEAKER AND/OR PANEL MEMBERS

MAKE ARRANGEMENTS FOR NECESSARY EQUIPMENT AND FURNITURE

- tables
- chairs
- overhead projector
- screen
- chalkboard (chalk & eraser)
- other

- videocassette recorder
- camera & film
- filmstrip projector
- prepared transparencies
- slide projector
- tape recorder & microphone

DETERMINE WORKSHOP STAFF

- coordinator
- consultant(s)
- group leaders
- clerical
- other

DETERMINE IF CREDIT IS TO BE GIVEN

- professional (granted by local school district)
- college (granted by college or university)
- released time
- other

OBTAIN NAMES AND ADDRESSES OF ALL POTENTIAL PARTICIPANTS

From:

- associate IMC (local)
- local school districts
- state department
- other
SEND LETTERS OF INFORMATION AND RESERVATION REPLY CARD TO POTENTIAL PARTICIPANTS

Include:

- menu choice
- reimbursement information
- general information (who, what, why, where, and how)
- sponsoring agency
- other
- workshop director
- alternate (or contact person)

MAKE ARRANGEMENTS TO DUPLICATE NECESSARY MATERIALS

- videotapes
- slides
- cassette tapes
- reel-to-reel tapes
- printed material
- other

SEND FOLLOW-UP EVALUATION TO PARTICIPANTS

Delay time(s): ____________________

MAKE ARRANGEMENTS TO DUPLICATE NECESSARY MATERIALS

- videotapes
- slides
- cassette tapes
- reel-to-reel tapes
- printed material
- other

LOCATE EQUIPMENT NEEDED TO PRODUCE WORKSHOP MATERIALS

- thermofax machine
- ditto machine
- videotape recorder
- television camera
- slide camera
- cassette tape recorder
- xerox copier
- reel-to-reel tape recorder

SEND FOLLOW-UP EVALUATION TO PARTICIPANTS

Delay time(s): ____________________

MAKE ARRANGEMENTS TO DUPLICATE NECESSARY MATERIALS

- videotapes
- slides
- cassette tapes
- reel-to-reel tapes
- printed material
- other

LOCATE EQUIPMENT NEEDED TO PRODUCE WORKSHOP MATERIALS

- thermofax machine
- ditto machine
- videotape recorder
- television camera
- slide camera
- cassette tape recorder
- xerox copier
- reel-to-reel tape recorder
MAKE ARRANGEMENTS FOR
COFFEE BREAKS

DETERMINE BUDGET
Sources of funds to be used:

____________________________________

____________________________________

____________________________________

MAKE NECESSARY
ARRANGEMENTS FOR
SOCIAL HOUR

MAKE ARRANGEMENTS
FOR LODGING FOR
PARTICIPANTS

HOLD WORKSHOP
STAFF PLANNING
SESSION
delegate responsibilities to individual
staff members

device time line for executing tasks

OBTAIN NECESSARY WORKSHOP SUPPLIES FOR
PARTICIPANTS AND ASSEMBLE PACKETS

__name tags
__binders or portfolios
__note paper
__pens, pencils or
markers
__handouts
__list of participants
(names and addresses)
__information on local
"what to see & do"
__other ____________
MAKE ARRANGEMENTS
FOR FOLLOW-UP PUBLICITY

__School Districts
__local IMC
__local press
__other ____________________

OBTAIN MATERIALS NEEDED TO PRODUCE WORKSHOP MATERIAL

___spirit masters
___mimeograph stencils
___ditto paper (colored)
___mimeograph paper
___(colored)
___index cards
___transparencies
___flash attachment
___other ______________

___paper clips
___rubber bands
___blank cassettes
___recording tape
___stapler, staples
___heavier stock paper
___for covers
___film & flash bulbs
___videotape

SPECIFY OBJECTIVES

__for staff
__for participants
__for activities
__other ____________________

TAKE "READY FOR ANYTHING" KIT TO WORKSHOP

Contains:

___extension cords
___blank transparencies
___transparency marking pens
___adapter plug
___blank cassettes
___take-up reel
___batteries
___extra bulb for projector (slide & overhead)
___stapler & staples
___scissors
___scotch tape
___masking tape
___paper clips
___other __________

DEVELOP EVALUATIVE INSTRUMENTS

__to measure participant entry behaviors
__to measure success (re: objectives) of individual workshop components
__to measure participant exit behaviors
__to measure post workshop application of concepts

SEND MORE SPECIFIC INFORMATION TO RESPONDING PARTICIPANTS

__housing facilities
__reimbursement policy
__pre-assessment form
__transportation information (maps, etc.)
__other ____________________
WRITE REPORT ON WORKSHOP
SEND TO:

- administrators
- participants
- workshop staff
- speaker and/or panel members

DETERMINE DATE(S)
OF WORKSHOP(S)

SEND LETTERS OF APPRECIATION

- workshop staff
- consultant(s)
- participants
- local helpers
- other

ADJUST BUDGET
(REALLOCATION OF FUNDS
IF NECESSARY)

HOLD WORKSHOP STAFF POST-SESSION

- decide on feasibility of future workshops
- share subjective and objective reactions
- delegate any additional responsibility

PAY BILLS
COMMUNICATING ACCOUNTABILITY

S. Joseph Levine
Nancy A. Carlson

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COMMUNICATING ACCOUNTABILITY

S. Joseph Levine
Nancy A. Carlson

--LEADER'S GUIDE--

OVERVIEW

This workshop activity is designed to facilitate understanding of the component parts of one accountability model. According to Alkin* there are three different groups within educational systems who demand information about school programs: the community, the school board, and the school administration. The information that must of necessity be communicated to these three groups relates to accountability: goal, program and outcome accountability.

This activity, through interactive small group exercises, attempts to let participants match the accountability information to the appropriate group. The information is contained in a series of press releases from a fictitious school district that has begun a curriculum in physical education for the handicapped.

The last part of the activity attempts to get groups to generate ways or methods to communicate information to various groups. There are three interactive parts to the entire activity; each followed by a discussion.

OBJECTIVES

Through the activity the participant will:

--be able to select types of accountability information that should be communicated to one of three specific groups.

--be able to identify information contained in dissemination articles and list appropriate pieces for a particular group.

be able to select appropriate ways to communicate information to each of the three groups.

PREREQUISITES

For the leader: familiarity with Alkin's model of "Accountability Types" (page 4 of attached article) and ability to manage (organize) discussions. The leader does not have to be an "expert" in accountability.

For the participants: interest in learning more about communicating accountability. The activity will work equally well with any adult group: parents, teachers, administrators, etc.

TIME NEEDED

Approximately one hour to one hour and fifteen minutes. To stay within this time framework, it will be necessary to encourage groups to accomplish tasks speedily.

MATERIALS NEEDED

--Worksheets:
   Each group of participants will receive 2 worksheets at three separate times. Further, these worksheets will differ slightly so that each group of participants can concentrate on one of the three hypothesized groups:
   1) School Administration: prepare 10 copies each of Worksheet 1, Worksheet 2 and Worksheet 3. These worksheets are on yellow paper on the following pages.
   2) School Board: 10 copies each. Worksheets are goldenrod.
   3) The Community: 10 copies each. Worksheets are green.

--Press Releases - one set per person (6 pages)

--Transparencies:
   3 prepared transparencies--use attached pages as masters
   a few blank transparencies

--Overhead projector

--Handout - UCLA Evaluation Comment
PHYSICAL ARRANGEMENTS NEEDED

Tables and chairs sufficient for 4-6 persons per group. Number of groups should be multiples of three, if possible. (i.e., 3, 6, 9, etc. groups). NOTE: if you have set up only 6 (9) tables, it will facilitate grouping.

PROCEDURE - STAGE 1

1. Divide the workshop participants into groups.

2. Provide a brief introduction to the activity. Perhaps explain that the role of a model, such as what they will be experiencing, is to facilitate communication, and to lessen in some cases the perceived "pressures" experienced by individuals and groups working within an educational institution.

3. Hand out Worksheet 1 (2 worksheets per group). The group(s) that get the yellow worksheet will be dealing with information that should be communicated to the school administration, those groups that get the goldenrod worksheet are handling school board information, and the green worksheet has to do with the community.

   NOTE: The problem-solving TASK of each group of participants is the same (i.e., listing necessary information). The groups may differ in the TYPES of information (content) they feel must be communicated.

4. Circulate to answer any questions and encourage groups to fill out worksheets.

5. This first activity should take about 15 minutes. Remind the groups of time remaining so they stay task-oriented.

DISCUSSION GUIDE

Ask a member from each participant group to report the information their group has listed. Record it on transparency 1.

NOTE: At this point participant groups will be reporting overlapping information. The tendency will be for all groups (school board, school administration, and community) to be perceived as needing all types of information. Following the reporting procedure, transparency 1 should show a conglomerate of information. At this point introduce transparency 2, and discuss the distinctions between GOAL, PROGRAM, and OUTCOME accountability. Obviously there are overlaps, but try to get participants to see the potential of this classifying system.
STAGE II

1. Leave transparency 2 on the overhead and hand out Worksheets 2 and press releases. (Each participant group should receive the same color worksheet as previously.)

2. Circulate to answer questions, but try to keep each group focused on their particular part of the model.

3. Begin discussion after 15 minutes.

DISCUSSION GUIDE

Again have each group report specific information contained in the press releases that relate to Goal/Community, Program/School Board, Outcome/School Administration. Record this on transparency 2. Briefly discuss information they feel was not presented.

STAGE III

1. Briefly outline the next task, which is for groups to generate a list of different ways to communicate information. One obvious way is the Press Release method. Hidden within the press releases are others, and many more ideas besides "meetings" may be generated.

2. Hand out Worksheet 3 in a similar manner. (Participant groups still concentrating on same groups--community, school board and administration.)

3. Encourage "brainstorming"--unusual and unique ideas.

4. Begin discussion after 15 minutes.

DISCUSSION GUIDE

Try to see how many different ways to communicate accountability information were generated.

EVALUATION

Two forms are provided in this kit which can be used to help you gather data on content learning and the workshop activity itself.
COMMUNICATING ACCOUNTABILITY

--EVALUATION--

CONTENT

1. List three groups to whom accountability information should be reported.

________________________________________

________________________________________

________________________________________

2. List the three TYPES of accountability.

________________________________________ accountability

________________________________________ accountability

________________________________________ accountability
COMMUNICATING ACCOUNTABILITY

--EVALUATION--

ACTIVITY

1. List two (2) new ideas, concepts, practices that you learned from this activity that have application for you.

2. Check where applicable.

This experience

___ a) provided information

___ b) increased my understanding of accountability

___ c) helped to improve my skills in communicating

___ d) all of the above

___ e) none of the above

998
COMMUNICATING ACCOUNTABILITY

THE COMMUNITY

THE SCHOOL BOARD

THE SCHOOL ADMINISTRATION
COMMUNICATING ACCOUNTABILITY

THE COMMUNITY

THE SCHOOL BOARD

THE SCHOOL ADMINISTRATION

1000
COMMUNICATING ACCOUNTABILITY
--WAYS TO COMMUNICATE--

THE COMMUNITY

GOAL

THE SCHOOL BOARD

PROGRAM

THE SCHOOL ADMINISTRATION

OUTCOME

1001
Today's educational systems are becoming increasingly involved with the question of accountability. According to Alkin¹ there are three different groups within the system who demand information about school programs. These groups are:

- the community
- the school board
- the school administration

He further says that each group requires different types of information.

As a team, enter in the spaces below the types of information that you feel the school administration should receive in an accountable school program.

The school administration should receive information of the following type:

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8.

WORKSHEET 1

Today's educational systems are becoming increasingly involved with the question of accountability. According to Alkin¹ there are three different groups within the system who demand information about school programs. These groups are:

- the community
- the school board
- the school administration

He further says that each group requires different types of information.

As a team, enter in the spaces below the types of information that you feel the school board should receive in an accountable school program.

The school board should receive information of the following type:

1.

2.

3.

4.

5.

6.

7.

8.

Today's educational systems are becoming increasingly involved with the accountability issue. According to Alkin, there are three different groups within the system who demand information about school programs. These groups are:

- the community
- the school board
- the school administration

He further says that each group requires different types of information.

As a team, enter in the spaces below the types of information that you feel the community should receive in an accountable school program.

The community should receive information of the following type:

1.
2.
3.
4.
5.
6.
7.
8.

WORKSHEET 2

Your group has been given a set of press releases describing a fictitious school project. These releases include information that is appropriate to the three different groups. Read these releases and then, as a group, extract and list below the accountable information that should be communicated to the school administration.

The following accountability information from the press releases should be communicated to the school administration:

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

What other information should be communicated to the school administration, yet is not included in the press releases.

1. 

2. 

3. 

4. 

5.
Your group has been given a set of press releases describing a fictitious school project. These releases include information that is appropriate to the three different groups. Read these releases and then, as a group, extract and list below the accountable information that should be communicated to the school board.

The following accountability information from the press releases should be communicated to the school board:

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

What other information should be communicated to the school board, yet is not included in the press releases.

1. 

2. 

3. 

4. 

5. 
WORKSHEET 2

Your group has been given a set of press releases describing a fictitious school project. These releases include information that is appropriate to the three different groups. Read these releases and then, as a group, extract and list below the accountable information that should be communicated to the community.

The following accountability information from the press releases should be communicated to the community:

1.

2.

3.

4.

5.

6.

7.

8.

What other information should be communicated to the community, yet is not included in the press releases.

1.

2.

3.

4.

5.
There are many different ways of communicating information to the three different groups (community, school board, school administration). What communication vehicles are most appropriate for communicating accountability to the school administration?

The following methods of disseminating information are appropriate for communicating to the school administration:

1.

2.

3.

4.

5.

6.

7.

8.
WORKSHEET 3

There are many different ways of communicating information to the three different groups (community, school board, school administration). What communication vehicles are most appropriate for communicating accountability to the school board?

The following methods of disseminating information are appropriate for communicating to the school board:

1.

2.

3.

4.

5.

6.

7.

8.
Worksheet 3

There are many different ways of communicating information to the three different groups (community, school board, school administration). What communication vehicles are most appropriate for communicating accountability to the community?

The following methods of disseminating information are appropriate for communicating to the community:

1.

2.

3.

4.

5.

6.

7.

8.
The Office of Education, U.S. Department of Health, Education and Welfare, Bureau of Education for the Handicapped, has just awarded a grant to the Center for the Study of Developmental Retardation. The project is to define a curriculum in physical education for the developmentally retarded children of the nation. The curriculum will integrate all aspects of physical activity into a life-long curriculum. The task force committee on Research on the Handicapped is expected to work closely with the project director.

Once the curriculum is developed, it will be field tested in three different school districts: one urban, one rural, one suburban. Characteristics of the children participating in the program will be clearly identified and measurable changes in individual and group behavior will be analyzed.

A unique aspect of the program is the inclusion of a parent/community planning team to assist in the planning stages of the project.

* * * *
Unique project for the retarded utilizes community survey.

The Center for the Study of Developmental Retardation has just released data on their community survey. Hailed as a "unique contribution to school planning" by superintendent Dr. Dale Barker, the survey was designed to probe specific goals that should be included in the recently funded project to define a curriculum for developmentally retarded children. Highlights of the survey include:

--a wide spread concern for the integration of retarded children in community recreation programs.

--the necessity for a better understanding of the physical achievement levels that are possible with retarded children.

--the exploitation of appropriate work placement opportunities for retarded children in the community.

* * * *
Press Release

Doe School District
Date OCTOBER 12, 1974

Teachers of the handicapped in three different local communities have been participating in teacher training workshops. The objectives of the workshops are to increase the teacher's understanding of the physical education curriculum project that is to be implemented in the district and to develop competencies in assessment, planning and evaluating children's behavior and reporting results to the project coordinators.

The purpose of the project is to improve developmental, cultural and leisure skills of the developmentally retarded so that they can have a broad base of motor skills and leisure activities to draw upon in later life.

One teacher commented: "I'm beginning to see that physical activity isn't just something done on the playground. It's applicable in math activities and in learning concepts and it helps the children feel better about themselves. I can't wait to try out some of the modules--particularly the ones on rhythmical skills--my students need that."

* * * *

1013
Area principals today visited the classrooms where handicapped children have been participating in a project designed to improve their physical activities. Prior to seeing the children, each teacher had a chance to share with her principal the data (pupil profile) on each child. The teacher explained what the terminal objectives were for each child, and exactly where each child was performing in relation to that objective.

Each principal received a preliminary copy of the Program Objectives Manual which spells out in detail over 450 specific objectives for the retarded students in the program.

One principal reported that he had a chance to observe a skill building session during which each child was working on developing a particular skill. Some were working on apparatus to develop gymnastic skills; some were working on health fitness skills to develop endurance. Each child, however, was doing something different.

Next, the children put on costumes they had made and demonstrated a folk dance of Mexico. (The principal was requested to pay 2 pesos admission!) Scattered throughout the room were various art projects done in bright colors, and a large Mexican flag.

One of the other principals reported that he had participated in an exciting game of horseshoes. All in all, a day well spent.
Press Release

Doe School District

Date July 15, 1975

Data on the results of a year long project to improve psychomotor, cognitive and affective skills in handicapped children have just been released. The project can undoubtedly be called a success, and plans are already under way to field test the revised materials and objectives in more schools next year.

The response from parents, teachers, administrators and children have been very positive. Selected pieces of the final report have been included here. The entire 286 page document, including a detailed analysis of each child, is available from the U.S. Department of Health, Education and Welfare, Bureau of Education for the Handicapped.

** * * *

80% of teachers were very satisfied with the curriculum

61% of principals were willing to purchase and use the revised materials the next year

95% of the principals and teachers felt the objectives and goals of the curriculum were met

83% of the parents of participating children were able to see positive changes in behavior

** * * *

(continued)
Doe School District

Date JULY 15, 1975

(CONTINUED)

| TABLE I |
|------------------|------------------|------------------|
|                  | Rural Community  | Urban Community  | Suburban Community |
|                  | (n=21)           | (n=25)           | (n=35)            |
| Average score on | 35               | 30               | 45                |
| combined* pretests |                |                  |                   |
| Average score on | 45               | 36               | 60                |
| combined post tests |                |                  |                   |
| Expected score on | 42               | 36               | 54                |
| combined post tests |                |                  |                   |
| Difference between | +3               | 0                | +6                |
| expected and actual |                  |                  |                   |
| post test scores |                  |                  |                   |
| Percent of pupils |                  |                  |                   |
| who are:          |                  |                  |                   |
| above expectancy  | 70%              | 50%              | 80%               |
| at expectancy     | 10%              | 10%              | 15%               |
| below expectancy  | 20%              | 40%              | 5%                |

*includes measures of physical ability, independence and self-concept

* * *
"You are..."
IN YOUR ROLE

AS A LEADER

OF IN-SERVICE EDUCATION

YOU ARE...
This guide has been developed to highlight the many and varying roles of an in-service leader. It should help in the PLANNING, CONDUCTING and EVALUATING of an in-service workshop. Most in-service workshops are active processes of communication and interaction. Thus it pays for the workshop leader to put to work some good strategies for communicating and interacting. The real trick in the design of a workshop is to include the best uses of the right strategies.

Ted Ward
Joe Levine
Nancy Carlson

February, 1972

FIELD TEST VERSION "A" -- FOR LIMITED DISTRIBUTION

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Copyright 1972 - Ted Ward, Joe Levine, Nancy Carlson
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
A TEACHER
A TEACHER WITHOUT A CLASSROOM?

A TEACHER works with learners and learning is not peculiar to any age level. If we think of our participants as learners it will help us to better understand our role as a TEACHER. A TEACHER's role is made up of an operational concern for learning theory and the best procedures for promoting learning. We must remember motivation, reinforcement, feedback, sequencing, rate, discovery, respect and the other variables that effect the learner's ability to transfer the information to his own setting.
ALL MODELS AREN'T MADE OF CLAY

We provide models of behavior for participants. Make sure that when you provide a model you also provide alternative models. There is a great tendency to adopt models without thinking through alternatives. Participants will often expect the leader to provide the "perfect" way of doing something. This is often impossible for the leader. Besides, it assumes that there is one correct way of doing something! By providing alternative models the participants will better understand that they must make choices in order to find the procedures most appropriate for themselves.

In-service education is concerned with the matter of communicating with teachers about the means they can use to communicate with pupils. The first thing to remember is that the way you communicate with teachers at a workshop becomes, for some of them, a model for communicating with their pupils. If you use a lecture approach you are, in effect, suggesting to the participants that they should lecture to their pupils. And it doesn't really solve the problem when you tell them to do as you say, not as you do! The tendency is for teachers to teach as they were taught. Thus, as a TEACHER, you must be concerned with the content of your workshop and with the way in which you communicate the content. Being enthusiastic about your topic, being organized, showing your concern about their learning, is all important and is a part of TEACHING.
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,

YOU ARE...
A CHANGE AGENT
WHAT IS A CHANGE AGENT?

A CHANGE AGENT is a "middle man". He operates in a zone between where people are and where people are going. The most important aspect about being a CHANGE AGENT is the ability to perceive where people should be. The CHANGE AGENT must be well versed in new practices, innovations, and emerging trends. He must be able to perceive exactly where a teacher is and the most promising procedure for moving them. He must be committed to his course of action.

I'M NOT SO ICE COLD!

To be an effective CHANGE AGENT calls for immediate decision making. The CHANGE AGENT must be aware of resistance (visible and submerged) and be able to plot an appropriate course. Sometimes you must face it head-on. Other times you may work around it or decide instead to avoid it completely and deal with a new topic. The easiest way out isn't always the best way out!
A CHANGE AGENT understands and is able to communicate effectively an atmosphere for change. Change does not occur by mandate. Teachers must be ready for change and it is up to the CHANGE AGENT to provide the opportunity. Many CHANGE AGENTS use popularity as a lever. Others, however, are able to promote change through fear. A CHANGE AGENT does not always have to be the most popular person to accomplish his mission.
IN YOUR ROLE

AS A LEADER

OF IN-SERVICE EDUCATION,

YOU ARE...
A PLANNER
I THINK I'LL JUST SIT BACK AND....

A well-planned workshop is thought-through well in advance. Sometimes educators attempt to run off-the-cuff workshops; they seldom achieve their objectives. If you would like the participants to feel you are at ease and comfortable while directing the workshop, take the necessary time to plan exactly what you will be doing at each step. The best way to insure a casual presentation is through detailed planning. Only through good planning can you have the luxury of making immediate changes as they are needed. Good planning allows you to sit back and observe the interaction of participants and spot the places where your intervention is needed and where your plan can be "tuned up" on the spot.

COULD YOU REPEAT THAT?

There is no substitute for clear directions in helping the participants to achieve the objectives of the workshop. Attempting to provide verbal directions off-the-cuff almost always leads to confusion. Prepare yourself with clear and concise written directions for any activity prior to the workshop. When writing directions, have someone else read them to judge their clarity.

When you want the participants to listen to the reading of some directions, make sure that no other activity is going on to distract them. In particular, do not pass out any reading material while giving directions. The visual distraction will surely interfere with the verbal presentation.
An effective procedure for communicating clear directions is to provide both oral and visual directions. Prepare a copy of the directions for each participant. Then read the directions aloud while the participants are also looking at the directions. A general rule is to ask for questions at the end of the directions in order to provide clarity where needed.

If an overhead transparency is used in conjunction with the printed directions, make sure the transparency is identical to the printed material. Participants can then choose to either look at their printed directions or direct their attention to the projected transparency. If they are identical, there will be no concern for "missing" something that is not on the transparency.

**IS PLANNING MY JOB?**

If the leader isn't sure where he would like the participants to go (i.e. what they should achieve) there is a very low probability that they will get there. The leader and the participants must understand the objectives and see how the workshop and the materials can logically contribute to these objectives. Sometimes the objective of a workshop is less to teach a procedure or an understanding than to explore the meaning of a problem and to gather viewpoints and insights. When this is the case and the objective of the workshop is of an exploratory nature, the leader must make sure that the participants understand this. Whether the objectives are for skills or shared opinions, there is a greater probability that the participants will achieve them if they know what they are!

One of the underlying motives in most workshops is to help the participants set goals for themselves. People will not set goals for themselves simply because you give them the opportunity. They have to become motivated to do so, and they likely need guidance or help. Your example in having and sharing goals and your willingness to involve the participants in subsequent goal-setting activities are important steps. Thus, especially if you want others to learn to set goals for themselves, there is no substitute for clearly thought through goals and objectives of your own.
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
A COMMUNICATOR
A COMMUNICATOR uncovers ideas and delivers them. His primary aim is to enhance the delivery process. A good COMMUNICATOR is never in the way. He should only be noticed when he isn't there! If we create another layer of bureaucratic "red tape" we are falling far short of the role of a good COMMUNICATOR.

Identifying the needs of teachers is a task that must be actively pursued. A good COMMUNICATOR does not have the luxury of sitting back and waiting for an idea to walk up and introduce itself. Ideas can be uncovered by listening (to teachers, to administrators, at conventions), by reading (professional journals, research literature) and by viewing (school visitations, field trips, films).

RESPECT THE NEEDS OF THE GROUP

Once you have uncovered an idea you must create ways to make others aware of it. A workshop should be developed in response to observed or reported needs and ideas that directly relate to the teachers with whom you are working. Be certain that topics for workshops are directed toward concerns and needs of the teachers. Never conduct a workshop "for the fun of it." You can't COMMUNICATE when you have nothing to say!

When assessing teachers' needs, be sure to look at perceived needs and real needs. Sometimes the perceived needs of teachers are not their real needs. The real needs are those which most closely affect the learning of the pupils. Sometimes it takes a pair of workshops: one to help teachers learn more about themselves and the needs of their pupils, another to make plans and develop the basic skills to meet those needs!
CLOSING THE FEEDBACK LOOP

A COMMUNICATOR brings together teachers, their problems and the solutions to their problems. To COMMUNICATE is to share. We can best share when we have insights. But wait a minute--teachers also have insights. To share insights with teachers is COMMUNICATING. We learn from others and when we pass along our learnings we are truly a COMMUNICATOR. COMMUNICATION is a two way process. We must always attempt to close the feedback loop.

Teachers have needs

Teachers have insights

Insights can be shared

Close the loop!
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
A MANAGER
A good MANAGER carefully goes over the plan for the workshop and selects physical surroundings that will enhance rather than detract from the workshop. Ample lighting, seating and work space should be provided so that the participants can engage in the workshop activities in a comfortable manner. If a blackboard or overhead projector is needed, make sure it is there in the room. And, if you are using an overhead projector, don't forget the projection screen! (Carry an extra "3-pole to 2-pole plug adapter" in the glove compartment of your car; they are crucial and usually missing!)

Make sure the room is arranged in the way you would like it to be used, before the first participants arrive. A well-organized room sets the stage for a well-organized workshop. It shows that you care! Roll a few "mod" posters or "graffiti" panels into a tube to take with you and add a last-minute touch of nuance to the environment.
IS THERE A MANAGER IN THE HOUSE?

Through effective MANAGEMENT you will be able to reduce the fatigue factor so often associated with workshops. Sometimes tasks and jobs that should have been the responsibility of the leader end up being done by the participants. Arranging chairs, preparing materials, and the budgeting of time are properly chores for the leader. When a person attends a play he doesn't expect to help in the construction of the stage props! At a workshop, the participant does not expect to carry our organizational details that are the responsibility of the leader. You must assume that the participant has come to your workshop to learn. Your job as a MANAGER, then, is to fulfill this expectation in the most direct and unencumbered manner.

Good MANAGEMENT means that you will have all the right things at the right place at the right time. A well MANAGED workshop shows that the leader is interested in the participants. The leader has made a real investment--himself!

Is the equipment ready?
Do you know how it works?
An extension cord?
Did you preview materials?
Enough chairs?
WHO REMEMBERED A PENCIL?
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
A DISCUSSION LEADER
HOW DO YOU THINK IT SHOULD BE DONE?

Never try to start a DISCUSSION session by saying "now let's discuss it." Instead, start DISCUSSING the matter yourself and involve others by inviting other opinions and comments as you go along. As soon as momentum picks up reduce your own role as a DISCUSSION LEADER to a minimum. DISCUSSION is a sweeping function. You don't turn it on or off. It's either there or it is not there. The best way to get it started is often with substantive questions.

Try to avoid "yes" or "no" questions. Unless, of course, you are ready to immediately follow the short response with a related substantive question.

"Why?" is a good word to remember while stimulating a DISCUSSION. A leader's "why?" to a participant's unsupported point can often save a DISCUSSION from degenerating into a bull-session.

Never ask a question unless you want an answer! Periodic questions maintain participant's interest.
DO I HAVE TO KNOW EVERYTHING?

Be an expert in what you are saying. The participants expect this of you and it is a role that you must assume. To be expert does not mean that you flaunt knowledge in the face of the participants. To be an expert means that you truly understand the topic area and are willing to communicate it to others. Protect your integrity—don't present opinions as facts—but don't be shy about responsible professional opinions.

Prior to the workshop it is a good idea to go over in your mind (better on paper!) the questions that might be asked by the group. Be sure you have meaningful answers to these questions. Don't try and fool people into believing you know something you really don't! Don't try and communicate something you don't understand. Take time prior to the workshop to gain a more full understanding of your topic.

It takes 2 to discuss.
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
KEEP IT MOVING!

An ORGANIZER is a "people-manager." He represents the interests of the participants and is ready at all times to make sure that their needs are met. He has designed the workshop so that everyone pulls together in the same direction.

ANYONE KNOW WHAT TIME IT IS?

A basic ORGANIZATIONAL detail is timing. Establish a time schedule for your workshop and stick to it (within reason and sensitivity). There is nothing more frustrating for participants than a time schedule that is not followed. Carefully think through the activities that will be conducted at the workshop and accurately assess the amount of time needed for each. If you are in doubt, add some time but never provide too little time.

If you establish a time-orientation at the very beginning of your workshop the participants will come to expect you to stay on schedule. If, in turn, you stay on schedule they will learn to make the best use of available time. Without a clearly defined time schedule there is a great probability that the participants will spend inordinate amounts of time on petty tasks. Participants like to feel productive. A well ORGANIZED schedule promotes productivity.

"ROOMS"
--Often lose those in back
--Not the best unless lecturing
--Some can't see the screen
--Everyone can't see each other
--Speaker often loses eye contact
--Effectiveness wanes with distance

"SMALL GROUPS"
--No one gets lost
--Promotes interaction
--Leader can move freely
--Limits interaction with leader
--May cause problems when using A/V equipment
ACTIVE PARTICIPATION:

Obviously a certain portion of any workshop is devoted to talking. Or, as is often the case, lecturing. When a lecture is in progress there is only one really active participant—the lecturer. Increasing the number of people who are taking an active part in the workshop also increases the number of people that will leave with your message. (Don't jump to conclusions, we aren't suggesting that everyone should start lecturing!) We're aiming for participation through activities that call for everyone to take part in an active manner. Participants should truly be participating. ORGANIZE for participation.

Design the activities so that the participants can receive the message through the activity and not be entirely dependent upon you and your personality for receiving the message. When good teachers work with pupils they attempt to make learning an active situation. There is a higher probability that the desired learning will occur when encountered in an active manner. ORGANIZE your workshop as you would like teachers to ORGANIZE for their students!

A standard rule of thumb is if there is to be a passive role for learners, it should come after an active period. Involvement, first; passive roles second. Save your own "messages" for the end. Never start in a passive mode.

VARIETY IS THE SPICE OF LIFE

The longer you expect a group of people to work together, the more variety there must be in what they do while they are together. We understand this idea very clearly in terms of children; yet, in fact, it applies to all learners. (Be sure that you think of the participants at your workshop as learners.) Different types of activities, all related to your objectives, can keep the participants alert and active in their learning. Participants will not regard two hours of role-playing as having variety, even if each role-playing represents different characters. A role playing situation, along with a discussion, a movie, and a game is more likely to be perceived as having variety. In other words, the message may be the same but the medium is varied. ORGANIZE for variety.
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,

YOU ARE...
A TROUBLE-SHOOTER
The in-service educator must be a TROUBLE-SHOOTER. He should be alert to the participants at all times. People at workshops always seem to be doing the unpredictable! The more inclined you are to predict that they will do a certain thing, the more apt you are to be surprised. You must expect the unexpected and be sensitive to it. Good workshop planning and organization allows for the unpredictable. Good planning does not mean that everything has been pre-determined to the exclusion of individual needs and differences. You must be able to expect and be sensitive to those times when you must veer from your plan. When a problem arises you must be able to deal with it immediately and then continue on your course.

A TROUBLE-SHOOTER must have the courage to attempt new procedures for dealing with problems. No two problems that occur at a workshop are ever the same. A TROUBLE-SHOOTER builds procedures from experience. For experience to be valuable it must be varied.
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
AFTER ALL, YOU HAVE INVITED THEM!

A good HOST makes the participants feel welcome. They are your guests. His job begins with the invitation, it keeps going during the introduction, continues through the presentation and is still evident during the conclusion. When you invite teachers to participate at a workshop you are responsible for their well being. To be a good HOST you must remember all of the little details that help in creating a smooth flow during the workshop. It is your responsibility to make sure that participants get to know each other. You should extend yourself toward all of the participants. Pull them out of corners if necessary! By getting to know each other early in a workshop, teachers will more quickly begin to interact. Once you've got the participants interacting--sustain it! We learn through interaction.
RESPECT BREEDS RESPECT

Operate in such a manner that you show the participants you respect them. Be aware that they can make or break you as a leader! A good HOST approaches the group with a great deal of respect for what they can do to you as well as enthusiasm for what they can do with you! (Not fear, but respect.) Communicate your respect by sharing your intentions, sharing your goals, honoring and respecting people by listening to them, and being flexible within limits. There is such a thing as losing respect if you let yourself get pushed around by every little thing that comes up.

VIVA LA PARTICIPANT!
You Are

Of In-Service Education, As A Leader In Your Role
AN

EVALUATOR
I SHOULD HAVE PAID ATTENTION:

When you EVALUATE a workshop you must be observant, keep records of what goes on, analyze data and draw inferences.

I SAY THEE; DO IT!

A good workshop includes some procedure whereby you can "step back" and observe what is going on. Sometimes a leader will design himself into a trap. he gets so involved and the action depends so much on his dominant leadership role at every step that it is impossible for him to truly observe what is going on. A well designed workshop allows the leader time when he is free of any direct input responsibility. The leader needs to be able to survey calmly what is going on and thereby to plan any revisions that might be needed during the remainder of the workshop or for future workshops.

WHAT DID THEY DO?

A written record can take many forms. It can include samples of the participant's work, a pre-assessment test, a post test, or merely your own notes taken during an activity. Never trust yourself to reconstruct "what it was like" from memory. A follow-up questionnaire will help jog your memory. Always support your observations with a written record.

EVALUATE Participants
EVALUATE Program
EVALUATE YOURSELF

Should I wake him up or should I let him sleep?

Constructive criticism is designed to help.

VALUE IT!

Caustic criticism is designed to destroy.

IGNORE IT!
HOW DID IT?

A pile of data has little value until it has been examined. Schedule a block of time immediately following your workshop to analyze the written material that you have collected. You can really demonstrate your interest to participants by sending them a copy of your analysis. If something didn't work well don't be afraid to admit it! Who would want to go through the same mistake twice?

WHAT DOES IT MEAN?

Be prepared to draw inferences from your data analysis. An EVALUATOR is concerned with improvement and growth. When we draw inferences we are suggesting reasons why a workshop went in a particular direction. Inferences allow us to re-plan with growth built in. Don't be content to try the same-old-thing the next time!

A human computer!
Are you sure?
What makes you think that?

Pre-test - BEFORE
Contract - AFTER
Objectives - BEFORE
Post-test - AFTER
Worksheets - DURING
IN YOUR ROLE
AS A LEADER
OF IN-SERVICE EDUCATION,
YOU ARE...
WHY KEEP IT A SECRET?

When you REPORT the outcomes of a workshop you are sharing your findings with others. Without good REPORTING we might still be living in caves! Instead, we are able to allow others to examine what we have done and make their own decisions regarding its value. We have established a vehicle for growth. A REPORT must be objective. It is designed to document occurrences, report observable data, describe procedures, and to draw valid inferences. A REPORTER must be observant and alert to every-thing that goes on at a workshop. He must exert himself to see the unique, the important and even the ordinary. He must convey his findings in a manner that effectively relates his "news" to others. A REPORT is no good unless it is read.

Why are they there?

Who attended?

What happened?

Who attended?

Why are they there?

What happened?
REPORT IN-SERVICE SUCCESS IN TERMS OF LEARNING

When your supervisor(s) or colleague(s) ask "How did meeting go?", reply in terms of how well those that took part in your in-service learned. Below are three methods for computing and reporting in-service effectiveness.

A. Calculate the percentage of accomplishment for each objective.

For example: Ten (10) people attended the meeting and Objective #2 was accomplished by seven (7) people.

B. Calculate the total number of objectives accomplished during the in-service meeting.

For example: A meeting attended by 50 teachers used four (4) behavioral objectives (for each teacher). 150 objectives were accomplished.

C. Calculate the gain scores for items on Pre and Post Tests.

For example: Twenty people attended the in-service meeting. Item #4 was accomplished by 5 individuals during the pre-test. Item #4 was accomplished by 15 individuals during the post-test. Plot the % accomplished scores on the line graph using \[\ldots\] for the pre-test and \[\ldots\] for the post-test.
INFO-PAKS: A SAMPLE
INFO - PAK 1

SELECTED READINGS

THE EDUCATION OF PARENTS OF HANDICAPPED CHILDREN

A GROUP OF ABRIDGED READING SELECTIONS FROM A SELECTED TOPIC AREA

USOE/MSU
REGIONAL INSTRUCTIONAL MATERIALS CENTER FOR HANDICAPPED CHILDREN AND YOUTH

1069
SELECTED READINGS

THE EDUCATION OF PARENTS
OF HANDICAPPED CHILDREN

CONTENTS

1 Chaney, Clara M. "Tips From a Parent and Teacher." Indianapolis, Indiana: Communication-Dissemination Center, pp. 7-12.
This material offers some specific teaching technique ideas for parents and teachers of Mentally Retarded Children. Suggestions include ways of setting the stage properly in order to let these children learn and recognizing individual performance levels. This material has been incorporated into the book, Motoric Aids to Perceptual Training by Clara Chaney, and Newell Kephart, published by Merrill Publishing Co. of Columbus, Ohio.

Parental involvement in school programs for disadvantaged children is discussed in this handbook. Specific ideas for implementing a program along with various activities for parent councils are given.

The goal of this research center is to increase the educability of young children from low income homes. This article discusses a program to involve parents in the implementation of the basic goal. It gives suggestions for a classroom based program coordinated by the teacher and gives teachers suggestions that have been used for setting up the program. The article also describes the training of parents in a home based program.

This article presents guidelines for teachers working with parents of retarded children. In addition to the guidelines it gives the teachers some insight into the concerns and problems of adolescent retarded children.

This article describes a behavioral program in which parents are taught to provide a special environment for their handicapped children. In each case goals are individualized to fit the problems and needs of the child and family. The parent is first encouraged to identify goals. These may include eliminating inappropriate behaviors and/or developing skills in their child. Through demonstrations by the Home Teacher and work with their own child, parents observe and practice principles of reinforcement and shaping.

This article discusses techniques teachers and social workers can use for helping parents recognize and cope with problems presented by a retarded child. The emphasis is placed on dealing with the parents and their attitudes about the child.
TEACHING TECHNIQUES

Parents and teachers must learn to structure for their children until they can structure for themselves. They must create controls until the child can control himself. Each of these children can achieve and succeed if we are but wise enough to set the stage properly. If you want the child to learn to identify forms by placing them in a formboard, and the task is very difficult for him, you don't dump out the whole set of forms and expect him to replace them. You remove one and have him replace it. Remove one at a time until he is comfortable in the task, then begin removing two, three, and so on.

It is possible to structure and control almost any task. One of our favorites is a pegboard. It gives us a media in which we can control the child and the task, and convince the child that he can perform. First we must elicit performance. The child must perform, for without performance there is nothing to structure or control. The second step is performance upon command. The instructor says to the child, "Take this peg and put it here." We have encountered some terrific resistance and some real patterns of rigidity in this one simple task, but the pegboard puts the instructor in control. If the child doesn't follow your instructions, it is easy to grasp his hand, force him to take the peg, and put it in the proper place. After you have forced the action several times, the child realizes that he can do it alone. From this point, you can go on to making forms on the board, structuring each problem so that the child can perform.

There was a recent study done in the East on what makes a retarded child perform best from the standpoint of successes and failures. The results showed that a retarded child will perform best if he succeeds about 75% of the time, and my first thought was, is this so unusual? Don't all of us like to succeed about 75% of the time? If the task is so difficult that we are failing at least half of the time, we will soon lose interest in it. If it is so easy that we succeed all of the time, we will also lose interest. But just make it tantalizing enough by 25% failures, and we will keep trying until we get the task done. These children are very normal in this respect. As you are setting up tasks for these children, keep this in mind.

THE TOLERANCE LEVEL

There are three levels of endeavor involved in working with these children. The first is the tolerance level. At this level, the child performs very easily. As soon as the child reaches this level in any task, you stop using it as a learning activity and transfer it to his playtime activity. Often mothers say that when they work with their children, it's hard to transfer learning activities into play time. Remember to transfer the task before the child becomes really bored with what he is doing. As soon as he can perform a task reasonably well, let him use it for playtime experimentation.
THE CHALLENGING LEVEL

The second level is the level at which the child is encouraged to give it another try, and we call this the **challenging level**. It is at this level that you set the stage from day to day for those tasks that you will push. Here you will insist that the children perform, because these are tasks which they can perform with a little effort.

THE FRUSTRATION LEVEL

The third level, called the **frustration level**, is the level at which the child cannot perform because he is not now equipped to do so. These are the tasks you must recognize and avoid. If you find yourself presenting tasks at this level and realize the child cannot perform, that he is becoming frustrated and so are you, don't set the task aside suddenly; simplify it. Break it down to the point where he just adds the last stages of the task and at least he will have had some measure of success.

These retarded youngsters are wise little people. If they find that you will set a task aside when they say, "I can't," or "This is too much for me," they are going to start using this excuse on more and more tasks in which they probably could perform.

If they can get out of performing they will do so, because performance is difficult for them. You will have to be ever watchful for their escape mechanisms. Often you must ignore them, for they will develop imaginary aches and pains. I remember one little fellow whose arm hurt very badly. We said, "Yes, we understand. Often we have aches and pains, but we still have to work." Thus we worked through the aching arm all day. When he came in the next day it was his leg. He complained that it hurt him also. Finally he got the idea that regardless of whether he hurt or not he was still going to have to perform, and he did.

THE MATTER OF OBJECTIVITY

This brings us to another point. Never say, "Do it for Mommy," "Do it for Daddy," or "Do it for teacher." We don't want the children to perform to please us; we want them to perform because this is life. There are demands that society will make of them. If they learn to perform to please you, they can turn off the performance when they are unhappy with you. It gives them another means of resistance. Remember to maintain an objective attitude when working with these children. Study your child before you begin any special tasks with him. Begin to think of him as a child instead of "my little darling." Try to look at your child as a clinician would; then it will be much easier to make demands of him, because you'll know that you are doing it for his future happiness. You must convince yourself that your child can perform, and that he will be much happier once he does. All of us enjoy success, and these children are no different in this respect.

When you start working with the child do not say, "please," or "Would you like to do it?" When you give him a choice he has the right to say no, and you should abide by it. In the beginning simply say, "Do it. Here and now." That is all that is necessary, although you may say "Thank you" afterward.
When you are working with your child, demand that he work. Command him to perform, and try to keep as many of your commands as possible related to the task itself and not to the child. Don't constantly call him by name. Don't say, "Come on now, John, John do this, John do that." The child might feel that you're heckling him. On the other hand if you simply say, "Put the peg in the board," or "Draw the circle on the chalkboard," you are directing the command to the task that the child is performing, and you will get much better and much quicker performance.

KEEPING IT SIMPLE

Keep your commands short, simple, and to the point. Don't talk too much. I know that the experts say our children learn from our talking to them, but I feel that we often say too much at the wrong level. Anticipate the child's need at a particular moment and answer only that need. One parent at the Center mentioned that his son asks questions about everything he sees and they answer very simply, but the next day he may ask the same question. As an example, he said, "Down the street there is one of those little mechanical horses that children ride. Each time we walk by Mike says, 'The horse?', and each time I answer yes, it is a horse. What else can I say?" I commented that maybe the boy really wanted to make conversation about the horse, but he didn't know quite how to go about it. I suggested that the next time the father might say, "Yes, that's a horse. What do you do with it?" They came back at noon all excited, saying it worked. Father said, "We asked him the question and he told us, 'You ride it.'" This was the first time the child had ever added the second bit of conversation. Always before when he asked a question they had just answered it, so there was nothing more for him to say.

If your child is in the habit of throwing questions at you, toss one back to him. If he says, "What are you doing?", say, "What am I doing?" He too might be trying to make conversation and not know how to do it.

Communication is dual. If these children are having difficulty speaking, they are probably having difficulty receiving. Too often a command is followed by superfluous words such as: "Come on. Why don't you do it? Look, it's not so difficult, just put it in here." By the time the child gets through to the last word you've spoken, he has completely forgotten the original instruction, so performance is impossible.

BE POSITIVE

Give a simple command and wait. If the child doesn't perform, give it again. If he still does not perform, repeat it the third time, as you move him into the task. This is one of the reasons for starting with motor tasks. Almost any time a child refuses to do a motor task, you can move him into the task physically. If you have a child doing Angels-in-the-Snow (a task in which the child lies on the floor and moves an arm and a leg on command), and you instruct him to move his leg, but he refuses to move it, you can easily grasp his leg and move it. I have found this quite effective with older children, especially boys, to say, "You move it or I'll move it for you." They don't want me manhandling them, so to avoid it they will at least try to perform the task.
Let your voice carry confidence and expectancy when you are working with your child. Mothers often have difficulty here, because they have seen their children fail so often. When a mother says, "Johnny, do it," she says it with a hopeful tone in her voice, and her lack of expectancy is evident. If father says, "Marion, don't go through that door," while he walks toward Marion as fast as he can, Marion knows that he is coming, and he knows by the tone of his father's voice that he did not expect him to stop. If you need to work on this type of problem, when you say, "Don't go through that door," be sure that you're close enough to the door that you can prevent the child's exit. After two or three similar successes, you begin to gain confidence, and the child understands that you are serious. Then you can from a further distance say, "Don't go through that door," until finally you can say it from across the room and experience immediate obedience. You have to train yourself to speak in an authoritative voice.

IN CONTROL AT ALL TIMES

When you are working with your child, your voice should be quiet and authoritative. The more you raise your voice, the more excited the child will become. I recently observed a teacher who spoke to her children in a very low, soft voice. The children had to listen to hear her. She gave a command softly and then waited. If necessary, she gave it quietly again and waited. If there was still no performance, she forced obedience. The children soon learned to listen to her, because they knew she would not raise her voice or give added clues once instructions had been given.

Initial work with your child should involve only short time periods. Adhere to a schedule, so that your child will become accustomed to performing at the same time each day. As you advance to the point where you can work with confidence and the child realizes that he can perform, lengthen the work periods and apply the above techniques to the activities of daily living.

During the initial work periods, be vigilant to prevent the child from gaining control of the situation. Remember that you are to structure the task for him, give the commands, and demand performance. You will find that the child will use many methods to avoid the task; however, you must recognize his methods and overcome them.

GROUP ACTIVITIES

The teacher working with a group of children can use circle games, obstacle courses, or even a game of follow the leader across the mats using different ways. There are fifty or sixty ways to cross a mat, and what is easy for one child may be a learning experience for another. If you find it hard to believe, get a group of adults together and see how many different ways they can find to cross a mat. By using the problems that you use working with the children, you might introduce a new type of party game. See how many variations the adults can come up with, and then help the children learn what they have discovered.

You don't want to teach the children to do a specific task in a specific way, so instead help them learn to do each activity in many ways, so that if they are called upon to perform a learned task in a slightly different manner, they can adjust and perform. Try to work out as many variations as possible when working with a child, but don't let him change the task unless it is a "follow the leader" type situation and each child is to take his turn.
ADDITIONAL POINTERS

If a child is almost ready to perform and there's something holding him back, a quick "now," or even a quick swat will sometimes solve the problem. Only a quick swat can carry the element of surprise needed to get the results that you want. Don't spank and don't use this technique too often, because once it loses its startle effect, it becomes useless.

Do not give the child a choice at any time unless you intend to abide by it. Choices are not a good idea with these children, because a choice usually involves the time element. If you say, "If you do this, Johnny, we'll show it to Daddy tonight," or We'll go get an ice cream cone," Johnny will probably want the ice cream now, or he will want to show Daddy now. These children have difficulty recognizing time variables; to them there is only now and the distant forever, no in between. A threat to spank is also ineffective; how threatening can the future be when there is no future?

KEEPING ONE STEP AHEAD OF THE GAME

When you tangle with the problems of hyperactivity and distractibility, you're going to have to think faster than the child thinks. You will have to anticipate the child's move before he makes it. If your child is one who slides out of his seat or makes a dart in the opposite direction, watch carefully to see when the child begins to make the move. Move in and stop him before he is out of his seat. Once he is out and gone, even if you bring him back, he has won the battle.

One little girl was unable to resist feathers on hats during a time when most women wore feathers in their hats. The child would sit in church and grab hats before anyone could stop her. The mother began sitting next to her daughter where she could feel her arm as it started to move. She would then thrust her hand out in front of the child's arm, thereby preventing her from stealing the feathers. The child's habit was soon broken, because her mother had wisely discouraged its practice from the beginning.

RELAXED ATMOSPHERE

Teach your child to relax, and help him learn to laugh at himself. Let him know that you don't mind if he makes a mistake, but encourage him to try again. Do not drill while you're working with your child; don't make him do the same thing over and over again. The first and second time that a child performs a task is the real learning activity.

LEARN TO RELAX

Mothers and fathers must also learn to relax. This is probably the biggest order of all, but there is no group of children in the world who react to our emotions and our tensions as these children do. Occasionally a mother will complain that her child is in a bad mood, and later admit that she was upset in the morning, but she settled down after her morning coffee. However, it wasn't so easy for her child to settle down; he kept building tension all day.
Try to keep the home situation relaxed. I think one of the most difficult times in the home is when everybody comes home from school and work in the evening, for at that time, the excitement and tension in the home reaches its peak. If possible, the child should be taken for a walk to get him away from all the confusion, and to give the other members of the family time to settle the atmosphere. This would enable the entire family to spend a more pleasant evening at home.

SUMMARY

Children with learning difficulties can learn more adequately than they are now learning. Each of them can experience learning now and for many years to come. Our problem is not teaching them, for I don't believe anyone ever really teaches children anything. Our basic concern is in setting the stage properly in order to let them learn. This is what we must do for retarded children; we must learn to think and feel as children. We must try to understand the problems which they encounter. If you keep these suggestions in mind, I think you will find that you can help these children learn to adapt and become useful members of our society.
Organization

As soon as the council is established, some type of organization needs to be adopted. The members themselves should decide the kind and number of officers and committees they need. Until a definite organization has been established, the group may select a temporary chairman to see them through the initial steps of organization. Roberts Rules of Order can serve as a useful resource document in establishing the rules and procedures of the group.

Among the first considerations of the group would be the following: selection of a chairman, tenure of members, replacement of members, attendance requirements of active members, and an organization structure for the group. While many models of this last item exist, the group may wish to consider the following as an initial structure:

1. A chairman
2. Assistant or co-chairman
3. Recording secretary
4. Committee chairmen in such areas as:
   a. Training
   b. Parental involvement activities
   c. Data collection
   d. Evaluation

Activities

The activities of a council are very closely related to the responsibilities which were discussed in an earlier part of this handbook. For Title I purposes, certain activities are spelled out in the regulations for the parent councils. They include:

1. Involvement in all stages of planning and development.
2. Involvement in operation of programs.
3. Involvement in the evaluation of programs.
4. After consideration of data, the making of recommendations concerning needs of children and programs available to meet these needs.
5. Reviewing evaluation data.

6. Commenting on applications when submitted.

Besides these specific activities, a parent council would also be expected to:

1. Participate in the direction and coordination of all parental involvement activities.
2. Participate in the planning of any training programs for parents.
3. Advise on dissemination activities, especially when directed towards parents.
4. Participate in the gathering of data on children to be served.

Support Needs

To fulfill its responsibilities and to perform its functions, the parent council has definite support needs.

The first of these needs is information. The local educational agency is responsible for initiating, conducting, and promoting an affirmative information program for the members of the group. The information required would include:

1. Data on the local educational agency as a system:
   a. Structure and organization of the school system
   b. Selection as recruitment standards for school personnel
   c. School budget
2. Citizen involvement in other programs such as Model Cities, Head Start, etc.
3. The decision-making process in the school system.
4. The local community as viewed socially and economically.
5. The purpose and history of the program in question.
6. The law and regulations (federal, state, and local) which affect the program.
7. Past project applications and their evaluations.
8. Current project applications.
9. Future plans for the program.
10. Description of the planning process, together with stages and time schedule of the process.

11. Data concerning needs of the children.

More specifically, the parent council should know:

1. How Title I children and schools are identified.
2. The numbers of Title I children and schools and their needs.
3. The priority listing of needs.
4. The alternate approaches to meeting those needs.
5. Other programs (federal, state, local) which can be used to help Title I children.
6. Type and number of personnel needed.
7. Facilities, supplies, and material available and needed.
8. Budget requirements for program.

As well as information, these activities require the presence of certain skills such as:

1. Ability to participate in the group process.
2. Ability to perform problem-solving and decision-making activities.
3. Leadership skills.

The presence of information and skill needs such as these immediately raises the importance of a training program for the parent council. Ideally, the training program would consist of an initial orientation session backed by intensive follow-up sessions held in situations removed from interruptions. During these sessions, the members should gain a general understanding of the project and take part in a workshop on decision-making.

Because parental involvement in education involves a close working relationship, some areas of training should provide for joint participation of council members and school personnel.

School staff members should take advantage of the opportunity to relate more directly with parents by serving as discussion leaders for some of the training sessions devoted to subject areas in which they possess special knowledge. School board members could also participate in this way.

The joint training sessions might require outside consultant support, but should also tap the knowledge and experience of parents, other lay citizens, and the school staff.
Some of the techniques for group training might include condensed readings, case studies, role playing, small discussion groups, audio-visual techniques, special exercises, speakers, student ideas, frequent visits to classrooms, and panel discussions.

Training should be a long-term, on-going process. School districts will differ in the degree and kind of involvement that has been achieved. Therefore, some school districts will have to start at the beginning; others will need to broaden their concept of what is involved. Additional training needs will suggest themselves as the program progresses.

Training sessions must be scheduled with the availability of the participants in mind. All the sessions need not be conducted in the schools. Frequently, a location in the community -- some place which represents neutral territory -- is a better setting. Such choices will help to reinforce the partnership idea and make easier the redefinition of roles.

Apart from information, skills, and training, the parent council will also have support needs in several other areas. It may be necessary to have some secretarial assistance, a meeting place, translators for non-English speaking parents, suggestions for speakers and consultants, etc. The local educational agency must be prepared to provide this kind of staff support to the council.

In some instances, the support need will take the form of a financial expenditure. Examples of items which could be justified from Title I funds are: tuition and registration fees for workshops and conferences, the cost of providing meeting facilities, equipment, and supplies, and expenses incurred by the local educational agency in connection with visits by parents to Title I schools. Title I funds may also be used in the form of direct payment to members of parent councils for expenses incurred for transportation to and from meetings, babysitting fees, and direct expenses incurred while visiting Title I programs.

Reimbursement for loss of work to attend meetings is not an allowable expenditure from Title I funds. Membership on a parent council should not be equated with, or allowed to become, a substitute for regular employment.

In justifying the expenditure of Title I money for parent councils, the basic consideration should be the facilitation of proper functioning of the committee and the avoidance of hardships that would otherwise be imposed on members of the council if the proposed expenditures were not authorized.

It should be noted that any expenditure of Title I funds must be included in an approved budget. Proper documentation must be made to justify each expenditure.
COMPONENTS OF PARENT TRAINING

Carolyn Saunders Brown
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DARCEE, the Demonstration and Research Center for Early Education is a unit of the John F. Kennedy Center for Research in Education and Human Development, located at George Peabody College in Nashville, Tennessee.

The children we have worked with, both in the home and in the classrooms, are biologically intact; they have no gross organic malfunctions. The only "exceptionalities" which can be cited is the fact that they were, and are now, all from low income homes.

It seems obvious, but it is still important to state, that poor people lack many of the resources which are present in and available to middle and upper income groups. The lack of sufficient resources can have drastic effects on low income families. Several studies have validated the disproportionate percentage of these children who exhibit communicative problems. Communication skill development has been a major focus of our curriculum. Our program, however, has been much more inclusive. Our central mission at DARCEE has been and remains to be, to improve the educability of young children from low income homes. Our overall objective, for the child has been "socialization for competence": the development of cognitive, affectional, and social skills. This work has naturally included involvement in the homes. We believe if any substantial, sustaining, difference is to be made, then it is through this transactional approach.

This approach is built upon the model in which the idea is to train the parents to provide experiences for children which will promote their growth and development. Living in poverty generally means that most of ones limited economic and cultural resources and most of ones energy is directed towards keeping body and soul together. The remarkable thing is the amazing strength that so many people living in poverty manage to possess in such extremely limited life conditions. We try to build upon this strength and help parents take advantage of some options from which they see themselves as being cut off.

It is from this key notion of maximizing the options open to parents that our work has emphasized two important roles for parents: 1) as teachers of their children and 2) as the behavioral change agents for their families in general.

I would like to now describe three of the programs conducted by DARCEE which deal with parent training. First, we will explore a method in which parents were worked into a classroom-based program for preschool age children. Then we will consider a program for preschool age children and their younger siblings conducted solely in a home setting. Third, we will review a home-based program involving mothers and their infants. (aged eight to eighteen months)

A Classroom Based Program

Our programs have been organized so that parents can start with things that they can do. They then proceed to work on more difficult skills depending on the reachable goals which have been set for them. In other words, the program is carefully sequenced. The experiences which are provided for the parents are arranged in an order that moves from easy to difficult skills. A sequence might look something like this: 1) observing, 2) limited teaching responsibility, 3) increased teaching responsibility, 4) complete teaching responsibility.

The starting point of one study was the darkened observation booth at our Early Training Center with its one-way vision screen. Under the direction of Mrs. Della Horton, the parent worker, the 20 mothers started coming to the center one morning a week just after school opened. The mothers came in groups of four. Their first job was learning how to observe, for a first, each mother had eyes only for her own child. They were apprehensive or even embarrassed when they saw a daughter afraid, or a son refusing to participate in classroom social situations, such as snack time. They hoped, however, that the child would know what to do. Mrs. Horton helped them to see the classroom as a whole and to see how teachers could modify the behavior of their children and create a climate in which learning could and does take place.

The mothers were to understand the purposes and goals of large group activities—many were astonished to see children change before their eyes into attentive and interested pupils. They came to understand the reason behind the grouping at the small tables, where activities are planned for individual needs. They had small group activities of their own in the conference room of the training center where they were taught how to use such elementary materials as puzzles and pegboards. They learned to role play assuming in turn the part of children or teachers in the classroom. They learned to ask appropriate questions and where to find the answers in books or experience. During all of these activities, their involvement was encouraged by Mrs. Horton, who devised various ways of rewarding them for good performance. One example of a "motivator," as Mrs. Horton liked to call it, was an outline of the human body. Designed for achievement motivation, the chart was blocked in part by part by part by part. For each mother, as she successfully completed part of her work, the
children in the classroom broadened their knowledge of the environment of the mothers. For example, when the children studied a map of the city, so did the mothers. They went on field trips, too, as a group or with the children. They went to museums, zoos, and other community facilities. Many of them had never been before. Like the children, they learned how to use the public libraries of the city. Both Mrs. Horton and the teachers encouraged interactions with the center by inviting mothers to special occasions such as a Halloween party.

Mothers were given assignments to do with their children in their homes. The presence of the younger sibling was always encouraged. The influence of the mother's training on the younger sibling has been one of DAPLE'S major concerns. We have called this "vertical diffusion" a label we have used for the effects of learning that may spread within the family.

After several months of these diverse activities the mothers were introduced to the classroom as participants, first during snack time and later in large group or selected activities time. At first they assisted the teachers, then they gradually accepted increasing roles of responsibility. Sometimes, the mothers shared responsibility in pairs. In selected activity time, often the mothers read books to the children. The children could choose which book they wanted to hear. Knowing how to read a book to a child is an important skill and not so easy as it might seem. At the outset, many had never read to their children, and were, moreover, shy and ineffective when doing so. We found reading to be one of the most valuable and inexpensive learning activities that could be carried on in the home. It is good training in verbalization and encourages interaction between mother and child.

Through this program, the mothers learned to observe, diagnose learning needs, and facilitate skill development in young children. Simultaneously, there was a good deal of cognitive and affective growth for the mothers themselves.

In Home Program with Preschool

The same principles of sequence and gradualness discussed in classroom programs apply in home visiting programs. The sequence might be as follows. (1) Mother is very dependent on home visitor. A strong one-to-one relationship exists. (2) Mother is slightly less dependent on the home visitor. (3) Mother is more independent. (4) Mother is independent.

Building a strong relationship between the mother and the home visitor is vital. This means that the home visitor is a friend who listens and understands but, at the same time, does not pity or coddle the mother. She will not do things for the mother. Through their friendship, the home visitor helps the mother learn to do things for herself. She continues her support of what the mother is doing, but she does not take over what the mother is doing. We believe this type of relationship is extremely important in helping the mother develop a "can do" attitude. The mother gains more confidence in what she can do as the home visitor allows her more and more opportunities to do what she can do by herself. The home visitor has to be a sensitive person who keeps her eyes and ears constantly open to learn more about the mother and how she is progressing.

We have met with our mothers once a week in their own homes. At the beginning of the hour's lesson, the mother and the child perform a task that has been reviewed during the week. The home visitor conducts the lesson, which usually includes an action singing game. It is not uncommon for other children, either members of the family or neighbors, to sit in and enjoy the fun. Such participation sometimes effects children outside the family, and, in such a case, we have an example of "horizontal diffusion" - the effects of intervention being spread within the immediate community.

Reading a story is often a part of the hour. The home visitor in this manner serves as a model for the mother, who will be assigned book reading during the week. After the book had been read, a relevant activity may follow. No opportunity is lost to review the numbers and kinds of characters, the sequence of events in the story, and the color and shapes that were used. The home visitor makes a special effort to integrate her intervention strategies into the already established home situation both physically and temporarily. The teaching materials used are often common household items. Her visits take place at a time when it is convenient for the mother. Every effort is aimed at making the mother's involvement with our program a help, not a hindrance.

Often at the end of the hour, the mother can work during the scheduled time. If the father is home he is a welcomed substitute. If the activity is dice, the older members of the family enjoy the game while the home visitor teaches them the rules. She also plays with the children and asks them to build structures with plastic blocks that can be threaded on a string. In her home classroom the home visitor promotes maximum learning by the parent and target child with other members of the family.

Subsequent lessons in the home enable the home visitor to deal with the mother's individual problems. One may need further instruction on how to motivate her children. Another may need extra practice in reading books for working with numbers.

The goals for the home are identical to those for the classroom mothers. In both instances, our efforts are more comprehensive and effective.
In Home Program with Mothers and Infants

We have recently finished extending downward our home visitor program with preschoolers to work with mothers and their infants aged 8 months to 18 months. Beginning this early represents a truly preventative approach to working with children who may later develop educational difficulties. Within the next several months we shall begin a program working with toddlers in multiple households as an extension of this work.

In the infant study, motor development and other aspects of physical growth such as crawling, walking, teething, growing of hair, etc., were observed, and, where possible, facilitated. Commercially available toys were carefully selected so they could provide the most appropriate stimulation. One example was the Busy Box. A wide variety of fine motor skills were needed for this very popular toy. While the children explored, the mothers were encouraged to say action words (push, pull, turn, spin, slide, pull open, dial) as well as to state the names of the objects. At the same time, emphasis was placed on home made materials and retrieval items that could foster development. Different sights and sounds could come from a juice can covered with contact paper, and filled with paper clips. The infant shook the can to see if it contained some interesting sound or to see if it was empty.

A great deal of eye-hand coordination is required on the part of the infant to use the wooden peg bench, and the infant is able to hear the pounding sound of the knock on wood. The mothers became more physically involved as they became more secure. In training each mother, the home visitor systematically elicited increasing involvement of the mother in the conduct of activities until the mother became independent of the home visitor in serving as an educational change agent for her infant. The home visitor suggested activities that were feasible in the context of the household routine and the life style of the family. Activities were planned which were compatible with the amount of time and money that were available and activities that could involve several members of the family. Outdoor activities were designed to permit the infant to explore in his yard and gather leaves, sticks, rocks, grass, dirt, and flowers, in order to examine things from the outdoor environment. Each infant had a picture card file of objects cut from magazines and put on 5 x 8 index cards by his mother.

Mothers were trained in reading a book to a child, and in pointing out the pictures to the infant. Conversing with the infant was continuously emphasized. The mothers found that there are innumerable ways of soliciting and reinforcing infants' verbalizations that foster language development.

The focus of this particular program was on infant growth and development in terms of gross-motor development, fine-motor development, cognitive growth, language development, and personal-social competence.

In conclusion, I would like to comment briefly on the role of the parent trainer. As you have seen, our parent trainers have in most instances worked inside of the home. We have referred to them more often as home visitors rather than parent trainers. The parent trainers are bachelor degree level people whom we regard as professionals. We have also used paraspecials in other studies. The paraspecials have been parents from the original study who demonstrated both the desire and the competence to move into this role. Whether professional or paraspecial, the role of the home visitor requires a unique combination of characteristics and competencies. The parent trainer is a resource teacher, a model, a reinforcer, an organizer, a friend, and a confidante. Mrs. Hardge, one of the original parent workers, often refers to the very thin line one treads upon when venturing into the territory of the home. Often the parent trainer must make decisions on the spot which have far reaching repercussions. These are the considerations one must make when selecting staff for this very important position.

I have described an approach for working with parents which we are quite excited about. The following DARCEE publications are available upon request. From these materials, one can gain a more thorough explication of our approach.
I have had many conversations with parents who expressed deep and anguished concern over the problems they were facing with their maturing, retarded child and were desperate for guidance and information. The sudden realization that the child was reaching maturity with little or no understanding of the physiological changes taking place and no notion of how to appropriately control the sex drive, posed a real dilemma for the entire family, and often resulted in serious school problems, with the fear that they would spill over into the community. I would like to share with you some of their concerns and guidelines that I have found useful in counseling with them.

PARENT CONCERNS

1. How to impart information that will help them to handle aggressive sexual behavior that may have grave consequences.

2. Lack of sophistication and vulnerability in heterosexual situations.

3. Influence of dating siblings.

4. Inability to understand and connect the sex act with pregnancy and its social consequences.

5. Frequency and intensity of masturbation.

Parents of children who were retarded with no physical stigmata and who were functioning at the upper limits of their classification had further concerns:


7. Marriageability of child.

8. Opportunity for the expression of sexuality either in or outside of marriage.

9. Lack of birth control information and how to use it.

GUIDELINES

If a good relationship has been established between the child, his parent, and the teacher, the teacher will be the one most often approached for guidance, since she is the one who will have the most continuing contact with the child beside the parents. However, it is important to remember that you cannot "give answers" but, you can help a parent to "think through" a problem. You cannot know the intimate family relationships and what influence they might have on a given behavior problem.
1. Be empathetic. Realize that parents of "normal" children also have their share of problems concerning sexual ethics, but that retardation is an extra burden for the parent.

2. Recognize the fact that the parent is going to be involved with his child from his own point of view and from within the family's own belief structure.

3. However, emphasize the fact that if the child is expected to become a part of society, on any level, his acceptance by others will depend almost exclusively on social behavior that does not deviate from the social norms.

4. Help the parent to realize that acceptable behavior cannot be acquired in isolation. The child must become a fully participating member in the family constellation, on his level of competence, before certain codes of conduct can become important to him.

5. Be familiar with materials that can help the parent understand phases of development so that he is better equipped to impart information to his child.

6. Be familiar with agencies to which you can refer a parent who needs help with a problem that falls outside of your area of competence.

7. Parent meetings are an excellent vehicle for sharing information and many times can help to give direction to a parent who is experiencing a similar problem. However, some parental problems are of such a personal nature that the parent may not want to share his problem. It is extremely important to be sensitive to such a situation and to plan time for an individual conference.
Parent education in managing retarded children with behavior deficits and inappropriate behaviors

Leif Tersdal
Joan Buell

In January 1967 a behavioral program was initiated at the Crippled Children’s Division of the University of Oregon Medical School as part of a medical-behavioral-educational pilot project in mental retardation. The behavioral aspect of the program is designed to train parents of retarded children in methods of:

1. accurately observing their child’s behavior and their own behavior;
2. eliminating problem behaviors at home;
3. building up in their child appropriate behaviors in areas such as self-help, verbal communication, social interaction and emotional reactions to stress situations.

Additional aims are:

1. to determine whether any generalities can be valid as to types of problems and extent of deficiencies relative to parent repertoire in handling retarded children;
2. to train personnel of various disciplines in observational techniques and behavior therapy.

Staff and Facility

At present the staff consists of psychologist, speech pathologist, social worker, public health nurse, occupational therapist, physical therapist, research assistant, and special achievement teacher—all either trained or receiving training in the use of operant techniques.

The facility includes an observation room, a playroom with a one-way window, two office rooms for interviewing parents, a physical therapy room, and an occupational therapy room. Observation is also done in the child’s home.

Conceptual Framework

The child, to be accepted in this behavioral-educational phase of the program, must have first undergone an intensive multiple-disciplinary diagnostic program. Children previously diagnosed as retarded attend the medical diagnostic program in groups of ten for two hours each day for four weeks. During the four weeks, they are observed by a pediatric nurse and other staff as they engage in group activities structured by a special achievement teacher. They are taken from the observation room to undergo neurological, pediatric orthopedic and dental diagnoses and treatment for any physical problems such as seizures, dental problems, nutritional problems, and visual and hearing problems. They are also evaluated by standard psychological, speech, occupational therapy and physical therapy evaluation procedures. At the end of this period the staff confers with parents to form them of the findings and to make recommendations for the child’s schooling and continuing medical and dental care. The goal is to assure that each child is functioning in an optimal health state. Selected children with the most severe behavioral deficits or the most markedly disruptive behaviors are seen in the behavioral phase of the program.

Types of Behavior Treated

Behaviors explored in the clinic include deficiencies in self-help skills such as dressing, grooming, feeding, toilet care, and deficiencies in speech and language such as vocalizing in jargon rather than in already acquired speech, echolalia, and low rate of speech. Inappropriate behaviors are varied but have included tantrumming, hitting children, and even such extremes as putting eye glasses in garbage disposal units, smearing food on walls, etc.

In each case the therapists observe the child closely, pinpointing exact behaviors, the context in which they occur, the current social consequences, and the possible competing responses. Potency and variety of
available therapists are assessed independently. The procedure is based on operant principles: Skinner (1938), Bipp and Baer (1961), Hollard and Skinner (1961).

Enlisting Parents as Cooperative, Effective Therapists

The parents have come in with a plea for help. They find that they cannot handle their child in certain situations. Discipline may be a problem. Specifically, when they see that their child is lacking in many areas of performance, they become worried and seek help. Their child's behavioral problem and/or deficiencies may have either excluded the child from school programs or seriously interfered with the child's progress in school. For some families, a major portion of activity and time is spent in attempts to cope with their child's behavior. They may even have cut-tailed normal social activities because of embarrassment over their child's behavior and their inability to cope with it.

The clinic requires parental participation since changes in the child's behavior are directly related to changes in parental management of the child. Improvement in the child's behavior will in turn reinforce the parents' attempt to try new approaches and responses to their child.

Interview and Observation

Parental participation in the program begins with the initial interview. They are encouraged to report to the staff their concerns about their child and they are asked to report situations in which problems occur and to describe how they handle them. The first interview also provides an opportunity to explain to the parents the need for clinic and home observation of the child's behavior.

The parents' report of their child's behavior serves as one basis for the development of the parents' own observational skills; i.e., staff observation and their own observations later in the program can be compared with their initial report. Their verbal report does not serve as a basis for giving guidance on child care and management.

More specifically, when first seeking help, parents may be able to see quite clearly what their children are doing part of the time, but they do not have a clear overall picture. They are generally so concerned about specific nuisance behaviors that they frequently fail to recognize significant gains in adaptive skills that are occurring for their child. For instance, a child who at the age of four continues to be spoon fed by his mother, may occasionally put some food in his mouth. The parent, never having broken down the process of learning to eat into small steps, does not see this as an approximation but only as a messy habit of an uncooperative child. Also, few parents recognize a relationship between the child's behavior and their response to it.

Clinic Observations

The setting event or context in which behavior problems occur can be replicated in a lab session, so that the child's behaviors can be observed as well as the parent's response to that behavior. For example, if a child may scream or cry when his mother gives him a command or fail on the floor and bang his head when asked a question; he may hit the parent, or knock over furniture as the parent reads alone, but not while the child plays with her. Or, he may poke another child who is receiving parental attention. These behaviors can be replicated by instructing the parent to give a command, ask a question, and to socialize with the child, or read alone and not respond to the child, etc. In this way, observations can be made as to the specific context in which certain behaviors occur, as well as the reinforcers that maintain those behaviors.

A lab session also provides an opportunity to evaluate the parents of parental attention as a reinforcer for the child. This is accomplished by observing the play behavior of child and mother and recording data regarding frequency and duration of a particular response class. It could be time spent playing with a particular toy, time spent in one section of the room as opposed to another, etc. The mother is then instructed to respond to the child whenever a specified behavior occurs, and to withhold it if any other behavior occurs. The parent is also told that when she does respond, she should try to encourage the child by joining him in his activity, commenting on what he is doing, and avoiding criticizing the child or giving him verbal directions. After about five minutes a reversal technique is employed in which the originally reinforced behavior is put on extinction (the mother is instructed not to respond to the child when the behavior appears), and a different play behavior receives attention from the mother.

In this way it becomes clear whether the parent's attention is reinforcing to a child; i.e., whether, when the parent attended verbally or by smile or touch to one behavior, this behavior continued or increased in frequency. In most cases a mother's talking to a child while he is doing a puzzle, for instance, is enough to instill that he will stay with the puzzle. If he does not, he will, if her attention is reinforcing, return to the puzzle. In some cases this is not true. A child's responses may be reinforced by termination of the mother's attention. In one case when the mother
followed instructions and expressed 
access to the child, the child hit 
her usual assertive language, and at 
other times simply left what he was 
donng and went to something else. 
This information was put together 
with (a) the fact that in group ac-
tivities when a teacher had said, 
"My, you're doing a good job," the 
same child hit her and went from 
a tantrum, and (b) the fact that dur-
ing home observations both the 
father and mother, while the child 
was dropped over, tears on his face, 
refusing to eat, used such sarcasm as 
"Well, look at that handsome boy 
we've got, isn't he funny, mother?" 
The conclusion was that verbaliza-
tion from adults, which to most chil-
dren would be reinforcing, was to 
this child aversive.

In another case, the mother and 
father stated that their child knew 
how to walk for three months before 
he would walk in their presence. 
Friends and relatives informed 
them that the child walked but would 
stop whenever his parents entered. They also indicated that 
if their child vocalized something 
which sounded like a word, he would 
not repeat it if either parent ex-
pressed an interest. In a separate lab 
session, the parents were instructed 
(individually) to join their child 
while he was engaged in an engaging 
activity (playing with a toy tele-
phone) and to do whatever he did 
and respond to him. The child's response 
in each case was to stop playing, suck 
his thumb and stay in one spot. In 
these cases giving the parents advice, 
without taking into account that 
their parental attention was aversive 
to the child, would have been ex-
ploited to worsen the situation. 

In the majority of cases, parental 
attribution is a strong reinforcer, and the lab session serves to demon-
strate to the parents the effects of positive reinforce-
tment for a desired behavior 
and withholding positive reinforce-
ment for an undesired behavior.

**Home Observations**

Although time consuming, home 
observations provide an invaluable 
source of information about environ-
mental factors that relate to a child 
and his behavioral problems. Home 
observations are based on interview 
information about what situations 
seem to be most troublesome for the 
family in dealing with the problem 
child. The time before, during, and 
after dinner frequently is relevant 
for a wide range of behavioral prob-
lems.

To prepare for home observations, 
parents are told that the staff wants 
to observe their child in situations 
which are as natural as possible, with 
all members of the family behaving 
toward the child as they normally 
do.

During a home observation, the 
observer takes either a running re-
cord of exact verbalizations and ac-
tions or, in a later visit, a count of 
certain behaviors. In each case he 
is recording not impressions and 
vague descriptions but actual occur-
cencies; verbalizations, movements 
from room to room, screams, hishs, 
laughs, hugs, directions, requests, 
statements, etc. and in exact tem-
poral sequence. During the time 
that he is recording, he in no way in-
teracts with the parents or the child, 
not does he conduct any interviews 
during the home observation.

The observer has asked to be com-
pletely ignored. If, at first, the child 
approaches him he may say, "I
'm working now," and from then on 
he makes no response whatever. After 
a few minutes the child ignores him 
also. The parents frequently report 
that "this is just about the way it 
typically is." Two or three different 
observers return with very similar 
data from separate visits.

**Evaluation of Data, Treatment Plan**

The observations provide highly 
specific information which gives a 
context in which to view the child's 
problem. For example, one child 
who reportedly never did as he was 
told was observed to have received 
36 commands during a 20-minute 
play session. When the child ignored 
commands and went on playing, the 
mother dropped her request and 
continued playing with him. When 
the child began following through 
on a command, the mother turned 
away from the child. In this way she 
was actually putting "following com-
mands" on extinction. Another child 
who yelled frequently was found to 
be ignored when he spoke in a nor-
mal voice and responded to when he 
yelled. A third child, whose mother 
complained, "He will not sit still 
when I read to him, was observed 
as his mother "read" to him. The 
mother gave her child a series of 
questions about words that were too 
difficult for him and then severely 
criticized him for his incorrect an-
swers. When his squirms escalated 
to jumping in the air and shrieking, 
he was told, "O.K. I won't read to 
you anymore." Apparently "reading" 
had become highly aversive to him 
and he had learned ways to termi-
nate it.

Children with serious delays with 
self-help skills were typically 
confronted with situations in which par-
ents criticized the child as he was at-
tempting to dress or feed himself, 
and, when the child gave up, the 
parents dressed or fed the child. One 
nine year old mildly retarded child 
was spoon-fed by his mother. A four-
year-old was not allowed to touch 
food even at meal time and thus 
never went through the finger-feeding 
and spoon-feeding stages.

Speech and language difficulties 
were similarly analyzed. A child who 
seldom initiated speech but who 
chanted was observed at three home 
sessions. Over half of his utterances 
were echoed back to him; e.g., when 
he said, "I want a truck," rather than 
bringing him a toy, his mother re-
plied, "You want a truck." A four-
year-old girl, who in speech evalua-
tions showed no recognizable speech, 
and who had a pattern of bizarre 
hand movements, was observed 
in her home. She was an only child. 
She had no toys. Both mother and 
father winked her hand move-
ments and smiled when she imitated 
In three one to two-hour sessions, not 
one utterance made by either parent 
to the child was recognizable, as a 
word by either of two observers.

Without a series of home observa-
tions, the therapists would not have 
known how strongly the child's en-
vironment supported the behavior 
deficits.

By the time three to four clinic 
and home observations have been 
completed, the parents have observed 
the effect of their attention on the 
behavior of their child, and have dis-
cussed these observations with the 
therapists. It is at this stage, when 
all the small parts are put together, into a 
whole, that the parents can help

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choose what problem they want to work on first, to what extent they want to include siblings in the treatment plan, and whether they want to start with clinic sessions or whether they want to start at home. When the parent decides to work on a certain problem behavior or to try to build in a needed behavior, the first question to be answered must be "What behavior on the part of the parent will we help him change in order to alter a behavior in the child?" Whether or not the parents will withhold attention, contingent on a problem behavior, and give it only contingent on behaviors that are incompatible with the problem behavior, depends on whether we have found the parents' attention to be a reinforcer for this child.

In cases where parental attention is a strong reinforcer, teaching the parent to withhold attention contingent on a problem behavior is only part of the solution. In some cases the mother has found it difficult to give warm loving attention when the child is doing well. The patterns of response which involve "leaving him alone when he's not getting into trouble," are so strong that it has taken several sessions to teach the mother to respond to the child as he is behaving appropriately. Occasionally a therapist has taken the child in the playroom and worked on shaping a small behavior using social reinforcers, while the mother and another therapist watch and discuss what is going on. As the mother sees the therapist at work, she is encouraged to try different ways of motivating her child. It is as she uses these patterns and as they begin to show results, and only then, that she begins to find the child himself more reinforcing to her, and begins to find more confidence in working on problems and building in new behaviors. It is at this point that the parent can usually begin to see small approximations toward other useful, desirable behaviors to which she could respond in her child.

The situation is more difficult in cases where parental attention is not a reinforcer. For one thing, when parental attention is not reinforcing to a child, the pattern of parent-child interaction will be unusual because many behaviors of the parent will have been extinguished by a lack of response on the part of the child. Play between parent and child will be absent, and the parents will generally interact by punishing a child and attempting to suppress an ongoing behavior. When the child is not actively causing a disturbance, the parents will not intervene. In these cases the parents must first be taught to use potent extrinsic reinforcers and to pair them with a class of verbal and gestural responses on their part that can eventually be used as reinforcers. They must also be taught when to reinforce approximations toward useful behaviors in areas of grooming, dressing, feeding, playing, and talking.

Types of Treatment Sessions

Clinic

In beginning treatment, the most successful method has been to give the mother a chance to try out suggestions while in the clinic. She and the child play together in the playroom under observation, and she practices, for example, reading to a child while he is sitting still next to her and not attending to him while he wiggles around or leaves her to go and play with something else in the room. This gives her experience in making her attention contingent on a desired behavior. As soon as she has accomplished a marked change in the child's rate of sitting and listening, she can discuss with staff the methods she used and the ways to use them at home. A following session then might be on a more marked problem behavior such as whining, tantruming when given a direction, or distracting the mother from a task at hand.

Home

Concurrent with clinic sessions, the staff has conducted home treatment sessions. The therapist, having helped the family decide what problem to work on, goes to the home and observes them as they put the changes into effect. These visits are much like the early observations except that now, with definite behavioral contingencies planned, discussions will hinge on the ways in which the parents are succeeding and on elements that deserve further consideration or possible change.

In Hawkins, Peterson, Schwert, and Bijou (1969) and Allen and Hartup (1967) detailed studies on individual sets of parents were trained to work on a problem behavior at home. The program under discussion here was developed to assist a large number of parents, each dealing with a retarded child.

It is obvious that parents constitute a large portion of the child's social environment and that they have control over a variety of parent reinforcers. Behaviors which are followed either inadvertently or intentionally by one or more of these reinforcers will increase in frequency whether they are adaptive or disruptive. Teaching parents to observe carefully and to respond at times when adaptive behaviors appear in their child's repertoire will increase the child's chances of learning a significant number of skills. Only when a child has been observed interacting with his family can specific help be given. Following the isolation and treatment of one or more specific problems, the parents can begin to apply their skills in other areas of the child's behavior.

As we learn more about the repertoire of parents who have retarded children, though, we must consider the possibility that some broad patterns may appear. Systematic study of common pitfalls should aid in planning that will help parents avoid these typical problems.

JUNE • 1969
Counseling with Parents of Retarded Children
Living at Home

In the light of the emerging philosophy and prevailing practice of encouraging home care of mentally retarded children, a re-examination of the casework counseling technique with parents is indicated. Until recent years, social workers in the field of mental retardation were primarily located in institutions and the practice of casework with families was usually centered around the problems of placement planning. With the advent of special clinics for early diagnosis and evaluation of retarded children, attention shifted to parental feelings and reactions and to ways of counseling parents more satisfactorily.

The need for a sympathetic, supportive approach to the parents has been well-established with the recognition that the attitude of the retarded child is deeply affected by the ego-functioning of the parents. The importance of having as complete an understanding of the child's problem as possible has been accepted as a necessary counterpart to being able to provide a meaningful explanation to the parents of the child's difficulties and a thoughtful consideration to the personal questions and emotional involvements related to raising a retarded child.

Social workers in specialized clinics and social agencies are now dealing not only with the areas of diagnosis and placement, but with the added task of helping the family and child live together more comfortably in the home. The purpose of providing maximum benefit to the child needs to be inter-related with minimal stress to total parental needs and family functioning. Both the child and the family are faced with making adequate adjustments to the community in which they live. Unless these ends are achieved, maintenance of the child in the home serves little purpose.

Professional workers in supporting a philosophy of home care for retarded children, must be keenly aware of the responsibility to know how to help families achieve this goal with maximum ease. The paper proposes to examine some aspects of counseling with parents of retarded children living at home that are related to the problem and that may lead to a better understanding of how to work with these families. These observations are drawn from experience in counseling with families of children living at home that are receiving services in the Special Development Clinic at the Los Angeles County General Hospital.

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Social Work
Counseling with Parents of Retarded Children

be generic to the problems of the older retarded as well.

AMBIVALENCE OF PARENTS' FEELINGS

Enormous ambivalence of feeling is evoked in a parent when he learns that his child is retarded. Feelings of rejection, detestation, and disappointment collide with anxious helpfulness, doubt, anger, and self-pity. Strong emotions of guilt mix with protective parental reactions: resentment, confusion, and insecurity become pervasive. It is this ambivalence that characterizes initial work with families of retarded children. These conflicting emotions are never completely resolved, as the long-term aspect of the problem and the repeated crises that stem directly from the fact of the child's handicap stir up the ambivalence from time to time. To help the parents, it is necessary to ferret out the positive aspects of the ambivalence and help him to build on these so as to find some answers to the problem immediately at hand. Thus, ambivalence is dealt with in relation to the immediate crisis situation on a reality basis and by focusing on the areas that are conducive to meeting the needs of the family. The following case illustrates this point:

A young couple had just heard the diagnosis of retardation for the first time. In the hostile tirade the mother lashed out at the social worker, she vehemently denied that this catastrophe could be true, attacked the doctors, blamed herself. Toward the end of the outburst, she cried out, "Nothing I ever do is perfect. How will I ever be able to raise this child?" In this plea for help the social worker recognized the mother's immediate fear and denial of the diagnosis as resulting from her shaken confidence in being able to successfully handle her mothering role with the defective child. The positive aspect of the ambivalence, underlying the fear of inadequacy, was her intense desire to be a good mother. This was an area that could be worked with realistically in counseling, since she was indeed performing successfully in her mothering role with her two older children. The husband's support to his wife was encouraged. With help and attitudinal change, this mother was enabled to depend again on her own inner strengths and resources in coping with the child; this in turn paved the way toward better understanding of the child's limitations and freed her to work on other aspects of the problem.

A factor accounting for sustained ambivalence toward a retarded child is that the parents are deprived of the opportunity to project any blame for the problem onto the child himself. It is too difficult in any rational way to blame the child for his own defect. This differs from situations in which, when social pathology exists and becomes reflected in disturbed parent-child relationships (for example, in emotional disturbance and delinquency), the parent realistically is able to hold the child partially responsible for a share of the problem. This serves to alleviate some parental guilt and lowers resistance to accepting help. In the area of mental retardation the self-accusatory parent, who feels that he alone is in some way accountable for his child's limitations, is very well known.

It is an accepted fact that part of the resistance of the person seeking help stems from his feeling of responsibility for the problem. When guilt is intensified, the resistance to help will be proportionately increased. Because of this, those endeavoring to help parents of retarded children must be aware that heightened resistance is usually due to the inwardly projected guilt of the parent. In counseling, this guilt needs to be alleviated and an empathetic understanding of the problem area imparted to lower the parent's resistance, freeing him to benefit from the offered help. Most parents hope to hear an authoritative and sympathetic endorsement of themselves, of their human and parental competence, and of their right to blame themselves for what has happened.*


JANUARY 1964
One way of accomplishing this task of parents is to counsel them together in joint interviews. This helps to foster the mutuality of feelings and responsibility shared by each parent. It is a shift away from individual parents to an assumption of self-blame for the problem. Joint interviewing techniques often can help to restore the mutual concern for the child and help parents understand their strengths to handle crisis situations. Although mothers are generally associated with the major care of the child, management is a joint responsibility of both parents. Too often the father's role and share of responsibility are overlooked, especially when it is the mother who assumes the task of taking the child to his medical care and transmitting the medical information and advice to his husband. Joint interviewing frequently serves as a device to engage the father actively and to give due consideration to his concerns and attitudes, as well as to those of his wife. Counseling parents together is supportive and enables them to concentrate their energies, not as much on the fruitless searching for why this has happened to them, but more productively on how they can better perform in their parental roles in order to benefit their child.

CHANGES REQUIRED OF PARENTS

The hard reality that needs to be faced is that with the pressure of a retarded child the family is no longer the same and it cannot be reconstructed as it was before the arrival and impact of the defective child. Perhaps the area of greatest difficulty that needs to be resolved in the counseling process is the changes required on the part of the parents to meet the special needs of the retarded child. Often conflict with parental functioning that heretofore was considered satisfactory


Often the management of the retarded child is perceived by the parents as being no different from their performance with their normal offspring. Counseling needs to help the mother and father see the need to change their own parental behavior.

The mother was testers for constant self-blame. The disturbance she was creating was upsetting to the rest of the household and the mother felt that the child was the problem. The parents were feeling to feel that the child in the home was almost impossible. The mother stated she was handling the problem behavior exactly as she had in the past, coping with similar behavior in an older child.

Close examination revealed that in reality the mother, caught up in her disappointment and her attitude that a mentally retarded child was totally worthless, considered the child not worth bothering to discipline. Also, the father was unsupportive, leaving all discipline to his wife. Hence, the mother responded to the tantrums with anger and helplessness, and was permitting herself to be manipulated by the child. The youngster, having no external controls put on his behavior, became increasingly incontinent and difficult. This gave validation to the low value placed on him by his mother.

When the mother gained some insight and understanding that she was reacting differently to this child than to her normal offspring, she began to cope with the problem. Her self-esteem increased with her more effective management of the child. In addition, the father was able to participate more meaningfully in the child's discipline, thereby giving his wife emotional support. As the child's behavior improved, the parents acquired a new appreciation of him. This in turn helped them to evaluate the considerable potential latent in their mildly retarded son and to enjoy a more favorable relationship with him in the home situation.

Social Work
The resistance and ambivalence of the parents in counseling are amplified also by the nature of the new stresses encountered merely by virtue of being the parent of a retarded child. The problem of keeping the retarded child at home is determined by a number of factors, such as sibling relationships, social status, family attitudes, the degree of deficiency in the child, and so on. These are all potential problem areas and the ability with which problems that might arise in these areas are handled and solved vary from family to family, situation to situation.

The new stresses arising from the presence in the family of a retarded child are not pathological as such, but should be viewed as a normal complement of problems for the situation that may affect the parent-child relationship and to which adjustments need to be made. When a pathological situation (i.e., divorce) is imposed on a family and is disruptive to family functioning, the focus in counseling must be directed toward the realistic problems that occur as a result of the pathology. It has been pointed out that the presence of a retarded child in the home is often a precipitating factor in individual or family maladjustment or breakdown. The family that is able to adjust satisfactorily to the impact on it of a retarded child has also to deal adequately with the many normal problems that occur in relation to the situation. Their attitudes, feelings, care and management of the child, and the like must all be taken into account.

These normal problems attending the presence of a retarded child in the home must be dealt with on a reality basis to permit the best possible solutions to be effected. Some of these problems are met often in other handicapping conditions of childhood: the increased dependence of the child on the parent, confusion and lack of finiteness in medical diagnosis, crumbling of parental aspirations for the child, rehabilitation and training problems, and the like. However, there are some conditions that occur uniquely in the case of the mentally retarded child and his parents.

One solution, which is culturally sanctioned, is often freely available to parents of the severely and moderately retarded. This is the opportunity to relinquish responsibility for care of the child to an institution if, considering the degree of his intellectual impairment, the child is eligible. Granted that placement holds the parents to a modicum of responsibility and is indeed an appropriate solution in many situations, there still is a need for recognition that this alternative presents conflict for the parents and may impair efforts to effect a successful adjustment in the home. From the time that parents are told that their child is eligible for institutionalization the ambivalence about the child and the problem increases. Again, this ambivalence needs to be handled in counseling, with the focus geared to the positive aspects inherent in the successful fulfillment of parental roles and responsibilities.

COUNSELING SHOULD BE SPACED

One difficulty occurring in counseling with parents is that the resistance of the parent is sometimes insidiously supported by the behavior of the child himself. The parents may move well initially in shifting to more positive attitudes and methods of handling the child only to be thwarted by the slow movement of the child in responding to improved parental functioning. Although intellectually the parents can relate the slow pace to the child's mental limitations, they often become frustrated emotionally and can react by feeling that the counseling is unproductive. This can cause reversion to easier, more familiar patterns of behavior. The counselor, too, can become uneasy and impatient by the
The slow pace of the child's growth may result in a lack of motivation to continue to support the child's development. It is often needed to improve the quasity of parent-child relationship that to develop his potential to deal with concrete emotional distress. A kind of approach toward easing their emotional distress, rather than being a child himself emotional growth and goal, which is not always appropriate. When the parents understand and help the child toward this, it is important to give the child an opportunity to give his or her expectations of develop at his own pace. A review of the situation is needed to diagnosis and evaluation. It may be that the parents need to set limits on the child's need to be worked on appropriate behavior. Also, parental questionnaires have been used to help at home. The results of these questionnaires have suggested as the child grows, counseling parents to bring into consideration and encourage a retarded child at home assume work with the family, attendance, or other liberal responsibility to learn how appropriate interactions. Finally, the parents should take other appropriate actions to bring into consideration the extent to which the parents face by the child, the things that have been discussed and around the child. The counselor is the only person to be formed to intensive basis. The interprofessional roles are activated in the counseling process. The child needs intensive treatment. It is not possible to aid a continued cure. Intensive and many years of treatment is often needed, but the child's performance a longer period. The key points of treatment should be considered. Finally, the parents should take an active role in their treatment. The child needs a guidance in counseling. In his own words on sustaining the normal healthy social development, the child can participate in the counseling process with the parents. The counseling relationship is aimed at where the child is not rational. There is an initial stage for establishing trust.
Counseling with Parents of Retarded Children

wardly directed guilt and of helping parents to focus on more rewarding functioning in their parental roles with the retarded child.

4. The presence of a retarded child changes the structure of existing family relationships. One area of great difficulty is that former parental functioning may prove to be inadequate in meeting the needs of a retarded child. Parents need help in seeing that their attitudes and feelings relevant to mental retardation per se affect their parental behavior.

5. There are many new stresses affecting families of retarded children that should be viewed as normal problems for the situation and that need to be dealt with on a reality level. Some of these, such as the easy access to shifting responsibility of the child through institutionalization and the slow reaction of the retarded child to parental teaching and management, are unique and may hamper counseling efforts.

6. Parents are best helped at times of crisis, but counseling geared to improvement of the child's behavior and to daily living can be structured over spaced intervals planned to compensate for the slow movement and the maturation of the child and to offer sustained support to the parents.

The importance of more and better knowledge about how to help these families has been best expressed by a parent who has written:

The greatest single need of parents of mentally retarded children is constructive professional counseling at various stages in the child's life which will enable the parents to find the answers to their own individual problems to a reasonably satisfactory degree. . . . We need guidance from someone who can help us to see that this thing which has happened to us, even though it may be a life-shaking experience, does not of necessity have to be a life-breaking one.

SURVEY ON LEARNING DISORDER TERMINOLOGY:
ANALYSIS OF RESPONSES
July 31, 1972

MEMORANDUM

TO: Those of you who completed the Survey on Learning Disorder Terminology

FROM: Nancy Carlson, Senior Training Specialist

First of all, I would really like to express my appreciation to each of you. I am very pleased with the responses that we received, and delighted with the notes that some of you wrote to me. Your response certainly indicates that Special Education personnel are willing to cooperate in the design of better instructional experiences.

The results we have included, although detailed, are not meant to be complicated. We certainly hope this feedback will assist you.

Feel free to contact your local IMC, State department consultant or our Regional IMC with any questions regarding work with handicapped children.

Thank you again.
PRELIMINARY RESULTS OF SURVEY ON LEARNING DISORDER TERMINOLOGY

INTRODUCTION

The field of "Learning Disabilities" has very quickly risen to the level of a national problem. Increasingly, school districts are paying more attention to children unable to achieve at certain criterion levels. At the same time, teachers who daily work with children having learning problems are asking for information on how to provide more alternatives for learning.

Diagnostic terminology, which focuses on a learner's style of learning and ability to learn, seems to be a key area. Therefore, before designing experiences to assist teachers in using more appropriate diagnostic terminology, it was felt that we must know something about what terms teachers presently have knowledge of and/or use. The survey information gained from respondents in Indiana, Michigan and Ohio will be used by the Regional center to plan improved in-service and pre-service training experiences for teachers in the three states.

The following pages are listed briefly: the steps in developing the survey instrument, the nature of the sample, the scoring procedures.

PILOT STUDY FOR INSTRUMENT DEVELOPMENT

Diagnostic and descriptive terminology was compiled from the ERIC thesaurus, the MSU IMC/HCY thesaurus and a glossary of terms used in learning disabilities (previously compiled by a MSU Special Education faculty member and consultant to the Regional IMC.) An item pool of test questions was generated by staff and consultants. Items were assigned to recognition or recall type responses, and incorporated into an appropriate instrument design.
Three parallel forms of survey instruments were developed. These three forms were randomly distributed to a pilot sample and a total of 107 responses were collected. An item discrimination was tabulated for each survey item in the three forms. Those items discriminating at the .50 level and above were retained with the exception of Part I, (a matching question) which was included as a whole because it contained the most number of discriminating items. The case study selected for inclusion in the final form was the most discriminating of the three pilot case studies.

**FINAL FORM OF SURVEY**

The final form of the survey was compiled from the most discriminating of the total items given to the pilot sample. This final form was submitted to Learning Disorder "experts" for verification. A cover letter was written asking respondents to return the survey by June 10.

**SELECTION OF SAMPLE**

Contact persons in the state departments of Indiana, Michigan and Ohio were asked to submit names and addresses of special education teachers in their states. No such up-to-date complete listing of the total population was available in any state. Randomness was therefore not possible. From various sources, a large number of names and addresses from the three states were compiled and ultimately 816 surveys were sent out. Only two duplications were reported.

**RESPONSES**

254 surveys were completed and returned in time to be tabulated. Three surveys were returned too late to be tabulated and 21 were returned by the postal authorities. No follow-up attempt was made since it was assumed that teachers were on vacation. Therefore, although we have knowledge about 35%
of the surveys that were sent, the results are based on 31% of the sample or those respondents who completed the survey within the time period given.

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>% Returned*</th>
<th>% of Total**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>84</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Michigan</td>
<td>110</td>
<td>37</td>
<td>43</td>
</tr>
<tr>
<td>Ohio</td>
<td>60</td>
<td>31</td>
<td>24</td>
</tr>
</tbody>
</table>

* indicates % returned out of total number sent to that state.

** indicates % of respondents from that state out of total respondents.

Although all respondents did not indicate their present occupation (due to an error on the part of the letter-writing team), close to 90% did so indicate. The nature of the jobs listed showed a wide distribution at all teaching levels from pre-school through college and in all areas: speech, M.R., L.D., multiply handicapped, regular, etc.; with many types of primary responsibilities: teaching, consultant, administrator, aide, etc. No one area or type stood out as being either under- or over-represented in terms of national distribution.

SCORING OF SURVEY

Initial item weighting procedures for the six parts were set up with the pilot form using learning disorder consultants. Inter-rater reliability was assured and frequency of response to items was tabulated. The "best" (according to "experts") answer to an item was usually the answer most frequently given. The exception to this was found in the case study. A detailed description of that scoring procedure is contained below.

A. Parts I, II, III (recognition type questions such as matching, choosing) were scored acceptable/not acceptable. Acceptable responses are given on the attached completed survey. For each item, the percentage of acceptable responses is given (for example, in Part I, 98% of the respondents answered "smell" for the term "olfactory." In Part III, number 3, only 36%
of the respondents answered "directionality"—most of the other 64% answered "laterality", an easily confused response.)

B. Part IV (brief description of term) was scored acceptable/partially acceptable/not acceptable. One acceptable answer is given on the attached completed survey. There were other acceptable and partially acceptable answers. Generally, however, the acceptable and partially acceptable responses contained reasonable approximations to what we have compiled. Percentage listed indicates what proportion fell into acceptable and partially acceptable categories.

C. Part V (provide term) was scored acceptable/partially acceptable/not acceptable. Frequency of response data was kept on this part, and the response most frequently given is written on the attached survey. An example of a partially acceptable answer would be "perception" for item number 2 rather than "discrimination." Percentages listed indicate what proportion fell into acceptable and partially acceptable categories.

D. The Case Study was scored quite differently. First the nature of the word or word phrase given was categorized into one of seven different categories (see below) and then weights were assigned to the quality of response within the category (acceptable/partially acceptable/not acceptable). The score on this part was then doubled. Only acceptable and partially acceptable responses were considered in the final percentage tabulation. The categories with descriptions and examples are as follows:

**DIAGNOSTIC TYPE RESPONSES:** includes all more global responses of a non-specific or less specific nature.

Examples:
"visual problems"
"average or above IQ"
"perceptual problem"
"specific learning disability"
"dyslexic"
VISUAL RESPONSES: includes responses in which specific visual problems are listed.
Examples: "figure-ground"
"visually distractible"
"visual memory"

AUDITORY RESPONSES: includes responses in which the auditory channel of learning is mentioned.
Examples: "auditory learner"
"decodes auditory information better"
"no auditory problem"

BEHAVIORAL RESPONSES: includes responses which pertain to behavioral characteristics.
Examples: "lowered frustration level"
"short attention span"
"group oriented"
"emotional lability"

NOTE: The percentage attributable to Behavioral type responses does not take into account those responses which were given no weight. For example, "hyperactive" and "emotionally disturbed" were considered to be without validity. A large number of responses of this type were given, but were not counted.

PERCEPTUAL-MOTOR RESPONSES: includes responses related to perceptual-motor activities (i.e. copying, handwriting).
Examples: "visual-motor dysfunction"
"eye-hand problem"

NOTE: The statement that "handwriting was average" leads one to suspect that the "motor" or acting part may be less serious than the "perceptual" or seeing part. In the case study, the child's frustration in copying and with math problems is more likely due to too much visual stimuli impinging. Responses falling only into perceptual-motor category were weighted less.

OUTPUT RESPONSES: includes responses in which only the output of the learner is mentioned.
Examples: "verbally fluent"
"good verbal expression"

PREScriptive RESPONSES: includes responses in which specific diagnostic and/or remediation techniques or tools are suggested.
Examples: "test vision"
"decrease quantity of stimuli"
"give ITPA"
"give visual-perception test"
"use 'window' for reading"
"use peer tutoring with reading"
Scores ranged from 12 to 49. The average score was around 35 (35.15) with a standard deviation of 7 (6.92). The mean score of the case study was a little over 4 (4.36).
SURVEY OF LEARNING DISORDER TERMINOLOGY

I. Following are two lists of terms. For each term in the left column select the word or phrase from the right column that best describes it. Enter the appropriate number in the space provided. (There are three extra words in the second column.)

<table>
<thead>
<tr>
<th>Terms</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>olfactory</td>
<td>98%</td>
</tr>
<tr>
<td>deficit</td>
<td>91%</td>
</tr>
<tr>
<td>dyslexia</td>
<td>90%</td>
</tr>
<tr>
<td>visual-motor</td>
<td>96%</td>
</tr>
<tr>
<td>figure-ground</td>
<td>86%</td>
</tr>
<tr>
<td>expression</td>
<td>91%</td>
</tr>
<tr>
<td>distractability</td>
<td>86%</td>
</tr>
<tr>
<td>dysfunction</td>
<td>52%</td>
</tr>
<tr>
<td>paranatal</td>
<td>98%</td>
</tr>
<tr>
<td>tactual</td>
<td>98%</td>
</tr>
</tbody>
</table>

1. weakness
2. hidden figure
3. output
4. smell
5. reading disability
6. disturbance
7. crossed-dominance
8. poor attention
9. touch
10. during or at birth
11. problem
12. eye-hand
13. hyperactive

II. In the following pairs of sentences, technical terms are used. In each pair, one sentence reflects the better use of the term. Please circle the word "better" in front of the sentence that uses the underlined term in a more appropriate way:

1. (Better) Establishment of a midline will facilitate walking on a balance beam.
   Better: Marking the midline on a writing paper helps children with visual perception problems.

2. Better: The process a child goes through in establishing lateral dominance is called left to right progression.
   (Better): Left to right progression is a pre-requisite skill for reading and writing.

3. (Better): The statement, "You have to learn to walk before you can run," illustrates the concept of a developmental sequence.
   Better: An example of a developmental sequence is the alphabet (A-B-C-D).

4. Better: Reversal problems involve visual perceptual skills and a tendency to read from right to left.
   (Better): Reading "b" for the symbol "d" is an example of a symbolic reversal problem.
5. Better: A test or process that separates individuals in a specific category from those not in that category is a screening device. 

Better: A screening device pinpoints specific learning disabilities.

6. Better: Aural stimuli are presented in the testing of auditory discrimination. 

Better: In the training of gross motor skills aural stimuli play an important role.

III. In the following sentences are blanks that can be filled by technical terms regarding learning disorders. The sentence describes the condition or factor. The correct terms can be selected from the list below. These terms are applicable only to the following 5 statements.

laterality spatial orientation
apraxia ignored 
discontinued aphasia
emotional affective
directionality localization

1. Aphasia _______ refers to the inability to comprehend, manipulate or express words in speech, writing or signs.

2. The ability to place one's position correctly in the environment with respect to location is called _______.

3. Directionality _______ is the term usually used to indicate knowledge of left and right in space.

4. A behavior should be _______ if it is unimportant.

5. Behavior that is influenced or caused by some kind of emotion is called _______.

IV. Write a brief description of the following terms:

1. Dysfunction _______ impairment or abnormality of function; disturbance related to domain of knowledge and thinking (awareness and judgement), distinct from feeling (affective domain)

2. Cognitive _______ manual dexterity _______ agility and/or deftness with hands

3. Manual dexterity _______ ability to recall prior visual experiences

4. S.L.D. _______ Specific Learning Disability: classification

5. Visual Memory _______ sensory training _______ training in any or all of sensory modes (vision, hearing, smelling, tasting, touching)
V. For the following definitions, provide the technical term:

75% 1. Precise muscle coordination of delicate muscle systems requires **fine-motor** skills.

69% 2. Ability to discern differences is called **discrimination**.

68% 3. Instructional materials labeled "low vision" aids are generally used with the **partially-sighted** population.

77% 4. The discipline which studies the structure and function of the nervous system is **neurology** or **neuropsychology**.

VI. Case Study

The paragraph below describes certain behaviors of a child. In the lines below the paragraph write 3-5 words or word phrases that you associate with these kinds of behaviors.

Alice has a superior vocabulary for her age and participates appropriately and well in class discussions. Her handwriting is average. When asked to reproduce the face of Santa Claus from a model for a Christmas card, she became frustrated and refused to finish it. She takes a long time to complete a reading assignment. She says she keeps losing her place and sometimes skips entire lines. Alice can do arithmetic problems, one-by-one or a few at a time, but does not do well when there are many on a page.

Responses to the case study were divided into the categories below. The figures under each category represent percentages of the total number of case study responses only (i.e. 39% of the total number of case study responses fell into the diagnostic category). The average score for the case study was around 4. See "Results" for explanation.

<table>
<thead>
<tr>
<th>Diagnostic</th>
<th>Visual</th>
<th>Auditory</th>
<th>Behavioral</th>
<th>Perceptual-Motor</th>
<th>Output</th>
<th>Perscriptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>39%</td>
<td>26%</td>
<td>4%</td>
<td>12%</td>
<td>9%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

USOE/MSU
Regional Instructional Materials Center
For Handicapped Children and Youth
213 Erickson Hall
Michigan State University
East Lansing, Michigan 48823

1108
1. Following are technical terms and their equivalent "layman's word." The sequence is scrambled. Please draw lines to connect the correct pairs. (There are three extra words in the second column.)

<table>
<thead>
<tr>
<th>FORM A:</th>
<th>FORM B:</th>
<th>FORM C:</th>
</tr>
</thead>
<tbody>
<tr>
<td>hyperactive</td>
<td>bifactory</td>
<td>haptic</td>
</tr>
<tr>
<td>hyperkinetic</td>
<td>deficit</td>
<td>hypersensitive</td>
</tr>
<tr>
<td>electroencephalograph</td>
<td>dyslexia</td>
<td>electroencephalograph</td>
</tr>
<tr>
<td>lateral dominance</td>
<td>visual-motor</td>
<td>taxonomy</td>
</tr>
<tr>
<td>taxonomy</td>
<td>figure-ground</td>
<td>etiology</td>
</tr>
<tr>
<td>figure-ground</td>
<td>expression</td>
<td>dyslexia</td>
</tr>
<tr>
<td>etiology</td>
<td>distractibility</td>
<td>congenital</td>
</tr>
<tr>
<td>gustatory</td>
<td>dysfunction</td>
<td>expression</td>
</tr>
<tr>
<td>reception</td>
<td>prenatal</td>
<td>distractibility</td>
</tr>
<tr>
<td>prenatal</td>
<td>classification</td>
<td>cause</td>
</tr>
<tr>
<td>classification</td>
<td>input</td>
<td>reading disability</td>
</tr>
<tr>
<td>input</td>
<td>happy</td>
<td>output</td>
</tr>
<tr>
<td>happy</td>
<td>sidedness</td>
<td>feel</td>
</tr>
<tr>
<td>sidedness</td>
<td>brain-wave machine</td>
<td>feel</td>
</tr>
<tr>
<td>brain-wave machine</td>
<td>crossed-dominance</td>
<td>feel</td>
</tr>
<tr>
<td>crossed-dominance</td>
<td>hyperactive</td>
<td>feel</td>
</tr>
<tr>
<td>hyperactive</td>
<td>before birth</td>
<td>feel</td>
</tr>
<tr>
<td>before birth</td>
<td>cause</td>
<td>feel</td>
</tr>
<tr>
<td>cause</td>
<td>hidden-figure</td>
<td>feel</td>
</tr>
<tr>
<td>hidden-figure</td>
<td>taste</td>
<td>feel</td>
</tr>
<tr>
<td>taste</td>
<td>perception</td>
<td>feel</td>
</tr>
<tr>
<td>perception</td>
<td>classification</td>
<td>feel</td>
</tr>
</tbody>
</table>

1109
II. In the following pairs of sentences, technical terms are used. In each pair, one sentence reflects the better use of the term. Please circle the word "better" in front of the sentence that uses the underlined term in a more appropriate way:

FORM A, B, C:

1. Better: Establishment of a midline will facilitate \underline{walking on a balance beam.}
   Better: Marking the \underline{midline on a writing paper} helps children with \underline{visual perception problems.}

2. Better: \underline{Perceptual skills involve receptive abilities.}
   Better: \underline{Perceptual skills involve expressive abilities.}

3. Better: Schizophrenia is an \underline{organic disorder.}
   Better: Cerebral palsy is an \underline{organic disorder.}

4. Better: Crawling is a form of training \underline{eye-hand coordination.}
   Better: Tracing is a form of training \underline{eye-hand coordination.}

5. Better: Learning in one situation that is carried over to another is called \underline{transfer.}
   Better: When a child uses his left hand some times and his right at other times, this is called \underline{transfer.}

6. Better: The process a child goes through in establishing lateral dominance is called \underline{left to right progression.}
   Better: Left to right \underline{progression is a pre-requisite skill for reading and writing.}

7. Better: The statement, "You have to learn to walk before you can run" illustrates the concept of a \underline{developmental sequence.}
   Better: An \underline{example of a developmental sequence is the alphabet (A-B-C-D).}

8. Better: Reversal problems involve \underline{visual perceptual skills and a tendency to read from right to left.}
   Better: Reading "b" for the symbol "d" is an example of a \underline{symbolic reversal problem.}

9. Better: A test or process that separates individuals in a specific category from those not in that category is a \underline{screening device.}
   Better: A \underline{screening device pinpoints specific learning disabilities.}

10. Better: Aural stimuli are presented in the testing of \underline{auditory discrimination.}
    Better: In the training of gross motor skills \underline{aural stimuli} play an important role.
III. In the following sentences are blanks that can be filled by technical terms regarding learning disorders. The sentence describes the condition or factor. The correct terms can be selected from the list below. These terms are applicable only to the following 5 statements.

**FORM A:**

<table>
<thead>
<tr>
<th>lesion</th>
<th>reflex</th>
</tr>
</thead>
<tbody>
<tr>
<td>apraxia</td>
<td>aphasial</td>
</tr>
<tr>
<td>perceptual-motor</td>
<td>laterality</td>
</tr>
<tr>
<td>reinforced</td>
<td>rewarded</td>
</tr>
</tbody>
</table>

1. Knowledge of the left and right sides of the body is referred to as __________.

2. __________ refers to the inability to comprehend, manipulate or express words in speech, writing or signs.

3. A behavior is more apt to be repeated if it is __________.

4. A __________ is a congenital phenomenon.

5. Dribbling a basketball down a court is an example of __________ coordination.

**FORM B:**

| emotional | body image |
| reinforced | ignored |
| output | directionality |
| perseveration | affective |
| input | discontinued |

1. A behavior should be __________ if it is unimportant.

2. __________ is the term usually used to indicate knowledge of left and right in space.

3. Continuing with a response inappropriately is called __________.

4. Behavior that is influenced or caused by some kind of emotion is called __________ behavior.

5. The perceptual-motor process involves sensory perception (________________) and motor or muscular activities (________________).

**FORM C:**

| feedback | spatial orientation |
| imagery | tracing |
| memory | affect |
| localization | sensory threshold |

1. Data on the consequences of an action is called __________.
2. The ability to place one's position correctly in the environment with respect to location is called ____________.

3. The mental reconstruction of a sensory (visual, auditory, kinesthetic) experience is ____________.

4. ____________ is a range on a continuum of discrimination abilities with upper and lower limits.

5. ____________ is the subjective feeling of pleasantness or unpleasantness accompanying perception.

IV. Write a brief description of the following terms:

FORM A:

1. Psycholinguistic ________________________________

2. Straus syndrome ________________________________

3. Dysfunction ________________________________

4. M.B.D. ________________________________

5. Aphasia ________________________________

FORM B:

1. S.L.D. ________________________________

2. Visual memory ________________________________

3. Lesion ________________________________

4. Cognitive ________________________________

5. Sensory training ________________________________

FORM C:

1. Psycholinguistic ________________________________

2. E.H. ________________________________

3. Cognitive ________________________________

4. Manual dexterity ________________________________

5. Visual-motor memory ________________________________
V. For the following definitions, provide the technical term:

FORM A:

1. Ability to receive and understand sounds and their meaning. ________________

2. The ability to link two or more stimuli together to form a union or whole is called ________________.

3. Teaching high school students multiplication and division is an example of ________________ teaching.

4. Precise muscle coordination of delicate muscle systems requires ________________ skills.

FORM B:

1. Ability to discern differences is called ________________.

2. The high level of thinking that involves the ability to speculate toward one's own conclusion or purpose is called ________________ thinking.

3. The discipline which studies the structure and function of the nervous system is ________________.

4. The organization of all stimuli impinging on a person at one moment, and the tying of that in with impressions from past experiences into a complex response is the process of ________________.

FORM C:

1. Factual knowledge a person has of his body. ________________

2. Ability to visualize completion of a written figure. ________________

3. Ability to discern differences is called ________________.

4. Instructional materials labeled "low-vision" aids are generally used with the ________________ population.
VI. CASE STUDY - The paragraph below describes certain behaviors of a child. In the lines below the paragraph write 4-7 words or word phrases that you associate with these kinds of behaviors.

FORM A: John is too "attentive when oral instructions are given. He is easily upset when others block his view of the teacher/speaker. He does well in skills such as copying from the board and other written tasks. He does not do well on oral spelling tests when the teacher reads a spelling list to the group. John tires quickly when listening to a story. He begins to look out the window and move around in his chair.

FORM B: Alice has a superior vocabulary for her age and participates appropriately and well in class discussions. Her handwriting is average. When asked to reproduce the face of Santa Claus from a model for a Christmas card, she became frustrated and refused to finish it. She takes a long time to complete a reading assignment. She says she keeps losing her place and sometimes skips entire lines. Alice can do arithmetic problems, one-by-one or a few at a time, but does not do well when there are many on a page.

FORM C: Often when Mrs. Adams is presenting a lesson to the group, Bobby will get out of his chair and come up to tell her about what he did the previous night. Bobby works best in a cubicle or "office". When Bobby is at his seat to do independent work, he spends much of the time listening to what is being said in the reading group at the back of the room. When Mrs. Adams works with Bobby alone at his desk, sometimes Bobby will suddenly hug her.
BRANNE CODE RECOGNITION MATERIALS: LEADER'S GUIDE
AND RESULTS OF USE
OVERVIEW

This simulated activity is designed to make teachers aware of the use of the Braille Code Recognition Materials. The entire activity is structured by a tape recording. This tape provides introductory remarks, outlines how the simulation will be conducted, actually conducts the simulation, provides time for discussion, and introduces and discusses the Braille Code Recognition Materials.

Enough materials have been provided for use with up to 12 teachers. The simulation must be conducted with a minimum of two teachers.

Through the simulation, the teachers will have an opportunity to participate in an adult level task that exactly parallels the use of the Braille Code Recognition Materials. The teachers, in pairs, will take turns teaching and assessing each other using a set of simulated materials. Each participant at the workshop will have an opportunity to play both "teacher" and "student."

OBJECTIVES

Through the activity the participants will

--experience the exact procedure that is used in administering the Braille Code Recognition Materials.

--experience feelings similar to those of a blind student in learning a symbolic code.

--receive information about the problems associated with learning to read braille.
At the conclusion of the activity the participants will
---be able to specify the exact procedure for administering
the Braille Code Recognition Materials.

MATERIALS INCLUDED

Included in the kit are all materials needed for conducting
the activity with up to 12 participants.

Tape Cassette
Contains all instructions for conducting the activity.

"Contents of This Training Package"
Handouts #1-#6
12 copies of each is provided.
The cassette indicates when each is to be handed out.

Packet A & Packet B
Six of each packet are included.
Each pair gets an A & B packet.
The cassette indicates when they are to be handed out.

Evaluation Form
12 copies are provided. These are to be handed out at the conclusion of the activity.

NOTE: If you will be using the kit with more than 12 participants, you should duplicate extra parts prior to the workshop.

MATERIALS NEEDED

Cassette player
Seating and tables to accommodate participants in pairs.
(There should be ample room to separate participants to reduce interference between pairs during the activity.)
Pencils

TIME NEEDED

Approximately one hour will be needed for the activity. (The activity can extend to 90 minutes if the discussion periods are stimulated.)

PREREQUISITES

For the leader: You should take time to listen to the entire cassette prior to the workshop. Become familiar with all of the materials and at what points during the activity they are to be handed out. The role of the leader is primarily that of "manager."
You will be responsible for organizing the participants, operating the cassette recorder, handing out materials, and keeping track of time to make sure the participants stay on course.

For the participants: All participants should have an interest in teaching blind students and in fact will have an opportunity to use the Braille Code Recognition Materials following the workshop. Since the training kit consists of print materials, it is usable only with sighted teachers.

PROCEDURE

The exact procedure for the activity is provided on the tape. Listen to the tape prior to the workshop to become familiar with the procedure.

EVALUATION

An "Evaluation Form" has been provided with the kit to assist in assessing the participants at the conclusion of the workshop. This form can be modified to meet any specific needs that you may have.

The answers to the "Evaluation Form" are:

1. List the exact procedure for using the Braille Code Recognition Materials.

   Administer Braille Code Recognition List  
   Provide feedback  
   Use exercises  
   Administer Braille Code Recognition List  
   Provide feedback  

2. The Braille Code Recognition Materials are designed to:

   increase the braille reader's speed at  
   reading braille.
Improving braille reading--a teacher in-service training material developed by the Regional Special Education Instructional Materials Center at Michigan State University.

Welcome to this session on improving braille reading. Our session will be broken up into a series of sections and at different times I'll be asking you to stop the tape. My exact words at these places will be "stop the tape now."

Let's take a minute right now to make sure that we've got all of the materials that we will be needing for our session. In the envelope you will find a printed sheet of paper that is labelled "Contents of This Training Package." Please find this sheet of paper and carefully check to see that you do have all of the contents. When you have finished checking, restart the tape. Stop the tape now.

--PAUSE--

Before we get into our simulated activity it will be worth our time to quickly review exactly what the problem is for the braille reader. Handout number one is an outline for your use during this discussion. Feel free to take notes on this handout.
Right now, someone should pass out handout number one. Restart the tape when everyone has a copy of handout number one. Stop the tape now.

--PAUSE--

The process of braille word recognition is the integration of successive tactual perceptions of braille characters. In other words, the braille reader must first identify each of the individual braille characters, then combine these identifications to figure out the word. The sighted reader, in the same situation, does not have to focus on individual word elements to gain the word meaning. The sighted reader can derive word meaning merely from the configuration of the word. The task for the braille reader, then, is far more complex and consequently far more time consuming. The chance for error, therefore, is greatly increased.

An early study of braille reading showed that the child's reading habits are established by the time he reaches the third grade. Another study showed that reading rates of braille readers level off by the ninth grade. Both of these studies are an indication that if a braille reader does not have early success, he will be hampered in his later braille reading ability. General practice seems to be based on the assumption that by high school level, braille readers have developed satisfactory recognition skills and optimal utilization of the braille code. This assumption has been shown to be erroneous. Many high school braille readers have not developed satisfactory recognition skills and their use of the braille code is far from optimal.

Recent studies by Henderson and Umsted have been built around the concept that a prerequisite for efficient braille
reading is the child's ability to quickly and accurately recognize the individual braille characters that make up a word. It was shown that braille reading can be improved by working with the child to improve his recognition of word parts. Exercises were developed that provided a systematic manner for the teacher to work with individual students to improve their braille reading through drill and practice of single characters and short form words.

This session is concerned with providing you with the information and skills necessary to use these procedures with your students. The procedures have been produced by the American Printing House for the Blind as a set of training materials. These materials, called the braille code recognition materials, consist of a number of separate components. In order to give you an idea of how to effectively use these materials, we have designed a short simulated experience that we have titled "Learning To Read." Our simulated experience calls for you to be divided into small groups of two people each. Let's divide up into teams of two right now. If there is an extra person, that person should be an observer of one of the teams. Restart the tape after you have organized into teams of two. Stop the tape now.

--PAUSE--

Now we should be in teams of two. At this point pass out handout number two. Restart the tape when everyone has a copy of handout number two. Stop the tape now.

--PAUSE--

This is a flow chart of our simulated activity. Let's go through it together. First, one person in each team will be
the teacher. The teacher will be working with his or her partner. This is not a role play. You don't have to pretend to be a blind student or a 10th grader. Just be yourself.

Teacher--you will be in control during the first half of this activity. The second half of the activity is exactly the same as the first half. The only difference is that you will switch places with your partner for the second half. Your partner will then become the teacher.

The flow chart shows us the teacher's role. First, you will use a set of four Drill and Practice Teaching Cards to teach your partner to begin to recognize the meanings of four unique symbols. You will be given two minutes to do this.

Then, moving down to the next block on our flow chart, you will use the Code Recognition List to assess how your partner is doing. You will have four different Code Recognition Lists and you will be able to choose whichever one you want to use.

As your partner is responding to the Code Recognition List, you will make a record (that's the circle on the flow chart) of how long he takes on the list and the errors that are made. You will have a Record Form for this.

Then you will inform your partner of how he did. You will share the completed Record Form with him.

Next, you will conduct some Drill and Practice Exercises to assist your partner in better learning the symbols. You will have two different exercises. You will use them as much as is needed to help your partner learn the symbols.

Finally, you will again administer one of the Code Recognition Lists, make a record of elapsed time and errors, and share this
with your partner. This, then, completes the first half of the simulated activity. The second half will be identical with teacher and partner switching roles.

Okay, will all of you who are teachers please get a packet of materials marked Packet A. Teachers—when you have gotten your materials, restart the tape. Stop the tape now.

--PAUSE--

Examine your packet and check to see that you have white Drill and Practice Teaching Cards—the four pink Code Recognition Lists—the four blue Record Forms—and the two yellow Drill and Practice Teaching Cards. After you have examined your packet, restart the tape. Stop the tape now.

--PAUSE--

You will now have two minutes to teach your partner. Use the Drill and Practice Teaching Cards for your teaching. Do NOT stop the tape. I'll tell you when your time is up. Start teaching now.

--PAUSE (2 minutes)--

Okay, time is up. Teacher—select one of the Code Recognition Lists and its corresponding Record Form. Prepare to assess your partner. From this point on you are on your own. Try and follow the sequence of activities on the flow chart. When you have completed the entire flow chart, before you switch roles for the second half, restart the tape. Don't forget to time your partner. Good luck. Stop the tape now.

--PAUSE--
We've just completed a simulation of the actual materials and procedures that are a part of the braille code recognition materials that are available from the American Printing House for the Blind. If you followed all of the steps on the flow chart, you did some teaching, some assessment, provided feedback to your partner, continued with further teaching, further assessment, and finally finished with feedback. The braille code recognition materials follow this same format.

Now, how did your partner do? Hopefully, you saw improvement when you administered the second Code Recognition List. If there was improvement, there was learning! The task of learning these symbols is very much like the task that a blind student must go through in learning braille. Though our simulation was not a tactual task, the confusion of associating similar symbols to words is very much like learning braille. We'll be talking more about this later on. Now, however, let's go on to the second half of our simulated activity.

Okay, let's switch roles. Will the new teachers please get a packet of materials marked Packet B. New teachers--when you have gotten your materials, restart the tape. Stop the tape now.

---PAUSE---

Teachers, you should have the same types of materials as the first half of our activity. Please notice that the symbols and their meanings have been changed. Examine your packet and check to see that you have all of the materials. After you have examined your packet, restart the tape. Stop the tape now.

---PAUSE---
Take out the Drill and Practice Teaching Cards. You will now have two minutes to teach your partner. Do not stop the tape. I'll tell you when your time is up. Start teaching now.

--PAUSE (2 minutes)--

Okay, time is up. Teacher--select one of the Code Recognition Lists and its corresponding Record Form. Prepare to assess your partner. From this point on you are on your own. Try and follow the sequence of activities on the flow chart. When you have completed the entire flow chart, restart the tape. Don't forget to time your partner. Good luck. Stop the tape now.

--PAUSE--

Now that we have completed the simulated activity, we should spend a few minutes discussing the various problems encountered in using code recognition materials and ideas that might help us in working with students.

Handout number two titled "Discussion Questions" will assist us in our discussion. Restart the tape after each of you have a copy of the discussion questions. Stop the tape now.

--PAUSE--

Included as part of this kit are the braille code recognition materials. You will find both the print and braille copies. The different parts include the Braille Code Recognition Lists (there are twenty of them), the Braille Code Exercises (there are three different types, a total of 12 exercises), and recording forms--Progress Charts. Restart the tape after you have had a chance to
examine them. Stop the tape now.

--PAUSE--

Let's take a more detailed look, now, at the braille code recognition materials. There are three different types of materials for use with your students. The Braille Code Recognition Lists or BCRLs, the Braille Code Exercises, and the Progress Charts.

You've probably noticed that our simulated activity contained a fourth material, the drill and practice cards, that is not included with the braille materials. These cards were necessary for our game to give you a basic understanding of our unique simulated code. The blind student already has a basic understanding of his unique code. Our task with this student is not to introduce him to the code, but instead to improve his ability in using it. We begin our work with our student with the second step of the simulated activity--the administration of the Code Recognition List.

Restart the tape when you have a copy of the BCRLs, the Braille Code Recognition Lists, in front of you. Make sure you have a copy of both the print and the braille editions. Stop the tape now.

--PAUSE--

There are a total of twenty BCRLs, Braille Code Recognition Lists, in the booklet. Each list is composed of the same 176 short form words and signs. The only difference between the lists is the order in which the words are presented. All of the lists, therefore, are of the same difficulty.
The first thing you will do with your student is administer one of the BCRLs. You may select any one since they contain the same words.

Let's assume we chose list number one. Turn to the first list. (pause) We would present the braille copy to the student and instruct him to read the list aloud as quickly as he can. We would tell him that we would be timing him and also keeping track of his errors.

The student would begin by reading "perceive," "less," "still," (or he might say "s" "t"--either way is okay), "here," "about," and so forth. As he reads we would keep track of how long he takes and the words that he says incorrectly. The student would continue through the entire list until he got to the word "you."

This would complete the first phase of our training session with him. We have assessed his speed and accuracy. Next, we would inform him of the words he got incorrect. If you remember his mistake, you can inform him of it, or instead you may wish to have him re-read the word and see if he will get it correct. In either case, the student should be made aware of each word he got incorrect and also what the correct word is. You will notice on the print copy that there are line numbers on each side of the page. This will help you in quickly finding the corresponding line and word on the student's braille copy.

Next we would use one or more of the braille code exercises with the student. Restart the tape when you have the booklet of Braille Code Exercises in front of you. Stop the tape now.

--PAUSE--
Turn to the table of contents, the first page in the booklet of Braille Code Exercises. (pause) There are a total of twelve exercises in the booklet. There are four each of three different types of exercises. There are four "A" exercises, four "B" exercises, and four "C" exercises.

Turn to page one. This is the first "A" exercise in the booklet. (pause) The directions for all "A" exercises are: "In each row identify by name the word or contraction that is different from the others in the row." The student would read the first line and say "children." He would then read each successive line and identify that word which is different.

Now turn to page five. (pause) This is the first "B" exercise in the booklet. Read the directions for "B" exercises. (pause - 10 seconds) The student will read the first word and then identify the position of any other words in the line that are the same. For the first line, the student would say "be," then read across and say "first." On the next line he would say "the" and "second." He would continue through the whole exercise in this manner.

Finally, we have "C" exercises. Turn to page nine in the exercise booklet. (pause) This is the first "C" exercise. Read the directions for "C" exercises. (pause - 10 seconds) The student must read the whole line and identify that word or contraction that appears more than once and say how many times it appears. The first line would be "herself," "two times." The next line--"letter," "two times." Observe the student carefully on these exercises. Watch for backward hand movement. There will be a strong desire for the student to scan backwards to identify how many times the word appears. Stress to the student that he
should only read forward. He can read the line in a forward manner as many times as are necessary.

These are the three different types of exercises. Our simulated activity used only two types of exercises. The braille code recognition materials use these three different types. You should help the student whenever needed during each exercise. These exercises are designed to heighten the student's perception of the braille code. They are purposely written to be perceptually confusing so that the student must examine the signs very carefully for minor differences that may exist. If the student can become more perceptive to minor differences in these exercises, he will be more perceptive in his normal reading process.

Plan on using one or more different exercises with your student during each daily session. You may select any of the twelve exercises for use. Following the exercises, you should select another one of the twenty BCRLs and again assess the student for speed and accuracy. As we did during the first part of the session with the student, inform him of his mistakes, go over them for correction and also tell him how long it took to read the BCRL.

I think you will find these materials are quite self-explanatory. The exact procedure for using them with your students is shown on handout number three. Take a few minutes to discuss the use of these materials. Restart the tape when you are ready for my concluding comments. Stop the tape now.

--PAUSE--

Now you have a good idea of exactly how to use the braille code recognition materials with your students. Handout number
four and number five include some interesting information about the types and frequency of braille reading errors that you can expect from your students. Restart the tape when you have a copy of handout number four and number five. Stop the tape now.

---PAUSE---

Handout number four has been taken from the Henderson study. This handout shows the different types of character recognition errors that braille readers make. It also shows the relative occurrence of each type of error as discovered in the study. The most frequent type of error encountered in reading individual braille characters is that of vertical alignment. Over 40% of the errors that were made by the students in the study were vertical alignment errors. (pause)

The next most frequent type of error is horizontal reversals. Over 20% of the errors made were horizontal reversal errors. (pause)

Almost 10% of the errors were vertical reversals. There were six other types of errors shown by the students. Dropped dots, where the student failed to read all of the dots; association errors, where the student perceived the braille character all right but named it incorrectly; rotational errors; added dots; horizontal alignment; and combination reversal-alignment errors.

The braille code exercises are built around these error types. Each line of each exercise stresses the remediation of a specific type of error. A clear understanding of the different types of errors will assist you in spotting specific difficulties that a braille student is having. (pause)
Handout number five lists the fifty-five single cell braille characters and the relative difficulty students had in identifying each one. The first character, "his," was missed 50% of the time. This list will assist you in becoming aware of those single-cell characters that your students are most likely to have difficulty with.

The key for the successful use of the braille code recognition materials is consistency and feedback. Use the materials in a systematic and organized manner. Try to use them daily. It is especially important to have the student experience these materials over a period of time, approximately three weeks, with daily practice.

The student should be constantly made aware of his own progress. Provide feedback to the learner whenever possible.

This concludes our session. If you have any comments or suggestions about this recording and teacher training activity, please direct them to the Regional Special Education Instructional Materials Center, College of Education, Michigan State University, East Lansing, Michigan.

Comments and suggestions about the braille code recognition materials should be directed to the American Printing House for the Blind, Louisville, Kentucky.

This concludes the tape recording.
In this packet you will find 4 different materials. They are all color coded to assist you in finding them.

**WHITE** - Drill & Practice Teaching Cards

Use these cards to introduce the four different symbols and their meanings to your partner. You will have 2 minutes for this initial instructional session.

**PINK** - Code Recognition List (#1-#4)

These four lists each have the four symbols arranged in random order. You will use one of these lists to assess your partner after you have used the Drill & Practice Teaching Cards and also at the conclusion of your session with your partner. You may select any one of the lists to use. You must time how long it takes your partner to complete the list.

**BLUE** - Record Form

The Record Forms provide the correct answers for the Code Recognition List. Circle your partner's mistakes as he goes through the list. Also, enter on the Record Form the amount of time that your partner takes to go through the list. Share this list with your partner and go over his mistakes.

**YELLOW** - Drill and Practice Exercise

Use these two exercise lists with your partner. Use each one as many times as is needed.
## Code Recognition List #1

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## Code Recognition List #2

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**CODE RECOGNITION LIST #3**

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**CODE RECOGNITION LIST #4**

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PARTNER'S NAME _______________________
Elapsed time ______

RECORD FORM - LIST #1
TO ACCOMPANY CODE RECOGNITION LIST #1

Directions: Have your partner read Code Recognition List #1. Circle each word that your partner misses.

OH HUM  OUCH  GREAT  OH HUM  WOW

GREAT  OH HUM  WOW  OUCH  GREAT

WOW  OUCH  OH HUM  GREAT  WOW

When your partner has finished reading the CODE RECOGNITION LIST, give him/her feedback on mistakes that were made.

---

Directions: Have your partner read Code Recognition List #2. Circle each word that your partner misses.

OH HUM  OUCH  GREAT  OH HUM  WOW

GREAT  OH HUM  WOW  OUCH  GREAT

WOW  OUCH  OH HUM  GREAT  WOW

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PARTNER'S NAME _______________________
Elapsed time ______
RECORD FORM - LIST #3
TO ACCOMPANY CODE RECOGNITION LIST #3

Directions: Have your partner read Code Recognition List #3. Circle each word that your partner misses.

WOW  OH HUM  OUCH  GREAT  OH HUM

OUCH  WOW  OH HUM  OUCH  GREAT

WOW  GREAT  OUCH  OH HUM  WOW

When your partner has finished reading the CODE RECOGNITION LIST, give him/her feedback on mistakes that were made.
DRILL AND PRACTICE EXERCISE B

For each line, find the symbol that appears more than once and say that symbol and how many times it appears.

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Say the first symbol in each row by name. Then point to the other symbols in the row that are the same as the first and say their name.
In this packet you will find 4 different materials. They are all color coded to assist you in finding them.

**WHITE - Drill & Practice Teaching Cards**

Use these cards to introduce the four different symbols and their meanings to your partner. You will have 2 minutes for this initial instructional session.

**PINK - Code Recognition List (#1-#4)**

These four lists each have the four symbols arranged in random order. You will use one of these lists to assess your partner after you have used the Drill & Practice Teaching Cards and also at the conclusion of your session with your partner. You may select any one of the lists to use. You must time how long it takes your partner to complete the list.

**BLUE - Record Form**

The Record Forms provide the correct answers for the Code Recognition List. Circle your partner's mistakes as he goes through the list. Also, enter on the Record Form the amount of time that your partner takes to go through the list. Share this list with your partner and go over his mistakes.

**YELLOW - Drill and Practice Exercise**

Use these two exercise lists with your partner. Use each one as many times as is needed.
CODE RECOGNITION LIST #1

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**Code Recognition List #3**

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**Code Recognition List #4**
PARTNER'S NAME ____________________________
Elapsed time ______

RECORD FORM - LIST #1
TO ACCOMPANY CODE RECOGNITION LIST #1

Directions: Have your partner read Code Recognition List #1. Circle each word that your partner misses.

OOPS GEE WHOA OOPS HELP

GEE HELP WHOA GEE OOPS

HELP WHOA GEE WHOA OOPS

When your partner has finished reading the CODE RECOGNITION LIST, give him/her feedback on mistakes that were made.
PARTNER'S NAME ______________________
Elapsed time ______

RECORD FORM - LIST #3
TO ACCOMPANY CODE RECOGNITION LIST #3

Directions: Have your partner read Code Recognition List #3. Circle each word that your partner misses.

OOPS  GEE  HELP  GEE  HELP

WHOA  WHOA  WHOA  GEE  OOPS

GEE  WHOA  HELP  OOPS  OOPS

When your partner has finished reading the CODE RECOGNITION LIST, give him/her feedback on mistakes that were made.

OOPS  GEE  WHOA  OOPS  HELP

HELP  GEE  GEE  WHOA  OOPS

GEE  HELP  GEE  HELP  OOPS  WHOA
DRILL AND PRACTICE EXERCISE B

For each line, find the symbol that appears more than once and say that symbol and how many times it appears.

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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Say the first symbol in each row by name. Then point to the other symbols in the row that are the same as the first and say their name.
CONTENTS OF THIS TRAINING PACKAGE

HANDOUT #1  Outline

HANDOUT #2  Sequence of Activities

PACKET A  A group of materials for the first half of the simulated activity

PACKET B  A group of materials for the second half of the simulated activity

HANDOUT #3  Discussion Questions

HANDOUT #4  Procedure for Using the Braille Code Recognition Materials

HANDOUT #5  Frequency of error types in character recognition

HANDOUT #6  Relative difficulty of single-cell braille characters

BRAILLE CODE RECOGNITION MATERIALS - A complete set of the print and braille materials to be used for improving braille reading skills

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OUTLINE

(Use this sheet for taking notes)

Braille word recognition is the integration of successive tactual perceptions of braille characters.

Differences between braille reading and print reading.

-- more complex
-- more time consuming
-- greater chance for error

Braille reading habits - established by third grade.

Braille reading rates - established by ninth grade.

Henderson & Umsted studies

-- practice in recognition of word parts can improve braille reading.
-- systematic practice is needed.
"LEARNING TO READ"
--SEQUENCE OF ACTIVITIES--

USE ALL FOUR

- DRILL & PRACTICE
- TEACHING
- CARDS

(white)

SELECT ONLY ONE

- CODE
- RECOGNITION
- LIST

(pink)

MAKE RECORD
(Blue)

SELECT ONLY ONE

INFORM
PARTNER

USE BOTH (AS MANY TIMES AS NECESSARY)

- DRILL & PRACTICE
- EXERCISES

(yellow)

MAKE RECORD
(Blue)

SELECT ONLY ONE

- CODE
- RECOGNITION
- LIST

(pink)

INFORM
PARTNER
DISCUSSION QUESTIONS

1. **What frustrations did you have during this activity when you were in the role of student? How is this like the frustrations that a blind student has?**

2. **What parts of this activity seemed to contribute most to learning? How is this the same with blind students?**

3. **What were the primary problems associated with this task of assessing and teaching? How must we accommodate for these problems when working with blind students?**
**PROCEDURE FOR USING THE BRAILLE CODE RECOGNITION MATERIALS**

The following procedure should be used daily.

1. Administer Braille Code Recognition List (use any one of the 20 lists)
2. Provide feedback to the student (point out speed and accuracy, help with errors)
3. Use one or more of the Braille Code Exercises
4. Administer second Braille Code Recognition List (use any one of the 20 lists)
5. Provide feedback to the student (point out speed and accuracy, help with errors)

Hints for Use:

--be consistent  
--use the materials daily  
--stress student practice  
--provide feedback to the student  
--encourage the student by pointing out improvement  
--keep a record of improvement (speed and accuracy)
### Frequency of Error Types in Character Recognition*

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Percentage of errors that are of this type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Alignment</td>
<td>40.79%</td>
</tr>
<tr>
<td>(h ⋆ for his ⋆)</td>
<td></td>
</tr>
<tr>
<td>Horizontal Reversals</td>
<td>23.30%</td>
</tr>
<tr>
<td>(h ⋆ for i ⋆)</td>
<td></td>
</tr>
<tr>
<td>Vertical Reversals</td>
<td>9.95%</td>
</tr>
<tr>
<td>(sh ⋆ for ing ⋆)</td>
<td></td>
</tr>
<tr>
<td>Dropped Dots</td>
<td>6.31%</td>
</tr>
<tr>
<td>Association</td>
<td>4.61%</td>
</tr>
<tr>
<td>(wrong meaning for character)</td>
<td></td>
</tr>
<tr>
<td>Rotational Error</td>
<td>3.64%</td>
</tr>
<tr>
<td>(to ⋆ for i ⋆)</td>
<td></td>
</tr>
<tr>
<td>Added Dots</td>
<td>2.91%</td>
</tr>
<tr>
<td>Horizontal Alignment</td>
<td>2.67%</td>
</tr>
<tr>
<td>(ch ⋆ for k ⋆)</td>
<td></td>
</tr>
<tr>
<td>Combination Reversals &amp; Alignment</td>
<td>1.21%</td>
</tr>
<tr>
<td>Other</td>
<td>4.61%</td>
</tr>
</tbody>
</table>

## Relative Difficulty of Single-Cell Braille Characters*

(This list shows the most frequently missed braille characters)

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>ERRORS**</th>
<th>CHARACTER</th>
<th>ERRORS**</th>
</tr>
</thead>
<tbody>
<tr>
<td>his</td>
<td>24</td>
<td>ow</td>
<td>6</td>
</tr>
<tr>
<td>ing</td>
<td>20</td>
<td>ar</td>
<td>5</td>
</tr>
<tr>
<td>sh</td>
<td>20</td>
<td>e</td>
<td>4</td>
</tr>
<tr>
<td>com</td>
<td>19</td>
<td>t</td>
<td>4</td>
</tr>
<tr>
<td>q</td>
<td>19</td>
<td>h</td>
<td>4</td>
</tr>
<tr>
<td>ff</td>
<td>18</td>
<td>ble</td>
<td>4</td>
</tr>
<tr>
<td>con (cc)</td>
<td>17</td>
<td>m</td>
<td>4</td>
</tr>
<tr>
<td>of</td>
<td>15</td>
<td>d</td>
<td>4</td>
</tr>
<tr>
<td>i</td>
<td>14</td>
<td>o</td>
<td>3</td>
</tr>
<tr>
<td>dis (dd)</td>
<td>14</td>
<td>r</td>
<td>3</td>
</tr>
<tr>
<td>was (by)</td>
<td>13</td>
<td>f</td>
<td>3</td>
</tr>
<tr>
<td>were (gg)</td>
<td>11</td>
<td>s</td>
<td>3</td>
</tr>
<tr>
<td>en</td>
<td>11</td>
<td>a</td>
<td>3</td>
</tr>
<tr>
<td>u</td>
<td>11</td>
<td>for</td>
<td>2</td>
</tr>
<tr>
<td>be (bb)</td>
<td>11</td>
<td>c</td>
<td>2</td>
</tr>
<tr>
<td>with</td>
<td>11</td>
<td>y</td>
<td>2</td>
</tr>
<tr>
<td>ch</td>
<td>10</td>
<td>and</td>
<td>2</td>
</tr>
<tr>
<td>gh</td>
<td>9</td>
<td>ou</td>
<td>2</td>
</tr>
<tr>
<td>in</td>
<td>9</td>
<td>ed</td>
<td>2</td>
</tr>
<tr>
<td>the</td>
<td>9</td>
<td>z</td>
<td>2</td>
</tr>
<tr>
<td>wh</td>
<td>9</td>
<td>b</td>
<td>2</td>
</tr>
<tr>
<td>st</td>
<td>9</td>
<td>k</td>
<td>2</td>
</tr>
<tr>
<td>j</td>
<td>8</td>
<td>w</td>
<td>1</td>
</tr>
<tr>
<td>er</td>
<td>7</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>ea</td>
<td>6</td>
<td>p</td>
<td>0</td>
</tr>
<tr>
<td>v</td>
<td>6</td>
<td>n</td>
<td>0</td>
</tr>
<tr>
<td>th</td>
<td>6</td>
<td>l</td>
<td>0</td>
</tr>
<tr>
<td>g</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*As reported in Henderson, Freda, *The Effect of Character Recognition Training on Braille Reading*, George Peabody College, 1967 (Unpublished education specialist thesis)

**The number of errors shows the number of times each character was missed out of 48 repetitions of the character. Therefore, "his" was missed 24 out of 48 attempts or, in other words, was missed 50% of the time.
1. List the exact procedure for using the Braille Code Recognition Materials.


2. The Braille Code Recognition Materials are designed to:
FINAL REPORT

THE DEVELOPMENT OF A TEACHER TRAINING KIT
FOR THE
BRAILLE CODE RECOGNITION MATERIALS

S. Joseph Levine

July 1973
THE DEVELOPMENT OF A TEACHER TRAINING KIT FOR THE BRAILLE CODE RECOGNITION MATERIALS
--FINAL REPORT--

BACKGROUND

An agreement was entered into during the 1971-1972 project year between the American Printing House for the Blind, the Illinois Instructional Materials Center and the Michigan State University Special Education Instructional Materials Center to share in the creation of a set of teacher training materials that could be used by teachers to assist them in making effective use of the Braille Code Recognition Materials (BCRM). The BCRM are a set of teacher/learner materials designed to increase a braille student's reading speed. The Teacher Training Kit (TTK) was perceived as a self-instructional group procedure that could be utilized by a teacher for understanding the rationale and procedure for use of the BCRM.

The responsibilities of each of the agencies was specified in their 1972-1973 continuation proposals. The following chart shows the time line and responsibility for each agency.

<table>
<thead>
<tr>
<th>MSU Responsibilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M-1 Write design of training strategies</td>
<td></td>
</tr>
<tr>
<td>M-2 Design training strategies</td>
<td></td>
</tr>
<tr>
<td>M-3 Test training strategies</td>
<td></td>
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<tr>
<td>M-4 Write training program</td>
<td></td>
</tr>
<tr>
<td>M-5 Instruct 20 teachers on whole procedure (in cooperation with Illinois Department of Education)</td>
<td></td>
</tr>
<tr>
<td>M-6 Write report (Collaborative)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APHB Responsibilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1 Clearances and communication with authors of primary materials</td>
<td></td>
</tr>
<tr>
<td>A-2 Write description of the program as intended for use with children</td>
<td></td>
</tr>
<tr>
<td>A-3 Write recommendations re: teacher training</td>
<td></td>
</tr>
<tr>
<td>A-4 Provide consulting resources re: content (Umsted, Henderson, Brothers)</td>
<td></td>
</tr>
<tr>
<td>A-5 Produce Braille materials required for (and in) the training program</td>
<td></td>
</tr>
<tr>
<td>A-6 Collaborate in design of criterion measure instruments</td>
<td></td>
</tr>
<tr>
<td>A-7 Produce pro-quality pilot materials for whole teacher training program</td>
<td></td>
</tr>
<tr>
<td>A-8 Design criterion-measure instruments for summative assessment</td>
<td></td>
</tr>
<tr>
<td>A-9 Write report (Collaborative)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Illinois Responsibilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I-1 Provide occasion and participate support for training workshop</td>
<td></td>
</tr>
</tbody>
</table>

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The MSU SEIMC was responsible for the design and field testing of the TTK. The APHB would provide input regarding the exact nature of the BCRM and the teacher behaviors necessary for effective use. The Illinois IMC would provide the field test location and a group of teachers to participate in the actual field test.

The project was established so that the TTK would be available in the fall of 1973 at the same time as the BCRM. The two unique aspects of the project were:

a) three federally funded projects working collaboratively on a single project that draws on the strengths of each.

b) the creation of a set of teacher training materials at the same time as the creation of the child use materials so that all users of the child use materials could receive appropriate training.

DEVELOPMENT OF THE TEACHER TRAINING MATERIALS

1. Initial contacts and examination of the prototype material.

The MSU SEIMC began initial work on the development of the TTK in the fall of 1972. Telephone calls were made to the American Printing House for the Blind (Dr. Roy Brothers) and Dr. Richard Umsted (designer of the basic BCRMs). Copies of the study by Dr. Umsted and the study by Freda Henderson were examined. A concern regarding the definition of the actual child use procedure developed. The procedures used by Umsted and Henderson were of a drill and practice nature and it was felt that specific teacher behaviors for conducting the drill and practice lacked clarity.

2. Meeting with the American Printing House for the Blind.

In January of 1973, Dr. Roy Brothers of the American Printing House for the Blind met with the MSU SEIMC staff to examine the question of specification of teacher behaviors. The following clarifications were made at the meeting.
a. The "Umsted materials" are not explicit in terms of the teacher activity nor in terms of the required teacher competencies.

b. The products that the APHB will be making available to teachers (from the Umsted and related work) will be essentially drill-and-practice materials and testing procedures, for use in situations where teachers are working in one-to-one relationship with children.

c. The teacher training material which is to be the MSU SEIMC contribution to this project will be concerned with the use of the testing and the training procedures.

d. The specificity needed for defining and specifying training of the teachers is not present except by inference in the child-use materials.

e. The teacher training material would be designed specifically for sighted teachers.

The teacher behaviors that were agreed upon as necessary for the successful use of the BCRMs were:

a. Understanding of the daily sequence of lesson events:
   --BCRL time trial (any of the random sequential lists)
   --Feedback on BCRL
   --Exercise (any one of series) up to total 3 per session as time allows
   --BCRL time trial
   --Feedback on BCRL

   Feedback on errors in BCRL is to be given immediately after time trial: Re-read lines with previous errors. Teacher response--if child re-reads correctly, teacher mentions prior error and commends for accuracy (reinforcement). If error recurs, tell student what faulty word really is--ask student to try word again.

b. Use of specific skills:
   --Stopwatch use (or reading sweep second hand)
   --Starting procedure
   --Recording of specific errors
   --Accepting multiple options (ff/to, be/bb, etc.)
   --Teacher response to learner
   --Eliciting learner response

   The MSU SEIMC suggested to the APHB two changes that should be made in the materials:
   --Include a line number at left and right lines of print on the print version of the BCRLs, in order to allow sighted teachers to more readily locate and follow position equivalent to the Braille line being read by the child and to more precisely record the location of errors in reading.
--Produce and add to the materials a graph or chart of progress that the teacher or child can use to log the day-by-day progress of the child.

3. Meeting with the Illinois Instructional Materials Center.

In February of 1973 a meeting between the MSU SEIMC and the Illinois IMC was held to work out the arrangements for the field testing of the TTK. The following decisions were made.

a. A full day workshop would be held.

b. Twenty teachers would be invited to the workshop.

c. Expenses for each participant would be paid by the Illinois IMC. (Funds for this purpose had been allocated in their 1972-1973 budget.)

d. The workshop would be held in Chicago at the Franklin Park IMC.

e. The date of the workshop would be March 17, 1973.

f. Each participant would be provided a set of the prototype BCRMs for classroom use. (The use of the BCRMs would be coordinated by the APHB. Data from usage would be collected and analyzed as a part of the research on the BCRMs being conducted by the APHB.)

DESIGN OF THE TTK

It was decided by the MSU SEIMC to create a TTK that utilized a simulated activity as the major focus. The simulated activity would:

a. provide an adult level task that would use the same learning environment as that encountered by a braille reading student. It should be noted that the simulation was not designed to make the sighted adult undergo the same task as the braille reader, but instead, the same learning environment. (i.e., the development of speed in decoding a unique code.)

b. provide an adult level task in the administration of the BCRMs.

The TTK would be coordinated through a pre-recorded cassette tape and would also include:

a. discussion of the use of the actual BCRMs.

b. discussion of the research on which the BCRMs are based.

c. appropriate handouts.

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Proto-type Test
Teacher In-Service Training Kit
Braille Code Recognition Materials

FORMATIVE EVALUATION NARRATIVE

The proto-type test was conducted on March 15, 1973 with four participants and one observer. The following prepared materials were used for the test:

1) Pre-recorded Tape Cassette
2) Packet A (Materials for simulated activity)
3) Packet B (Materials for simulated activity)
4) Flow Chart of simulated activity (handout)
5) Outline (handout)
6) Discussion Questions
7) Procedure for Using the Braille Code Recognition Materials (handout)
8) Frequency of Error Types in Character Recognition (handout)
9) Relative Difficulty of Single-Cell Braille Characters (handout)

The materials were used according to the exact procedure that is defined for later use. All structure for the activity was provided by the cassette. The designers of the activity briefly introduced the group to the topic area and the purpose of the proto-type test. The participants were told that they would be on their own throughout the entire activity. To begin the activity they merely had to start the cassette player.

The following observations were made during the activity:

1) The tape seemed to move along at an appropriate pace. No one got lost and directions were followed appropriately during the greater part of the activity. Places where the directions were not followed are noted in the following observations.

2) A minor typographical error was noted in one of the Packet B Record Forms. (This will be corrected for later testing.)

3) It was noticed that both dyads used all four Code Recognition Lists during the first part of the activity even though the directions specify using only one list. (The flow chart will be modified to include the specification, "Use only one at this time.")

4) There was some initial confusion about the Drill and Practice Exercises. Even though the packet materials are shape coded and color coded, there was a hesitation about when to use the exercises. (The color of each of the packet materials will be noted on the flow chart.)
5) The motivation factor in the simulated activity was developed fully. This motivation was primarily due to the time keeping function which is a primary concern in the use of the BCR Materials. It is felt that the time keeping function was learned by the participants.

6) The three minute use of the Drill and Practice Cards at the beginning of the simulated activity provided the participants ample time to learn the code. This defeated, somewhat, the practice section of the activity since the participants entered the practice section with the exit competencies. (The three minute time period will be shortened to 2:15 for the "A" activity and 2:05 for the "B" activity. This shortening of time should have the desired effect of making the learning task harder and consequently provide appropriate entry behavior for the remainder of the activity. This aspect will be examined during the field test. If the task still remains too easy, the number of symbols that must be learned will be adjusted from 4 to 6 in a further attempt to make the activity harder.)

7) At the conclusion of the activity a discussion was held between the designers and the participants. The focus at the beginning of the discussion was on the participants ability to relate the exact procedure that is to be used for the BCR Materials. It was found that the participants understood the concepts of drill and practice and time keeping, but they were not able to specify the exact procedure as was listed on the handout. After further discussion relating to "why," it was found that the participants felt very comfortable with the simulated activity, but felt that the explanation of the use of the BCR Materials and the comparison of the simulated activity and these materials was very shallow. (The cassette will be extended with a "walk through" of the BCR Materials. The tape will discuss each part of the materials and have the participants follow along with the actual materials as the different parts are discussed.)

8) The final part of the discussion dealt with the two handouts that showed abstracted information from the Henderson study. The participants felt that the information was valuable and useful, yet the cassette did not provide ample discussion of the information. (The cassette will be extended to provide a discussion of each handout. Information will be provided on the cassette to point out the value of these handouts and how to read the charts for maximum usefulness.)
The proto-type test took approximately sixty-five minutes prior to the discussion with the participants about their reactions to the experience. This is according to design plans and will probably extend to 90 minutes when the revisions are made.

S. Joseph Levine
Marybeth Dean
March 16, 1973
Classroom Use of the Braille Code Recognition Materials

Roy J. Brothers

For over 60 years individuals concerned with the education of the visually handicapped have recognized and have sought solutions to problems associated with braille reading. Basically the problem has been the relatively slow rate at which braille is read and the resultant effects on the total educational process. A comprehensive review of the research related to braille reading has been reported by Umsted (1971).

After a series of experimental studies Nolan and Kederis (1969) strongly suggested that the perceptual unit in braille word recognition was the single braille cell, and that whole word reading as advocated for sighted readers was not entirely appropriate for the braille reader. The studies supported the contention that word recognition was in fact the accumulation of information derived from sensing braille characters over a temporal interval. The implications for educational practices suggested that research efforts should focus on the mechanical aspects of reading, that is, recognition and rote knowledge of the code. To become a proficient reader the blind student faces the task of learning some 246 different meanings for the configurations that will be encountered; the 26 letters of the alphabet, 189 contractions and short-form words, and 31 marks of composition and punctuation. Those configurations which have more than one meaning depending on context and their placement further complicate the task.

Two experimental studies have tested the hypotheses advanced by Nolan and Kederis. Henderson (1967) utilized braille reading students in grades three through six to demonstrate the effect of character recognition training on the silent and oral reading processes. Character recognition was limited to the 55 single-cell contractions. The time required for the experimental group to read specific lists of braille characters decreased by 42% and the mean number of errors per list were decreased by

Dr. Brothers, formerly a behavioral research scientist at the American Printing House for the Blind, is now Superintendent of the Washington State School for the Blind, Vancouver, Washington.

The research reported herein was performed pursuant to a grant with the Bureau of Education for the Handicapped, U.S. Office of Education, Department of Health, Education, and Welfare. Grant # OEG-2-E-06289-1582-7202E163.

EDUCATION OF THE VISUALLY HANDICAPPED
84% on the post-treatment measure. Oral reading rates were increased significantly and error rates were decreased. Relative to silent reading rates the experimental subjects increased both rate and comprehension scores on the posttest. Thus, the results supported assumptions that improving braille character recognition increased the efficiency of the total reading process.

Umsted (1970), using a format patterned after Henderson, found that training for speed and accuracy in code recognition had a significant influence on the reading proficiency of high school braille students. The stimulus materials were expanded to include all 189 contractions, word signs, and short-form words. In addition 12 discrimination type exercises were developed to increase perceptual recognitions and the rate for reading code symbols. The mean number of errors for the experimental group was reduced by 60% while the rate of recognition increased by almost three times that of the control group. The most educationally significant result was a 30% gain in silent reading speed of the experimental group.

Special efforts are often needed to insure that positive results of experimental research are carried over into actual classroom practice. One goal of the Instructional Materials Reference Center, American Printing House for the Blind (IMRC/APH) has been to promote the efficient use of educational materials that have proven utility for the education of visually handicapped students. However, in some instances teachers need the opportunity to receive instruction in the specific techniques necessary to fully utilize newly developed materials.

The present study represented an effort by three agencies of the Special Education Instructional Materials Center (SEIMC) Network. The materials used were a development of the IMRC/APH. Specific instructions for use of the materials were developed by the Michigan State University Instructional Materials Center (MSU/IMC), and arrangement for the workshop experience and use of the materials in the classroom was coordinated by the Illinois Instructional Materials Center.

**Purpose**

The primary purpose of the project was to develop an instructional kit which would prepare teachers to use the Braille Code Recognition (BCR) materials developed and validated by Umsted (1970) and Henderson (1967). Subsequent evaluations were to determine the effectiveness of the teacher instructions and the effect of materials use on the braille reading skills of visually handicapped students. The present account has focused on the use of the materials in the classroom.

**Method**

**Materials**

The Braille Code Recognition materials used in the study basically consisted of braille code recognition (BCR) lists and braille code exercises (BCE). The twenty different lists contained 176 randomly assigned contractions and short-form words in English Braille. Each contraction and short-form word appeared only once on each list. Since 13 of the lower cell signs have a dual meaning depending on their use in a
sentence, the print copy reflected both meanings (i.e. bb and be; cc and con; dd and dis). In taking into account the 13 additional meanings that were represented, the total number of contractions and shortform words in each list was 189. In order to orient the student to the relative position of the dots each word and/or contraction in each of the 20 braille lists was preceded by a full braille cell. The BCR lists and BCE were prepared in both braille and print form.

Braille Code Exercises were also prepared in both print and braille form. The exercises were described by Umsted (1970) as follows:

Twelve discrimination-type lessons consisting of repeated practice and specific drill exercises were developed to help increase accuracy and the reading rate of the code symbols. Three different formats were used to offer variety to the drill exercises. The lessons were constructed with relevance to the errors which, according to the literature (Ashcroft, 1960; Henderson, 1967; Nolan and Kederis, 1969) occur most frequently. The frequency of individual items was not determined proportionately in terms of error indexes of the other studies, but emphasis was given to missed dots, reversals, and alignment errors [p. 18].

A percentage accurate table, and graph material were included in the set as a motivational aid. The percentage accurate table was used by the teacher to facilitate a conversion of error scores to percent accurate scores for each BCR list administered. Potentially the table converted from 1 to 63 errors to a percentage of accuracy. Print and braille graphing materials were used by the teacher and/or student to chart daily progress. Since time scores were recorded for each day it was possible to account for daily increases in the speed of recognition.

Evaluation materials. Revised forms A and B of the Diagnostic Reading Test, Survey Section (Committee on Diagnostic Reading Tests, 1952) were utilized to obtain pre- and posttest measures of silent reading speed for each student. Each form of the test was 1,500 words in length and was followed by twenty multiple-choice questions which sampled recall and comprehension of facts contained in the story. The reading level of the material was reported as being appropriate for grades 7 through 12.

Braille code recognition lists were utilized to obtain daily accuracy scores and rates for reading orally the 176 contractions represented on each list.

Subjects

Teacher participants. Under the auspices of the Illinois State Department of Education, teachers in the Chicago, Illinois area were given an opportunity to attend a braille reading workshop. Attendance was voluntary and in this respect the participants were not randomly selected. A total of 17 teachers attended the workshop and received instructions in the use of the materials. Of these, 12 were then serving students who could make immediate use of the materials.

Student participants. Teachers attending the instructional in-service training session were encouraged to try any or all of the materials with their stu-
dents. In this respect the sample of students was dependent upon the teacher sample. Controls over such factors as grade level, age, years of experience in reading braille, or intelligence were not possible. Nevertheless the sample of Ss was a desirable one if generalizations about uses of the materials were to be made.

A total of 24 students used part or all of the BCR materials. Of these four were categorized as ungraded; seven were enrolled in grades 4-6; ten were enrolled in grades 7-8; and three were enrolled in grade 12. The students ranged in age from 10 years 6 months to 22 years 0 months. The median age for the group was 13 years 4 months.

The students' prior experience with braille ranged from 6 months to 11 years. The mean number of years experience in reading braille was 5.5. Of those students participating 21% had less than two years experience in reading braille.

Teachers were asked to rate the students according to academic functioning. Of those given a rating, five were categorized as functioning above grade level, eight were rated at grade level, and eight were rated at below grade level.

Procedure

An inservice workshop was conducted in Chicago, Illinois during the spring of 1973. The purpose of the inservice was to introduce and thoroughly familiarize teachers with the use of the materials. Teachers were also instructed in the administration of pre and post silent reading tests. The timing and scoring procedures associated with administration of the BCR lists was emphasized. The field trial or classroom use of the materials was scheduled to immediately follow inservice instruction.

It was recommended that the materials be used for a three week period or fifteen class days. The length of individual sessions was not to exceed 30 minutes per day. It was further recommended that the first and last days be set aside for administration of Forms A and B of the silent reading test. The instructional plan for the thirteen intervening days followed a common pattern. First, one of the BCR lists was administered and the time required to read all contractions was noted. Second, specific lines that contained errors were reread. Finally remediation was provided. The procedure of rereading error lines was advocated since two types of error seemed possible. An error could be perceptual in the nature of a reversal, missed dot, or alignment problem, or it could be the result of a limited knowledge of the code. The type of error would determine to some extent the type of remediation provided. Remediation techniques were left at the option of the teacher. If the error was perceptual remediation focused on drills requiring finer tactual discriminations, and the use of the Braille Code Exercises was encouraged. Whenever time permitted additional BCR lists were administered and the same followup procedures were used. In some instances a skilled reader was able to read two or more lists within the course of a single period.

An effort was made to motivate each student to a higher level of performance. The number of errors made on each list was converted to a percentage of accuracy and was charted at
the end of each session. In the case of those students who had already achieved a high level of accuracy, speed was emphasized. Students were encouraged to chart their own progress whenever possible. Each student competed against himself to achieve lower error rates and higher recognition speeds.

Results

Prior studies by Henderson (1967) and Umsted (1970) indicated that practice in braille code recognition contributed to increased braille reading efficiency. The two basic indicators of student improvement were: a) increased accuracy in recognizing braille contractions, word-signs, and short-form words; and b) increased speed in recognizing the symbols. The ultimate criterion was an increased reading rate without loss of comprehension.

Performance Scores

For most of the students it was a new experience to read orally braille contractions, word signs, and short-form words out of any meaningful reading context. It was therefore important to consider the novelty of the task in defining the initial or entering level of performance. The baseline performance or pre-experiment score was determined after the administration of the first three BCR lists. The average error and time score constituted the pre-experiment score. Similarly the post-experiment scores were represented by the mean error and time scores obtained from the last three lists to be administered to the student. The average number of lists completed by a student during the 13 day trial period was 24.1. A total of 24 students completed 10 or more lists.

Accuracy of Recognition

The mean pre-experiment accuracy score of the group was 88.7% which represented 19.86 errors. The mean post-experiment score of accuracy was 97.4% which represented 3.63 errors. Using a t-statistic for correlated observations the mean difference was significant at the .01 level of confidence ($t = 4.72$, $df = 23$, $p < .01$). During the trial period the mean number of recognition errors decreased by approximately 82%.

One method used to motivate students toward higher levels of performance was the daily charting of accuracy and time scores. The mean error scores of the total group have been similarly reported in TABLE 1. It may be noted that a leveling off occurred after the seventeenth or eighteenth administration of the BCR lists.

Speed of Recognition

The mean pre-experiment time score of the group was 672.4 seconds or 11.21 minutes. The mean post-experiment time score was 358.9 seconds or 5.98 minutes. A t-statistic for correlated observations using reciprocal time scores indicated a significant mean difference at the .01 level ($t = -8.79$, $df = 23$, $p < .01$). The reduction of mean time scores over subsequent administrations of the BCR lists are reported in TABLE 2. The mean recognition time for reading BCR lists decreased by 47%.

It was anticipated that increased accuracy and speed of code recognitions would result in increased braille reading efficiency as represented by an increased reading rate. No loss of comprehension was expected. Since the background and braille experience of
TABLE 1
Mean Error Scores for Successive Administrations of BCR Lists

<table>
<thead>
<tr>
<th>N</th>
<th>Administration</th>
<th>Mean Error</th>
<th>N</th>
<th>Administration</th>
<th>Mean Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1</td>
<td>26.46</td>
<td>19</td>
<td>16</td>
<td>2.42</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>18.67</td>
<td>19</td>
<td>17</td>
<td>1.63</td>
</tr>
<tr>
<td>24</td>
<td>3</td>
<td>14.46</td>
<td>19</td>
<td>18</td>
<td>2.21</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>13.25</td>
<td>19</td>
<td>19</td>
<td>2.63</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
<td>12.00</td>
<td>19</td>
<td>20</td>
<td>1.79</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>9.21</td>
<td>19</td>
<td>21</td>
<td>2.21</td>
</tr>
<tr>
<td>24</td>
<td>7</td>
<td>7.79</td>
<td>14</td>
<td>22</td>
<td>2.28</td>
</tr>
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<td>9</td>
<td>7.54</td>
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<td>1.78</td>
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<td>24</td>
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<td>5.38</td>
<td>14</td>
<td>25</td>
<td>2.14</td>
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<tr>
<td>23</td>
<td>11</td>
<td>4.74</td>
<td>14</td>
<td>26</td>
<td>2.14</td>
</tr>
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<td>23</td>
<td>13</td>
<td>4.09</td>
<td>13</td>
<td>28</td>
<td>2.00</td>
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<tr>
<td>21</td>
<td>14</td>
<td>3.71</td>
<td>12</td>
<td>29</td>
<td>2.92</td>
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<tr>
<td>20</td>
<td>15</td>
<td>3.10</td>
<td>10</td>
<td>30</td>
<td>1.60</td>
</tr>
</tbody>
</table>

the students was quite varied the silent reading tests were not altogether appropriate for a few of the students. Consequently, the tests were not administered to some because of inappropriate grade level and/or inexperience with braille reading. As a result pre and post reading rates were obtained for only 20 of the students.

The pre-experiment silent reading rate was 64.38 wpm and the post-experiment rate was 73.58 wpm. A comparison of the means indicated a significant increase in braille reading speed ($r = 3.90$, $df = 19$, $p < .01$). The mean comprehension score for the pre-test was 12.1 and the posttest was 14.7. No loss of comprehension was noted, in fact a comparison of means indicated a significant gain ($r = 3.81$, $df = 19$, $p < .01$).

Discussion

The purposes of the project were fulfilled. Given a brief inservice experience a group of teachers were able to use the BCR materials effectively with a diverse population of braille reading students. The use of the materials by the students subsequently resulted in greater braille reading proficiency. The materials appeared to be effective with beginning braille readers as well as the most experienced students. Accuracy of braille code recognition and speed of recognition were again confirmed as observable indicators of increased braille reading efficiency. Parallel forms of a
TABLE 2
Mean Time Scores for Successive Administrations of BCR Lists

<table>
<thead>
<tr>
<th>Administration</th>
<th>Mean Time (seconds)</th>
<th>Administration</th>
<th>Mean Time (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>770.67</td>
<td>16</td>
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<td>2</td>
<td>661.62</td>
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<td>585.00</td>
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<td>286.05</td>
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<td>4</td>
<td>510.71</td>
<td>19</td>
<td>283.52</td>
</tr>
<tr>
<td>5</td>
<td>483.00</td>
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<tr>
<td>6</td>
<td>496.96</td>
<td>21</td>
<td>288.57</td>
</tr>
<tr>
<td>7</td>
<td>460.88</td>
<td>22</td>
<td>264.00</td>
</tr>
<tr>
<td>8</td>
<td>469.96</td>
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</tr>
<tr>
<td>12</td>
<td>408.18</td>
<td>27</td>
<td>244.14</td>
</tr>
<tr>
<td>13</td>
<td>403.78</td>
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<td>235.54</td>
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<tr>
<td>14</td>
<td>356.86</td>
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</tr>
<tr>
<td>15</td>
<td>329.00</td>
<td>30</td>
<td>231.30</td>
</tr>
</tbody>
</table>

silent reading test given before and after training were used to demonstrate increased reading rates. The ultimate value of educational materials rests on their ability to change or improve student behavior in observable and desirable ways.

Information obtained from the teachers resulted in some minor adaptations of the materials. For greater convenience of use, the lines on the print copy of the BCR lists were numbered, and all word and letter meanings were noted on the print copy of the braille code exercises.

The instructional procedure was tutorial in nature and admittedly emphasized rote types of learning. Emphases to be placed on hand positions, posture, braille rules, and/or writing were left to the option of the teacher. In regard to motivation the approach introduced a competitive atmosphere in which the students competed against themselves to increase accuracy and speed of recognitions.

As noted in TABLE 1 the accuracy of recognition leveled off after the eighteenth administration of the lists. This suggests that the administration of 20 lists would be adequate for most students. Administrations beyond 20 would not necessarily produce increased accuracy scores.

Results indicated that the student was not able to improve both accuracy and speed of recognition at the same time, and in this sense these indicators...
of improvement may be incompatible. When the goal was accuracy, speed suffered and conversely when speed was emphasized accuracy was diminished. A logical approach would be to obtain a high degree of accuracy before emphasizing speed. The emphases may be communicated to the student by what score is currently being charted (i.e., accuracy score, time score). After just 10 administrations of the BCR lists the mean accuracy score of the group was approximately 97%. Subsequent administrations could very well focus on increasing the speed of recognitions. The user should also consider the materials as a means of brushing up on the code and as a way to maintain high levels of reading performance.

Based on prior studies, expectations regarding student performance were supported. Errors were decreased by 82% while Umsted (1970) reported decreases of 60%. Recognition time was reduced by 47% while Umsted and Henderson (1967) reported reductions of 56% and 42% respectively.

The silent reading tests which were used to evaluate braille reading efficiency were questioned on grounds that they were inappropriate for a segment of the sample. For this reason, silent reading tests were not considered for inclusion in the package of BCR materials. The classroom teacher is in a better position to select appropriate diagnostic instruments for individual students.

The BCR materials and the instructional kit which was developed by the MSU/IMC are currently in production at the American Printing House for the Blind.

REFERENCES


Correction

October, 1973 (V:3), "The Blindfold Experience" (McDonald, Friedman and Weinberg, pages 84–86): Add to the footnote that Dr. Friedman is the Director, College Orientation Program for Visually Handicapped Students, Queensborough Community College, Bayside, N.Y.
VISUAL TRAINING CARDS: AN EVALUATION
February 12, 1974

MEMORANDUM

TO: SEIMC Staff

FROM: Lynn

SUBJECT: Summary of Visual Training Cards Evaluation Forms

The Visual Training Cards contain over 300 suggested activities and materials for children with visual problems.

In July, 1973, after the Visual Training Cards were reproduced and packaged, a letter was sent to the following agencies and individuals to announce the availability of the Visual Training Cards:

- Regional SEIMCs
- Regional Media Centers for the Deaf
- Indiana Teacher Trainers
- Ohio SERRC Coordinators
- Michigan Curriculum Resource Consultants, Acting CRCs, and Curriculum Resource Specialists
- Regional Resource Centers
- NCEMMH

Enclosed with the letter was an address label. We requested that the label be returned to us with the name of the individual who should most appropriately receive, use, and/or disseminate this material. As soon as the label was returned, the Visual Training Cards were sent to the individual specified.

The agencies and individuals that did not respond to this first letter (Appendix A) were given another opportunity to request the Visual Training Cards (Appendix B). A third and final notice was sent on November 12, 1973 (Appendix C).

To date 138 sets of the Visual Training Cards have been disseminated to the above agencies, and to other interested individuals who have seen the set of cards and have requested them.

At the end of November, 1973, a letter and an evaluation form was sent to each individual who had received a set of the Visual Training Cards (Appendix D,E). To date 81 evaluation forms have been returned (58% of the number sent out).

A summary of the data from the Evaluation Form follows:

[Provided data table]

Member -- Special Education
ERI -- Network -- Bars
VISUAL TRAINING CARDS EVALUATION

DATA

1. Have you shown the VISUAL TRAINING CARDS to teachers?

   63 Yes
   15 No
   3 No response

If YES, approximately how many teachers?

   955 TOTAL
   4 50 or over
   8 25-49
   22 10-24
   25 1-9

The respondents to this questionnaire had approximately three months time to examine and use the Visual Training Cards. This was an exceptionally short time period and the responses to the questions should be viewed with this in mind. Even within this short period of potential use, 80% of the agencies receiving the Visual Training Cards did show them to teachers. Though most showed them to small numbers of teachers (less than 24), the evaluation indicates that approximately 1,000 teachers were exposed to the Visual Training Cards during the first three months of availability.

2. To what use have you put the VISUAL TRAINING CARDS?

   53 Part of an instructional materials library for loan to teachers.
   30 Part of an instructional materials library for inspection by teachers.
   48 For use by a consultant when working with teachers.
   26 Personal use.
   0 Not being used.
   12 Other (please specify)

--Available through Associate Centers
--Workshop for regular classroom teachers
--Parent education and for prescriptive teacher education teaching report
(more)
The two primary ways in which agencies have used the Visual Training Cards is as a part of an instructional materials library for loan to teachers and to support consultant work with teachers. It's interesting to note that almost twice as many of the agencies loan the cards to teachers as just let the teachers inspect them without actual use.

3. Have you duplicated the VISUAL TRAINING CARDS?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>63</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>Plan to</td>
</tr>
</tbody>
</table>

If YES, for what uses?

- activity handout for regular classroom teachers
- teacher use
- for teachers to have in their classroom
- copies to special programs (multicap, etc.)
- teacher-psychologists
- entry on SER-LARS
- to assist in program prescription for children
- for teachers and students to use
- for teachers
- in-servicing, low incident handicapped, teachers in remediation of learning disabilities
- hand-duplicated for teachers making materials for vision training activities

The Visual Training Cards were designed and developed by the Great Lakes Region SEIMC for duplication by the agencies receiving them. This procedure of designing a reproducible product was employed to facilitate widespread dissemination of the Cards without placing the burden on any single agency. The responses to this question indicate that 23% of those receiving the Visual Training Cards have either reproduced them or are planning to. Due to the great number of materials received by these agencies and the demands for duplication that are placed on them, it is felt that 23% represents a sizable and acceptable response to this question. This question indicates that a multiplier effect is evident as regards the extended use and dissemination of the Visual Training Cards.
4. With what types of special education teachers do you feel the VISUAL TRAINING CARDS will be most useful?

- Learning Disabilities 60
- Emotionally Disturbed 11
- Mentally Retarded 40
- Visually Handicapped 81
- Deaf and Hard of Hearing 14
- Physically Handicapped 14
- Multiply Handicapped* 1
- Regular Class* 1
- Mentally Retarded 4
- Visually Handicapped 4
- All areas* 14

Though the Visual Training Cards were designed specifically for use with visually handicapped children (and so indicated in the set), it is evident by the responses to this question that they have wide-spread use with many types of handicapped learners. It seems that the responses to this question and, in fact, the potential uses seen by teachers, relates to factors other than those stipulated by the designers. It is assumed that the primary influence on potential use is a) background of the respondent, and b) audience served by the respondent. The responses to this question show that the Visual Training Cards have use with a number of different types of handicapped learners.

5. Please circle the number that corresponds to what you feel is the usefulness of the VISUAL TRAINING CARDS.

- Extremely Useful 24
- Useful 31
- Not at all useful 22

Based on the responses to this question it is felt that the Visual Training Cards are useful in the total instructional program of handicapped children. This question, however, does not differentiate between usefulness for teacher training or usefulness in teaching children. It is assumed that since most agencies deal primarily with teachers rather than children, the concept of usefulness should be equated with usefulness in teacher training and/or dissemination to teachers of handicapped children.

6. Would you like to see more sets of cards of this nature?

- Yes 73
- No 1

*These categories were added to the questionnaire by individual respondents.
If YES, in what area(s)?

18 Auditory
7 Motor development
7 Mental retardation
6 Academic subject areas (math, science, social studies, etc.)
5 All areas
5 Language development
4 Learning disabled
3 Deaf and hard of hearing
3 Perceptual training
3 Visual (1 Visual discrimination)
2 Occupational
2 Basic concepts and skills
2 Position discrimination/spatial relationships
2 Tactile/kinesthetic (manipulative)
1 Multiple handicapped
1 Task analysis
1 Constructive seat work activities

This question further supports the "usefulness" indicated in the responses to question #5. Of particular interest is the second part of this question. When asked what other areas should be the focus of similar card sets, 25% of the responses indicated auditory materials.

7. Comments

A total of 47 comments were included on the returned questionnaires. This large number of comments (59%) seems to indicate a positive interest in the cards on the part of the respondents. To further support this, very few negative comments were included. Of those comments that can be considered negative, the primary one was concerned with the development of more cards with teacher-made materials (rather than commercially available materials). The positive comments focused on format, ease of use/retrieval, and organization/conciseness.

(Comments listed on pages 5-7)
Comments:

--- Teachers were excited about them.
--- The format makes it readily useful to the classroom teacher. The suggested activities are practical and directions clear and simple. One criticism - stand-up tabs for each category of materials would make it easier to locate the type of activity one is looking for.
--- Need to get materials for some activities, others can be done with available materials.
--- Cards containing teacher made material activities should be well received by teachers. Cards describing commercial materials are clear and concise - real "time savers." Well done!
--- Extremely useful.
--- The cards would be a valuable asset to all teachers. Those who have seen them would have loved to use them.
--- I was very impressed with the way these cards were packaged.
--- Have really appreciated the materials we have been receiving.
--- For teacher made materials - use more visual diagrams. Teacher made ideas are the most practical because teachers can make and use immediately.
--- An excellent unit, easy access, immediate application.
--- Being with the Dept. of Mental Health, we find ourselves more concerned with MR and ED. Perhaps I have overlooked the use of these cards in these areas.
--- We need more of this kind of material.
--- These items are the kinds of things teachers are asking for all the time.
--- Need more clear specification of the "how to" or "directions" section.
--- Many of the commercial materials are very expensive, however, ideas for teacher-made things can be gleaned from them.
--- Some of the items seemingly were more auditory than visual - materials were labeled "visual training cards." Because of integration of sp. ed. students into regular classrooms, materials are needed that are appropriate for children functioning at lower levels but do not require significant teacher involvement.
--- This has been an excellent resource making it easy for teachers to list needed materials for budget purposes with all the necessary information available.
--- We use the low vision test when we see a child where perception and vision seem to be involved - then was really happy to have cards to do follow up instead of having to dig around and find materials which was what I had been doing.
--- Very helpful. Teachers have enjoyed using the suggestions presented.
--Very general items are presently included. Need for less "borrowing" ideas from currently used materials. In a handy form, easy to use.

--Time and experience may prove them to be of greater value than I have given them.

--We have only one class in our region for visually handicapped, this would be very beneficial in assisting the teacher in planning activities for her children as well as LD children who have problems in visual discrimination. I see them as a "great" source for planning activities to develop the child's ability to discriminate visually. This is something that can be used by all teachers.

--Perceptual development classrooms would certainly benefit from these cards, too.

--Good idea on the container BUT both of our copies were damaged in transit to us. Teachers have suggested that their interest in different instructional materials has grown through the cards, i.e., an idea indicating a material, rather than materials leading to ideas. Also, use of more materials was facilitated by the cards.

--Time has not permitted a thorough evaluation of these materials. The coding, while useful, is still a bit difficult to use effectively.

--Thanks for sending them to us.

--Good work!

--Include more teacher made materials. If another set would be available we would use it as a library loan item.

--I've not received feedback from the organization I forwarded these to.

--It would be great to have more ideas of materials teachers could make themselves.

--I have not had the cards long enough to fully evaluate them. They appear to be excellent.

--We need more time for use!

--Thank you! Keep up the good work.

--It would be helpful to alphabetically group the cards by publishers so teacher can use them to help evaluate commercial materials before purchase.

--Many times we request that teachers use concrete methods and manipulative materials when teaching mentally handicapped children. Training cards would be very useful in assisting these teachers with specific suggestions in teaching readiness concepts and remedial academics.

--I sure wish we could attend your in-service training sessions and receive your services this year. I would appreciate keeping in touch with Sue, Joe and Ted. Thanks for sending the cards and the evaluation form.
--I work with learning disabled, hearing impaired and mentally retarded children with vision problems. This kit has been handy in having ideas immediately at hand to use with each individual child.

--We are using the card kits to show teachers of the deaf a system which we think should be compiled for the hearing impaired - in fact we are working on such a concept now and hope to finish it next summer.

--Materials for non reading young adults, Jr. Hi. and Hi School students, not mentally impaired.

--Format should work in several areas--such as perceptual training activities, training activities for SMI, etc.

--Very useful for the common perceptual and eye-hand coordination problems found in partially sighted students.

--I will be meeting with special education teachers soon and will introduce the Visual Training Cards.

--The format of this material is excellent as well as the content.

--Cards seem excellent.

--Most areas were well covered although more were needed in the mathematics area. Perhaps more items that are less expensive could be included.

--The one thing we felt might improve the card sets was to have them in some type of order for easy reference purposes.

--Our training coordinator will be taking the cards to an Oklahoma workshop in February, also.

S. Joseph Levine
Lynn Kinzel
February, 1974
MEMORANDUM

TO: Associate Centers (Michigan, Indiana, Ohio), SEIMCs, RMCDs, RRCs

FROM: Joe Levine

SUBJECT: Availability of VISUAL TRAINING CARDS

The MSU SEIMC has just completed the development of a new resource for teachers called VISUAL TRAINING CARDS. These Cards are in response to requests by teachers of visually handicapped children for suggested activities and materials that can be used in conjunction with the Visual Efficiency Scale (available from the American Printing House for the Blind). Over 300 different cards suggest numerous activities and materials, each of which has been coded to the specific areas of the Visual Efficiency Scale to which it relates.

We have produced a limited number of these sets to be distributed to the associate centers in our region and to the members of the national network. The cards have been printed so as to facilitate their being reproduced for local distribution if you so desire.

Rather than send the Visual Training Cards to each center and hope that it filters through to the correct person, we are asking that you complete the enclosed address label and return it to us. Enter on the label the name and address of the person at your center who should receive this material. As soon as we receive the label, we will be sending your set of VISUAL TRAINING CARDS.
September 20, 1973

MEMORANDUM

TO:       Associate Centers (Michigan, Indiana, Ohio),
          SEIMCs, RMCDs, RRCs

FROM:     Lynn Kinzel

SUBJECT:  VISUAL TRAINING CARDS.

Please find enclosed a copy of the memo that was previously sent to you concerning the distribution of our VISUAL TRAINING CARDS. A number of these VISUAL TRAINING CARDS are still available to those who haven't responded to the previous letter.

We are enclosing another address label which we are asking you to complete and return to us if you wish to receive this material. Enter on the label the name and address of the person at your center who should receive the VISUAL TRAINING CARDS. As soon as we receive the label, we will be sending your set of VISUAL TRAINING CARDS.
November 12, 1973

MEMORANDUM

TO: Associate Centers (Michigan, Indiana, Ohio), SEIMCs, RMCDs, RRCs

FROM: Joe Levine

SUBJECT: Availability of VISUAL TRAINING CARDS

F I N A L N O T I C E

We still have a few remaining sets of VISUAL TRAINING CARDS. If you have not yet requested your free set of these materials, please fill out the enclosed address label and return it to us.
November 30, 1973

Dear

Recently we sent you a set of VISUAL TRAINING CARDS. We are most interested in your reactions to these cards and would appreciate it if you would take a few minutes to complete the enclosed questionnaire. When you're finished with it, merely refold it with our address facing out, staple it together, and drop it in a mailbox—the postage has been prepaid.

Thank you for taking the time to complete this questionnaire. We will be using the data to assess the value of the VISUAL TRAINING CARDS and make decisions regarding the development of similar materials.

Sincerely,

S. Joseph Levine
Coordinator: Media and Materials Development Unit

SJL:lk
VISUAL TRAINING CARDS
EVALUATION

1. Have you shown the VISUAL TRAINING CARDS to teachers?
   Yes ___ No ___ If YES, approximately how many teachers? ___

2. To what use have you put the VISUAL TRAINING CARDS?
   __ Part of an instructional materials library for loan
     to teachers
   __ Part of an instructional materials library for inspection
     by teachers
   __ For use by a consultant when working with teachers
   __ Personal use
   __ Not being used
   __ Other (Please specify) _________________________________

3. Have you duplicated the VISUAL TRAINING CARDS?
   Yes ___ No ___ If YES, for what uses? _______________________

4. With what types of special education teachers do you feel the
   VISUAL TRAINING CARDS will be most useful?
   __ Learning Disabilities
   __ Visually Handicapped
   __ Emotionally Disturbed
   __ Deaf and Hard of Hearing
   __ Mentally Retarded
   __ Physically Handicapped

5. Please circle the number that corresponds to what you feel is the
   usefulness of the VISUAL TRAINING CARDS.

   Extremely Useful  Useful  Not at all useful

   5  4  3  2  1

6. Would you like to see more sets of cards of this nature?
   Yes ___ No ___ If YES, in what area(s)? ___________________

7. Comments:

   _________________________________
Workshop Training Kits: Evaluations
April 4, 1973

MEMORANDUM

TO: 1973 Tri-State Leadership Workshop Participants

FROM: Sue Ann Yovenovich, Field Services Coordinator

SUBJECT: Participant Reaction Summary

Enclosed is a summary of the Participant Reaction Forms which you completed at the conclusion of the Tri-State Leadership Workshop. The workshop staff is pleased with the results of the reaction form which indicates that the majority of the participants felt that their individual needs were met during the workshop.

Again, we thank you for your participation and invite any comments, suggestions, criticisms, etc. Let us know how we can continue to serve you!

Enclosure

SAY:rh
TRI-STATE LEADERSHIP WORKSHOP

Rita Harmon
Sue Ann Yovanovich

SUMMARY AND PURPOSE

At the conclusion of the two-day workshop, participants were asked to complete a "Participant Reaction Form." This allowed participants to anonymously record their reactions to the workshop and served as an assessment measure for the workshop staff.

RESULTS

Question #1: "For each session that you attended, please check the appropriate blanks."

This question was designed to allow participants to indicate whether or not the sessions attended were relevant to their needs. Participants were also asked to indicate their future action with regards to the use of the kits. It was expected that the responses would indicate to the workshop staff the relevancy and potential use of the materials.

<table>
<thead>
<tr>
<th>Describe Your Learner</th>
<th>Relevant to Your Needs?</th>
<th>Will you use in the future?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>?</td>
</tr>
<tr>
<td>Problems and Hints</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Braille Reading Training Materials</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Task Analysis Game</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Charting Behavior</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Educational Planning</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Relevant to your needs?</td>
<td>Will you use in the future?</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Yes</strong></td>
<td><strong>?</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td>EDUCATIONAL PLANNING - 2ND SESSION</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>EDUCATIONAL PLANNING - 3RD SESSION</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>CREATING DISCUSSION TAPES</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>POLAR ALGEBRA</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>COMMUNICATION HANDICAPS</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>PLANNING WITH TEACHERS</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>L.D. CARD GAME</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>EVALUATING A WORKSHOP MATERIAL</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>L.D. PLANNING PRIORITIES AND NUMBERS/ALPHABET GAME</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

The response to this question indicates that the participants felt that their needs were met and that they would utilize them in carrying out their local in-service programs.

**Question #2:** "How useful was the OPTION ROOM?"

**Very Useful** | **Useful** | **Not Useful**

This question allowed the participants to indicate the usefulness of the OPTION ROOM. It was intended to provide input that would clarify participant reactions to the OPTION ROOM.

Of the 25 respondents who answered this question, all felt it was useful - 12 (48%) indicated it was **very useful**; 13 (52%) indicated **useful**.

**Question #3:** "How useful were the OVERVIEW TAPES in the Option Room?"

**Very Useful** | **Useful** | **Not Useful**

This question was designed to provide feedback regarding the usefulness of the OVERVIEW TAPES. It was hoped that the responses would provide input which would guide the workshop staff in preparing overview tapes, for future projects.

Of the 21 respondents who answered this question, 13 (52%) felt that the overview tapes were **useful**; 8 (48%) felt that they were **very useful**. The responses indicate that overview tapes were an asset and should be included in future projects.
Question #4: "How was the MODULAR SCHEDULING that was used during the two-day workshop?"

<table>
<thead>
<tr>
<th>Very Useful</th>
<th>Useful</th>
<th>Not Useful</th>
</tr>
</thead>
</table>

This question was designed to elicit participant reactions to the workshop format, i.e., modular scheduling. It was hoped that responses would provide input which would assist the workshop staff in planning for future workshops.

Of the 24 respondents who answered this question, sixteen (66.7%) found it to be very useful; 7 (29.1%) indicated useful; 1 (4.2%) did not consider it useful. The responses indicate that the participants had very positive feelings about the modular scheduling. This also indicates to the workshop staff that this format should be planned for a future workshop.

Question #5: "How many kits did you examine in the Option Room?"

This question was designed to provide feedback as to the number of kits examined. It was hoped that the responses would provide input which would assist the workshop staff in planning for future workshops. Hopefully, the responses would yield information such as: time allotment in Option Room; number of kits for examination; use of overview tapes; consultation by SCIMC staff.

Of 24 participants, 10 examined between 1 to 5 of the 32 available kits; 9 examined between 6 to 10; 3 examined between 11 to 16 and 2 examined all of the kits.

Responses indicate that the participants did use the Option Room during the workshop. It would seem that the use of such a format assists the participants in becoming aware of available resources.

Question #6: "Use descriptive words to describe your reactions to this two-day workshop. List the words as fast as they come to you. Limit one minute! No sentences, please."

A total of 153 words were elicited by this response. Of these, 141 (98.2%) were positive and 12 (17.8%) were negative. Those words which appeared 5 or more times were: informative (9); interesting (8); fun (7); good (7); and helpful (5).

The response indicates that the participants left the workshop with positive feelings.
PARTICIPANT RESPONSES

6. Use descriptive words to describe your reactions to this workshop. List the words as fast as they come to you. Limit one minute! No sentences, please.

(9) informative
(8) interesting
(7) fun
(7) good
(5) helpful
(4) educational
(4) frustrating (-)
(4) planned
(3) active
(3) interaction
(3) organized
(3) relevant
(3) useful
(2) brainstorming
(2) enjoyable
(2) excellent
(2) exciting
(2) fast
(2) great
(2) ideas
(2) involved
(2) late (-)
(2) relaxed
(2) stimulating
(2) structured
(2) tired (-)
(2) worthwhile
(1) analyze
(1) applicable
(1) a-v materials
(1) beneficial
(1) carry over
(1) casual
(1) challenging

(1) choice
(1) compare
(1) concentrated
(1) consistent
(1) different
(1) different approaches
to problems
(1) elementary level
mainly
(1) evaluative
(1) experiential
(1) explanations
(1) facilities
(1) functional
(1) glad
(1) happy
(1) informal
(1) input
(1) justifiable
(1) kits
(1) knowledgeable
(1) learning experience
(1) less tiring
(1) like to do again
(1) limited on time (-)
(1) lively
(1) logical
(1) lots
(1) many good features
(1) meaningful
(1) more
(1) motivating
(1) not real (-)
(1) not relevant to
my needs (-)
(1) nothing
(1) other states - more
input needed
(1) people
(1) personable
(1) profitable
(1) quick
(1) reinforcement
(1) review
(1) rewarding
(1) satisfied
(1) schedule
(1) sequence
(1) share
(1) some holes (-)
(1) successful
(1) teaching tool
(1) thought provoking
(1) together
(1) to-the-point
(1) valuable
(1) variety

(-) = negative word

1193
Question #7: "What do you feel were the two most valuable aspects of the two-day workshop?"

This question was designed to assess whether the planned objectives of the workshop were met as perceived by the participants. The responses indicate that participants did perceive the objectives through the workshop and felt that they were met.

Participant response:

(17) Interaction - Provided opportunity to interact with others.
(12) Replicable training materials that were provided.
(11) Educational Planning
(1) LD Card Game
(10) Workshop Format.
(3) Meaningful topics - relevant
(2) Modular scheduling
(2) Small group sessions
(1) Modeling of emphasis on evaluation
(1) Organization
(1) Informal with great variety of offerings
(8) Option Room - Provided opportunity to preview a variety of available in-service training materials.
(6) Involvement Activities

Question #8: "If this two-day workshop were to be offered again for a different group of participants, what one thing should be eliminated?"

This question was included to determine which aspects of the workshop should be modified or eliminated. A total of 13 responses (50%) indicated that nothing should be changed and a like number (50%) indentified the formal sharing evening session as unnecessary.

Participant response:

NOTHING (n = 13)
FORMAL SHARING - EVENING SESSION (n = 13)
PRE & POST TESTS (n = 3)
EVALUATION OF WORKSHOP MATERIAL (n = 2)
TASK ANALYSIS (n = 1)
CHARTING BEHAVIORS (n = 1)
Question #9: "What was omitted, yet should have been included in this two-day workshop?"

This question was designed to determine what, if any, participant needs were not met by the workshop. This information would provide input for planning of future workshops. The following areas were specified:

(4) Nothing
(4) Coffee early on first morning
(3) More emphasis on leadership style; planning, conducting and evaluating in-service workshops
(3) More time for group sharing
(3) More time and materials in option room

These topics were omitted:
   (1) Behavior management in the classroom
   (1) Planning for the retarded
   (1) Low functioning learners

Question #10: "Suggestions or comments."

This question was designed to provide participants with an opportunity to react in an unstructured manner on any aspect of the total workshop. Those comments relating to content were positive. Negative comments centered around physical arrangements (facility, starting times, etc.).

Coffee the first morning first!
Very well done!
Workshop should be held later in the school year.
The majority of the kits are appropriate but in listing my priorities they need some revision for my use.
Better eating facilities so can get back to sessions on time.
Beginning on time.
Ending on time.
In regards to modular scheduling -- offer all workshops several times-- give participants master schedule and let them pick and choose, although with a small group such as this, your approach was probably most practical.
Continuation of an option room - maybe expand.
Overall, a very good two-day session.
I feel many of the activities I could never use or adapt. Yet the idea does let me build on it and do something else—yet I needed the idea here! A real learning workshop even if all the activities didn't come through as such.

Every session was good. I enjoyed the fellowship.

9:00 for beginning sessions. Lunch period second day too short.

All sessions in same building. Take off earlier on Friday (2:30 or 3:00) or schedule solid until time to go.

Longer lunch hour on second day.

End session on Friday at 2:30 or 3:00 for those from a distance.

The concept of a self-directing activity was good but there are other good methods. Many teachers will not sit down with a cassette tape or respond to a self-directed activity.

I gleaned from each of the seven sessions attended. Leadership is good. I like the format and modular scheduling.
1. For each session that you attended, please check the appropriate blanks.

<table>
<thead>
<tr>
<th>DESCRIBE YOUR LEARNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A self-paced activity that has participants complete a series of worksheets that narrows in on specific observable behaviors of a learner. The activity can be easily modified to focus on any type of learner. This session will use an adaptation of the activity designed by Dave Braukman.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROBLEMS AND HINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Problems and Hints&quot; is designed as a workshop activity that will allow the participants an opportunity to share their concerns relating to a specified area. Rather than just raising issues, the activity structures participant answers for the issues. A series of short &quot;identify-write&quot; rounds make up the activity. A time schedule is provided at the beginning of the activity that establishes the procedure for each round. This is a very simple activity that can be successfully used without any prior preparation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRAILLE READING TRAINING MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a completely group-run activity that does not need a leader! The kit includes a cassette and simulated exercise that provides the participant an understanding of the problems involved in learning a symbolic code. The kit has been designed for use in situations where a workshop leader is not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TASK ANALYSIS GAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>A three stage activity calling for participants to sequence a set of objectives and their corresponding activities. The content focuses on a low functioning learner and the necessity for a teacher to use task analysis to move the learner towards educational goals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHARTING BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>A case study on a low functioning learner is presented through a series of charts describing specific behaviors of that child undergoing modification. Participants, in dyads, are asked to look at the charted information and work in a problem-solving situation.</td>
</tr>
</tbody>
</table>
EDUCATIONAL PLANNING

This is a three part workshop activity that is designed to focus on three types of decisions involved in educational planning:

--decisions that relate to educational responsibility
--decisions that relate to educational placement
--decisions that relate to educational programming

The activity asks the workshop participants to assume the roles of some of the key planners who may provide input for decisions involving children with learning and/or behavioral problems.

This in-depth case study used over time can be used to facilitate understanding of the planning process and to develop skills in decision making and understanding of other viewpoints.

Those workshop participants who choose this activity will be expected to attend all three sessions.

The first session will focus on educational responsibility.

EDUCATIONAL PLANNING - 2ND SESSION

This is a continuation of the educational planning activity described above. The focus for this session is educational placement.

EDUCATIONAL PLANNING - 3RD SESSION

This is a continuation of the educational planning activity described above. The focus for this session is educational programming and is an intensive programming session.

CREATING DISCUSSION TAPES

This simulated activity calls for teams of two participants to create a tape recording which will be used with teachers. The objective of the presentation is to deliver information about a new instructional material and to stimulate discussion among the listeners. Particularly useful for persons who will be developing interactive audio tapes.
POLAR ALGEBRA

A series of unique learning problems are created whereby the participant experiences the feelings of a student with learning disabilities. The activity is resolved through individual selection of remediation processes. Designed to develop a teacher's understanding of learning difficulties and the necessity for providing optional learning activities.

COMMUNICATION HANDICAPS

Participants operate in pairs and work through a series of four activities that demonstrate auditory learning and visual learning. A worksheet provides the structure for participants to reflect on each experience in terms of helpful and hindering teaching strategies.

PLANNING WITH TEACHERS

A demonstration (role play) activity showing the value of three alternate strategies for planning workshops. This activity is exceptionally useful if you are using other professionals to assist in your teacher training activities. The activity can be used with these professionals as part of their training.

L.D. CARD GAME

This workshop activity is designed to facilitate understanding of the symptoms, remedial strategies, and terms that are used in dealing with children who have learning problems. The activity is built around a matching game whereby the teachers, operating in groups, are asked to sort out terms, symptoms and strategies into appropriate combinations. Following the discussion, each participant will be able to take home a booklet containing the information the groups have been organizing.

EVALUATING A WORKSHOP MATERIAL

This group activity is designed to provide participants with an opportunity to examine and analyze a potential workshop material. Participants are provided transparencies on which to record their analysis data which will then be projected for group discussion. The activity highlights those aspects of a workshop material that are necessary for success.
L.D. PLANNING PRIORITIES AND NUMBERS/ALPHABET GAME

These activities are designed so that workshop participants can experience the diagnostic/prescriptive process in a planned way. The two activities focus on specific problems related to children with learning disorders. One of the activities will utilize an adaptation designed by Carol Weller.

* * * *

2. How useful was the OPTION ROOM?
   Comments:

<table>
<thead>
<tr>
<th>Very Useful</th>
<th>Useful</th>
<th>Not Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

3. How useful were the OVERVIEW TAPES in the option room?
   Comments:

<table>
<thead>
<tr>
<th>Very Useful</th>
<th>Useful</th>
<th>Not Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

4. How was the MODULAR SCHEDULING that was used during the two-day workshop?

<table>
<thead>
<tr>
<th>Very Useful</th>
<th>Useful</th>
<th>Not Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. How many kits did you examine in the option room?

   | 1200 |
   |      |

Relevant to your needs? Yes ? No Yes ?
6. Use descriptive words to describe your reactions to this two-day workshop. List the words as fast as they come to you. Limit one minute! No sentences, please.

7. What do you feel were the two most valuable aspects of the two-day workshop?

8. If this two-day workshop were to be offered again for a different group of participants, what one thing should be eliminated?

9. What was omitted, yet should have been included in this two-day workshop?

10. Suggestions or comments:
A full day workshop was held at the Midwest Educational Resource Center in Coralville, Iowa. The objectives of the workshop were to:

--create an awareness of involvement procedures for training teachers.
--provide varied experiences to demonstrate the multitude of approaches that can be used at teacher training workshops.
--analyze the component parts of a designed workshop training experience.
--provide a consistent model for those attending.

Attending the workshop were 36 teacher trainers from throughout the state of Iowa. All of these participants were involved at some level with the in-service training of special education teachers. It was expected that upon completion of the workshop, the participants would be able to:

--describe the leadership behaviors that contribute to more effective in-service workshops.
--describe the principles of learning that must be considered in designed workshop experiences.
--specify at least two procedures that can make an in-service workshop interactive.

The workshop leaders, S. Joseph Levine and Nancy Carlson, provided a set of five designed workshop experiences during the day. The experiences were selected to demonstrate different formats, procedures, and content areas that can be used at workshops. A pre/post test was administered and each individual experience was followed by a structured analysis period.
The program was as follows:

Pre Test
Introduction
Broken Squares (affective involvement)
Discussion/Analysis
Problems and Hints (positive focus on general problem area)
Discussion/Analysis
Discussion Leadership Simulation (use of discussion techniques)
Discussion/Analysis
The Leader Acts... (analyzing behavior from a videotape)
Discussion/Analysis
Evaluating/Modifying A Workshop (analyzing and redesigning a workshop)
Discussion/Analysis
Final discussion
Post Test

Copies of each of the designed experiences are provided at the conclusion of this report.

RESULTS OF PRE/POST TEST

Three questions were asked on the Pre Test and five questions were asked on the Post Test. An analysis of the responses follows:

Question #1 - List those behaviors that contribute to more effective communication with teachers.

A total of 151 scoreable responses were elicited on the Pre Test and 151 on the Post Test. However, due to some participants having to leave during the day a larger number of participants responded on the Pre Test. (Pre Test - n=36, Post Test - n=26)

Due to the workshop experience, the average number of responses per respondent increased (4.19/respondent on Pre Test, 5.8/respondent on Post Test). This indicates an increased ability to specify behaviors associated with effective communication with teachers.

The individual responses were examined and classified in the following manner:
Due to the workshop experience, the participants as a group showed an increased awareness of procedures and techniques, and sensitivity toward others. They showed a decrease in concern for personal skills. This indicates a shift away from viewing personal skills (charisma, knowledge, personality) as highly important for effectively communicating with teachers. It also indicates a shift toward both the procedures used and sensitivity toward others as being more important to effectively communicate. Such a double shift is seen as positive change in an appropriate direction for this workshop. Based on these responses, the first participant objective is seen as fulfilled.

Question #2 - What principles of learning must be considered when planning training sessions for teachers?

A total of 72 scoreable responses were elicited on the Pre Test and 101 on the Post Test.

Due to the workshop experience, the average number of responses per respondent increased (2/respondent on Pre Test, 3.9/respondent on Post Test). This indicates an increased ability to specify principles of learning that must be considered when planning training sessions for teachers.

The individual responses were examined and the percentage of responses grouped in each category are shown below.
An analysis of responses to this question shows that the Post Test responses were more focused than the Pre Test responses. Even with the 40% increase in responses (72 responses on Pre Test, 101 responses on Post Test) the Post Test responses group into 20 different categories whereas the Pre Test responses group into 22 different categories.

Though all categories that were elicited are appropriate principles of learning, the workshop leaders feel that nine of them are most important (indicated by asterisks on the table). These important principles of learning were indicated by 74% of the responses on the Post Test and only 50% of the responses on the Pre Test. This indicates an increased awareness on the part of the participants for those principles of learning considered most important by the workshop leaders.

**Question #3** - Give at least two examples of procedures for making a teacher training session interactive.

A total of 82 scoreable responses were elicited on the Pre Test and 54 on the Post Test. These responses were analyzed and divided into two groups—acceptable responses (procedures that would make session interactive) and non-acceptable responses (procedures that would not make the session interactive, or responses that were not procedures).

A total of 49 (of 82) acceptable responses were elicited on the Pre Test and 49 (of 55) acceptable responses were elicited on the Post Test.
At the conclusion of the workshop, the participants were better able to cite procedures that can make a teacher training session interactive. Though the total number of acceptable responses remained the same, only 60% of the Pre Test responses were acceptable whereas 89% of the Post Test responses were acceptable.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Post Test</th>
<th>Pre Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small groups</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Activities</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Groupings</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Warm up activities</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Role playing</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Common shared experience</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Broken Squares</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Problems and Hints</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Move people group to group</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Divide into pairs</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Games</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Mini labs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Discussion</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Question/Answer session</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Simulation</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Ask for responses</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Post Test</th>
<th>Pre Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large groups</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Panel discussion</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Sharing responsibility</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Problem solving</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Use media</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Know names</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Coffee breaks</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Room organization</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Have people sit on floor</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Introduce controversial material</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Debates</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Discovery technique</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Make session interesting</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
Question #4 - What were the strengths of today's session?

This question was provided on the Post Test only. A compilation of individual responses is shown below.

<table>
<thead>
<tr>
<th>Strength</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive</td>
<td>14</td>
</tr>
<tr>
<td>Applicable/relevant</td>
<td>7</td>
</tr>
<tr>
<td>Organized/well planned</td>
<td>5</td>
</tr>
<tr>
<td>Good methods/modeling</td>
<td>5</td>
</tr>
<tr>
<td>Humanness/warmth/informality of leaders</td>
<td>5</td>
</tr>
<tr>
<td>Good timing</td>
<td>3</td>
</tr>
<tr>
<td>Variety of methods</td>
<td>3</td>
</tr>
<tr>
<td>Handouts</td>
<td>3</td>
</tr>
<tr>
<td>Novelty</td>
<td>3</td>
</tr>
<tr>
<td>Positive reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>Clear objectives</td>
<td>2</td>
</tr>
<tr>
<td>Interesting</td>
<td>2</td>
</tr>
<tr>
<td>No writing necessary</td>
<td>2</td>
</tr>
<tr>
<td>Medium consistent</td>
<td>2</td>
</tr>
<tr>
<td>Fast moving</td>
<td>2</td>
</tr>
<tr>
<td>Openness of leaders</td>
<td>2</td>
</tr>
<tr>
<td>Use of small groups</td>
<td>2</td>
</tr>
<tr>
<td>Feedback to participants</td>
<td>1</td>
</tr>
<tr>
<td>Use of media</td>
<td>1</td>
</tr>
<tr>
<td>Opportunity for feedback to leaders</td>
<td>1</td>
</tr>
<tr>
<td>Clarity of directions</td>
<td>1</td>
</tr>
<tr>
<td>Reasonable blocks of time</td>
<td>1</td>
</tr>
<tr>
<td>Willingness to share</td>
<td>1</td>
</tr>
<tr>
<td>Smooth transition of ideas</td>
<td>1</td>
</tr>
<tr>
<td>Good balance (input vs. experience)</td>
<td>1</td>
</tr>
<tr>
<td>Changing groups</td>
<td>1</td>
</tr>
<tr>
<td>I felt a part of the activities</td>
<td>1</td>
</tr>
<tr>
<td>Little wasted time</td>
<td>1</td>
</tr>
<tr>
<td>Structure</td>
<td>1</td>
</tr>
<tr>
<td>Relaxed atmosphere</td>
<td>1</td>
</tr>
<tr>
<td>Insights into myself</td>
<td>1</td>
</tr>
<tr>
<td>Concern of leaders</td>
<td>1</td>
</tr>
<tr>
<td>Cognitive input</td>
<td>1</td>
</tr>
</tbody>
</table>

Question #5 - What were the weaknesses of today's session?

This question was provided on the Post Test only. A compilation of individual responses is shown on the following page.
<table>
<thead>
<tr>
<th>Feedback</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would like more time</td>
<td>8</td>
</tr>
<tr>
<td>Not enough clarity on &quot;Leader Acts...&quot;</td>
<td>4</td>
</tr>
<tr>
<td>Long day after long night</td>
<td>2</td>
</tr>
<tr>
<td>Too rushed</td>
<td>1</td>
</tr>
<tr>
<td>Not enough time to talk informally with leaders</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Planning A Workshop&quot; was repetitious for me</td>
<td>1</td>
</tr>
<tr>
<td>Sat too much</td>
<td>1</td>
</tr>
<tr>
<td>Too tired for Post Test</td>
<td>1</td>
</tr>
<tr>
<td>One participant on the line too much</td>
<td>1</td>
</tr>
<tr>
<td>TV monitor blocked screen for awhile</td>
<td>1</td>
</tr>
</tbody>
</table>

S. Joseph Levine  
November 6, 1973
WORKSHOP EVALUATION
Utica, New York
October 25-27, 1973

"HOW TO COMMUNICATE WITH GROUPS OF TEACHERS"

A three day workshop sponsored by the New York SEIMC was held in Utica, New York, (½ day, full day, ½ day). The objectives of the workshop were to:

--create an awareness of involvement procedures for training teachers.
--provide varied experiences to demonstrate the multitude of approaches that can be used at teacher training workshops.
--analyze the component parts of a designed workshop training experience.
--provide a consistent model for those attending.

Attending the workshop were 39 teacher trainers from throughout the state of New York. All of these participants were involved at some level with the in-service training of special education teachers. It was expected that upon completion of the workshop, the participants would be able to:

--describe the leadership behaviors that contribute to more effective in-service workshops.
--describe the principles of learning that must be considered in designed workshop experiences.
--specify at least two procedures that can make an in-service workshop interactive.

The workshop leaders, S. Joseph Levine and Nancy Carlson, provided a set of eight designed workshop experiences during the workshop. The experiences were selected to demonstrate different formats, procedures, and content areas that can be used at workshops. A pre/post test was administered and each individual experience was followed by a structured analysis period.
The program was as follows:

1st day

- Pre Test
- Introduction
- Broken Squares (affective involvement)
- Discussion/Analysis
- Numbers Game (simulation of learning disability)
- Discussion/Analysis

2nd day

- Problems and Hints (positive focus on general problem area)
- Discussion/Analysis
- Discussion Leadership Simulation (using different discussion procedures)
- Discussion/Analysis
- The Leader Acts... (analyzing a videotape presentation)
- Discussion/Analysis
- Designing A Workshop Program
- Discussion/Analysis

3rd day

- Workshop Planning Kit
- Discussion/Analysis
- Evaluating/Modifying A Workshop (analyzing and redesigning a workshop)
- Discussion/Analysis
- Final discussion
- Post Test

Copies of each of the designed experiences are provided at the conclusion of this report.

RESULTS OF PRE/POST TEST

Three questions were asked on the Pre Test and five questions were asked on the Post Test. An analysis of the responses follows:

Question #1 - List those behaviors that contribute to more effective communication with teachers.

A total of 168 scorable responses were elicited on the Pre Test and 128 on the Post Test. However, due to some participants having to leave during the day, a larger number of participants responded on the Pre Test. (Pre Test n=39, Post Test n=33)
The individual responses were examined and classified in the following manner:

<table>
<thead>
<tr>
<th>Type of response</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Skill</td>
<td>67% (112)</td>
<td>33% (41)</td>
</tr>
<tr>
<td>Sensitivity Toward Others</td>
<td>9% (16)</td>
<td>23% (30)</td>
</tr>
<tr>
<td>Procedure or Technique</td>
<td>24% (40)</td>
<td>44% (57)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100% (188)</strong></td>
<td><strong>100% (128)</strong></td>
</tr>
</tbody>
</table>

Due to the workshop experience, the participants as a group showed an increased awareness of "Procedures and Techniques," and "Sensitivity Toward Others." They showed a decrease in concern for "Personal Skills." This indicates a shift away from viewing "Personal Skills" (charisma, knowledge, personality) as highly important for effectively communicating with teachers. It also indicates a shift toward both the "Procedures" used and "Sensitivity Toward Others" as being more important to effectively communicate. Such a double shift is seen as positive change in an appropriate direction for this workshop.

Question #2 - What principles of learning must be considered when planning training sessions for teachers?

A total of 84 scorable responses were elicited on the Pre Test and 88 on the Post Test.

Due to the workshop experience, the average number of responses per respondent increased (2.2/respondent on Pre Test, 2.7/respondent on Post Test). This indicates an increased ability to specify principles of learning that must be considered when planning training sessions for teachers.

The individual responses were examined and the percentage of responses grouped in each category are shown below:

<table>
<thead>
<tr>
<th>Response</th>
<th>Post</th>
<th>Pre</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Active participation/involvement</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>*Task fits learner (relevant) (meaningful)</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>*Clear specification</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>Application to personal situation</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Motivational</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>*Positive reinforcement</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Structure</td>
<td>3%</td>
<td>--</td>
</tr>
<tr>
<td>*Immediate feedback</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Appropriate timing/rate</td>
<td>2%</td>
<td>--</td>
</tr>
</tbody>
</table>
An analysis of responses to this question shows that the Post Test responses were more focused than the Pre Test responses. Even with the 4% increase in responses (84 responses on Pre Test, 88 responses on Post Test) the Post Test responses group into 17 different categories whereas the Pre Test responses group into 22 different categories.

Though most categories that were elicited are appropriate principles of learning, the workshop leaders feel that eight of them are most important (indicated by asterisks on the table). These important principles of learning were indicated by 66% of the responses on the Post Test and only 61% of the responses on the Pre Test. This indicates an increased awareness on the part of the participants for those principles of learning considered most important by the workshop leaders.

**Question #3 - Give at least two examples of procedures for making a teacher training session interactive.**

A total of 71 scorable responses were elicited on the Pre Test and 70 on the Post Test. These responses were analyzed and divided into two groups—acceptable responses (procedures that would make session interactive) and non-acceptable responses (procedures that would not make the session interactive, or responses that were not procedures).

A total of 41 (of 70) acceptable responses were elicited on the Pre Test and 64 (of 71) acceptable responses were elicited on the Post Test.
At the conclusion of the workshop, the participants were better able to cite procedures that can make a teacher training session interactive. 89% of the Pre Test responses were acceptable whereas 90% of the Post Test responses were acceptable.

### ACCEPTABLE RESPONSES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Post Test</th>
<th>Pre Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small groups</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>Discussion</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Activities</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Games</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Role Playing</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Problems and Hints</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Simulation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Groupings</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Number Game</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Have participants use materials</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Question/Answer Session</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ask for responses</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Common shared experience</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Broken Squares</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Warm up activities</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Worksheets</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>64</strong></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>

### NON-ACCEPTABLE RESPONSES

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Post Test</th>
<th>Pre Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrations</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Good planning</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Handouts</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Specific objectives</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Opportunity to socialize</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Structure</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Sharing ideas</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Problem solving</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Active participation</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Designed around needs</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Sharing responsibility</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Use media</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Variety</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Be informal</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Panel discussion</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Personalize the content</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Have people bring something to session</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>In-service planning committee</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Non-closure atmosphere</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Pre/Post Test</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Use a gimmick</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
Question #4 - What were the strengths of today's session?

This question was provided on the Post Test only. A compilation of individual responses is shown below.

<table>
<thead>
<tr>
<th>Strength</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive</td>
<td>18</td>
</tr>
<tr>
<td>Applicable/relevant</td>
<td>11</td>
</tr>
<tr>
<td>Humanness/warmth/informality of leaders</td>
<td>9</td>
</tr>
<tr>
<td>Organized/well planned</td>
<td>8</td>
</tr>
<tr>
<td>Variety of activities</td>
<td>7</td>
</tr>
<tr>
<td>Structure</td>
<td>5</td>
</tr>
<tr>
<td>Relaxed atmosphere</td>
<td>5</td>
</tr>
<tr>
<td>Good methods/modeling</td>
<td>5</td>
</tr>
<tr>
<td>Clear objectives</td>
<td>4</td>
</tr>
<tr>
<td>Concrete ideas given</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis on process not product</td>
<td>3</td>
</tr>
<tr>
<td>Handouts</td>
<td>2</td>
</tr>
<tr>
<td>Insights</td>
<td>2</td>
</tr>
<tr>
<td>New ideas for planning</td>
<td>2</td>
</tr>
<tr>
<td>Homogeneity of group</td>
<td>2</td>
</tr>
<tr>
<td>Right amount of content</td>
<td>2</td>
</tr>
<tr>
<td>Closure to each activity</td>
<td>2</td>
</tr>
<tr>
<td>Flexible</td>
<td>1</td>
</tr>
<tr>
<td>Good timing</td>
<td>1</td>
</tr>
<tr>
<td>Interesting</td>
<td>1</td>
</tr>
<tr>
<td>Instill confidence in learners &amp; enthusiasm</td>
<td>1</td>
</tr>
<tr>
<td>Use of small groups</td>
<td>1</td>
</tr>
<tr>
<td>Feedback to participants</td>
<td>1</td>
</tr>
<tr>
<td>Variety of media</td>
<td>1</td>
</tr>
<tr>
<td>Clarity of directions</td>
<td>1</td>
</tr>
<tr>
<td>Adequate facilities</td>
<td>1</td>
</tr>
<tr>
<td>Changing groups</td>
<td>1</td>
</tr>
<tr>
<td>Activities to &quot;open up&quot; the group</td>
<td>1</td>
</tr>
<tr>
<td>Based on sound educational principles</td>
<td>1</td>
</tr>
</tbody>
</table>

Question #5 - What were the weaknesses of today's session?

This question was provided on the Post Test only. A compilation of individual responses is shown below.

<table>
<thead>
<tr>
<th>Weakness</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would like more time</td>
<td>5</td>
</tr>
<tr>
<td>Provision/Benefit evaluation repetitious</td>
<td>4</td>
</tr>
<tr>
<td>Materials not available for use</td>
<td>2</td>
</tr>
<tr>
<td>Evening meeting</td>
<td>2</td>
</tr>
<tr>
<td>Too many games/gimmicks (difficult to define content)</td>
<td>2</td>
</tr>
<tr>
<td>Would like to know why activities used and how processes came about</td>
<td>2</td>
</tr>
<tr>
<td>Comment</td>
<td>Rating</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Title irrelevant to content</td>
<td>1</td>
</tr>
<tr>
<td>Lack of group involvement in planning some part of workshop</td>
<td>1</td>
</tr>
<tr>
<td>Too rushed</td>
<td>1</td>
</tr>
<tr>
<td>Too tired for Post Test</td>
<td>1</td>
</tr>
<tr>
<td>First day &quot;warm up&quot; inappropriate</td>
<td>1</td>
</tr>
<tr>
<td>Information concerning night meeting times</td>
<td>1</td>
</tr>
<tr>
<td>Poor coffee</td>
<td>1</td>
</tr>
<tr>
<td>Poor bar and restaurant service</td>
<td>1</td>
</tr>
<tr>
<td>Evaluation took too much time</td>
<td>1</td>
</tr>
<tr>
<td>Not enough lecturing</td>
<td>1</td>
</tr>
<tr>
<td>Some activities not yield much relative to time spent</td>
<td>1</td>
</tr>
<tr>
<td>Lost interest in opinion of others - need solid passive (?) group activity</td>
<td>1</td>
</tr>
<tr>
<td>More concrete handling of problems in workshop</td>
<td>1</td>
</tr>
<tr>
<td>No change of pace</td>
<td>1</td>
</tr>
<tr>
<td>Hard to see how initial activities related to anything</td>
<td>1</td>
</tr>
</tbody>
</table>

S. Joseph Levine
November 28, 1973
WORKSHOP TRAINING KITS: AN INTRODUCTION AND SOME SAMPLES
WORKSHOP TRAINING KITS

TED WARD
S. JOSEPH LEVINE
NANCY CARLSON

USOE/MSU REGIONAL INSTRUCTIONAL MATERIALS CENTER FOR HANDICAPPED CHILDREN AND YOUTH

Copyright 1973, Ted Ward, S. Joseph Levine, Nancy Carlson
Effective use of instructional materials for handicapped children depends on far more than availability and quality of those materials. The person who provides or prescribes the instruction for the children (teacher, para-professional or parent) needs to be aware, knowledgable and motivated. Teachers (or other adults) will use instructional materials and media only to the extent that they are "comfortable" with the materials and media.

The Instructional Materials Center for Handicapped Children and Youth at Michigan State University has been committed to more effective instruction for handicapped children. We have discovered through experiences here and elsewhere that dissemination of instructional materials depends heavily on the reduction of teacher anxieties and the increase of teacher awareness and skills. To accomplish these goals, no better way has been found than involving teachers in mediated learning experiences with instructional materials. Teachers learn about instructional materials through instructional materials; teachers learn to use instructional materials through experiences in which they, themselves, learn by using and experiencing effective learning through instructional materials.

BACKGROUND ON THE DEVELOPMENT OF THE WORKSHOP TRAINING KITS

During the winter of 1969, the Instructional Materials Center for Handicapped Children and Youth at Michigan State University designed its first "teacher training kit" for special education teachers. This first kit was created in an attempt to assess the need for such products in the Michigan-Indiana-Ohio region. The kit consisted of a detailed description of exactly what went on at a particular workshop. It appeared as a booklet and included copies of all of the worksheets that had been used.* The activity described in the kit was rather unique as compared to the "typical" workshops that were being offered in the region.

--it didn't need an expert to be successful (anyone could run the workshop).
--it could be used by a local person without having to run to East Lansing for instruction.
--it was built around participant involvement.
--the "message" that was being taught was communicated by the activity itself rather than by a post-activity lecture.

--the activity used aspects of simulation as the vehicle for involvement.

The results of this first attempt at a training kit were scattered at first, but eventually feedback from throughout the United States started to filter back to us. This initial kit was being used extensively. The reaction of local users was positive. They liked the idea of being able to run their own workshop on a topic about which they did not feel particularly strong. They wanted more!

In the five years that have elapsed since the development of this first kit, over 75 different teacher training kits have been developed by the Center at Michigan State University. Numerous topic areas in special education have been covered. Formats ranging from simplistic games to role playing and detailed simulation have been experimented with and used. Workshop participant reactions have been studied along with participant change. A model for the design of workshop training materials has been gradually refined. The current state of development of these workshop training kits is found in this two volume set of training materials. Included are 16 different self-contained workshop training materials that can be used to cover a variety of topics.

USING THE WORKSHOP TRAINING KITS

ORGANIZATION OF THESE VOLUMES

The 16 different "kits" in these two volumes have been organized into three different "series." Each series focuses on a different area of instruction for a specific type of participant.*

SERIES 1 - LOW FUNCTIONING LEARNERS
A set of four workshop experiences designed to focus on the development of teacher skills necessary for working with children who are severely handicapped. The focus is on precise instructional procedures through the use of task analysis, clearly defined behaviors, reinforcement techniques, and graphic recording to assist in decision making.

SERIES 2 - IN-SERVICE TEACHER TRAINERS
A set of six workshop experiences for training personnel involved with in-service teacher training. The separate activities include the use of media for communicating with teachers, how to evaluate workshop materials, and techniques for planning and conducting workshops.

*The selection of these three areas of focus has been made in conjunction with the State Departments of Education in Michigan, Indiana and Ohio. The three areas were designated by these agencies as high priority areas for training activities.
SERIES 3 - CHILDREN WITH LEARNING DIFFICULTIES

A set of six workshop experiences designed to focus on the development of teacher skills necessary for working with children who have isolated learning problems (learning disabilities). Included are activities ranging from the understanding of terminology, the necessity for appropriate planning, and the use of specific diagnostic/prescriptive procedures.

Each of the 16 kits has two different sections. The first part of each kit is the Leader's Guide. Included in this section is an overview of the activity, the objectives, any special teacher or trainer prerequisites, the time that will be needed, the materials that will be needed, special considerations regarding physical arrangements, the step-by-step procedure for conducting the activity, and a discussion guide.

The second part of each kit contains master copies of all materials that are needed to conduct the activity. The Leader's Guide provides specifications regarding how many copies of a particular master will be needed, how many copies to pass out, and which masters should be used for making overhead transparencies. For some kits, a Supplementary Information handout has been included in the second section. This has been included to provide the workshop leader with background information on the topic covered in the kit. The Supplementary Information sheet may also be used as a handout to the participants at the conclusion of the activity.

All pages in the entire two volume set have been clearly numbered and identified to assist in the organization of the materials. The pages of each Leader's Guide are numbered in the upper left corner.

At the top of each page to be used as a master for a worksheet, handout, etc. there appears the kit title and the duplicator page number.

At the top of each page to be used as a master for a transparency there appears the kit title and the transparency page number.
USE OF MEDIA IN TEACHER TRAINING

The use of media in teaching has recently become one of the most popular topics for in-service teacher training workshops. This topic has been stimulated by the fact that designed use of mediated experiences in the education of handicapped children can promote learning through increased involvement, motivation, and a higher degree of reality in the instructional environment. Rather than providing a kit that specifically focuses on "How To Use Media," the use of media has been carefully interwoven in almost every one of the 16 activities. This non-direct approach to teaching the use of media for instruction is based upon Marshall McLuhan's statement that the "medium is the message." McLuhan's statement refers to the concept that the most influential message that can be communicated is that which is found in how you are actually communicating. To talk about the use of a tape recorder communicates the message "tape." To have participants experience a tape recorder communicates the message "tape recorder."

For example, in various activities the participants will find themselves being instructed through the use of an overhead projector (they will be learning the instructional use of an overhead projector); they will be responding on an acetate worksheet that will be projected to the rest of the group (they will be learning how to prepare overhead transparencies); they will be viewing a videotape (they will be learning the instructional use of videotape recordings); they will be creating a cassette tape recording (they will be learning the instructional use of tape recorders); they will be involved in simulated environments (they will be learning the use of instructional simulations); etc. This procedure for involving media as a part of the training experience has been carefully planned to truly communicate the instructional uses of media to the participant. Don't be misled because no single activity is labeled as a media teaching activity. They all are!

SOME SUGGESTIONS ON USE

There is a great temptation with any group of prepared material such as this set of training kits to use them exactly as specified. This can lead to problems when the specifications of the kit do not exactly meet your own specific needs. All of the kits may be altered to better fit your specific needs. Examine the kit and make modifications or corrections so that it will work in your situation. Many of the kits provide instructions on how to modify or change them based on differing situations. Others have been designed for the most typical uses. However, groupings may be altered, topic areas changed, instructions modified, or handouts included which will customize the kit to your situation.

You will note that all of the kits follow a basic delivery format.
The workshop begins with a short introduction to the participants. This is used to establish the objectives in the participants' minds and serves to provide them with an advance organizer of what will be the focus of the session. The main body of the session is an activity. All of the activities involve some form of instructional game or instructional simulation that has been designed to communicate the ideas, procedures, or information for the session. The session is concluded with a discussion period. The discussion is used to reinforce the learning presented during the activity.

Take advantage of the activity time during the workshop. The activities are designed so that once the participants have begun there is little need for intervention from the leader. Use this time to spot check how the participants are doing. If needed, assist individuals or groups that may need help. Observe interactions and make notes on what is occurring throughout the room. Go over once again the Discussion Guide to refresh your memory on the focus and procedure for the concluding discussion. While the participants are involved during the activity, invest your time in guaranteeing a conclusion to the activity that will provide the participants with the closure that is so necessary.

Prior to using any of the kits, take time to carefully read through the Leader's Guide and all participant worksheets. Make sure you understand the topic area, the learning that will be undertaken, and all of the mechanical aspects of the workshop (what worksheets are needed, when are they to be used, how will the participants be seated, etc.). Be prepared so that the workshop will run smoothly. The kits have been designed to provide you with a clear presentation of exactly what is needed to run the workshop. In many cases the leader's role has been so designed that only a minimum of preparation is needed. Extra preparation, however, will always help in making the workshop even more successful!

WORKSHOP EVALUATION

Provided with each of the 16 activities are two masters for duplicating copies of two different evaluation forms.

The Workshop Evaluation Form has been included to elicit participant feedback on the overall workshop experience. The responses to this form will assist you in making decisions regarding how the participants perceived the workshop.

The Content Evaluation Form includes items used in our formative testing of the workshop content. Responses on this form will allow you to make decisions regarding the participant learning that has taken place during the activity. You will note that the Content Evaluation Forms have been designed to be used both prior to the activity (Pre Test) and following the activity (Post Test). An examination of the difference between Pre Test and Post Test scores
will provide an indication of the learning that has taken place. You will also find on the page following the Content Evaluation Form a completed form with the italicized answers that frequently occurred during our field testing of the kit. This will provide you a guide for analyzing participant responses.

Room has been provided on all evaluation forms for the addition of extra items that you might want to add to gather data on areas not covered with the existing items. (i.e., modifications to the kit, specific requirements of your school system, etc.)

REPRODUCTION OF THESE KITS

Care has been taken in the design of these materials to provide for ease of duplication. Permission is given to any individual or agency to reproduce the materials in any desired quantity for local use. However, at no time shall the materials be sold or any fee charged a participant attending any workshop that is conducted with these materials. A charge may be made to recover actual costs involved in duplication if such a charge is absolutely necessary. At no time shall a profit be made on the use of these materials. When duplicated or used after revision, full credit must be given the MSU Center and the primary author(s) as found on the title page of each individual kit.

USING A SERIES OF KITS

To teach handicapped children or train teachers at a workshop necessitates three separate but interlocking abilities. The good teacher or teacher trainer is able to plan the instruction for a learner, actually deliver the instruction, and then evaluate the learning. Workshops usually focus on one of these three areas with probably the greatest attention given to delivery. Of course, delivery is highly dependent on planning which in turn is derived from evaluation which is based on delivery which is highly dependent on planning, etc., etc. What we have is a cyclical movement through the three abilities.

![Diagram]

Of course, it is completely arbitrary where the process begins. In fact, we are often involved in all three processes simultaneously for a particular learner.
The 16 training kits each can be viewed in regards to their individual focus on evaluating, planning, or delivering. It is suggested that when two or more kits are to be used in a series (either on the same day, successive days, successive weeks, etc.) they be selected according to how they complement each other according to this cyclical model. In other words, if you choose a delivery activity to begin, you should follow it with an evaluation activity. If a third workshop is to be offered, it should relate to planning. Ideally, a series of workshops should consist of at least four successive steps in the cyclical model. In this way the participants will have an opportunity to practice each separate process and also have an opportunity to see the effect of each process on the one following it. The following chart shows the process for each of the kits.

<table>
<thead>
<tr>
<th>Series 1:</th>
<th>Planning</th>
<th>Delivering</th>
<th>Evaluating</th>
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<tbody>
<tr>
<td>Task Analysis Game</td>
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<td>Describe Your Learner</td>
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<td>Reinforcement Mystery Games</td>
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<td>Charting Behavior</td>
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<th>Series 2:</th>
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<td>Planning With Teachers</td>
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<td>Creating Discussion Tapes</td>
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<td>Discussion Leadership Simulation</td>
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<td>Structured Scripts</td>
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<td>Evaluating Workshop Materials</td>
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<td>The Leader Acts...</td>
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<th>Series 3:</th>
<th>Planning</th>
<th>Delivering</th>
<th>Evaluating</th>
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<tr>
<td>Educational Planning</td>
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<tr>
<td>L.D. Planning Priorities Game</td>
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<td></td>
<td>X</td>
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<tr>
<td>Polar Algebra</td>
<td></td>
<td>X</td>
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<tr>
<td>The Analogy Game</td>
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<td>X</td>
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<tr>
<td>L.D. Card Game</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Teaching Children With Communication Handicaps</td>
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</table>
A QUICK LOOK AT THE KITS

The following short descriptions will provide you with a quick overview of the 16 kits that are included. Turn to the Leader's Guide for each kit for a detailed overview of each activity.

Series 1: Low Functioning Learners

Task Analysis Game - Small group interaction in sequencing objectives and activities in a task ordered arrangement.

Describe Your Learner - Self-paced activity that leads participants through a series of worksheets in specifying countable behaviors.

Reinforcement Mystery Games - Set of three demonstration/involvement activities for understanding the dynamics of reinforcement in learning.

Charting Behavior - Small group activity built on analyzing and constructing systems for charting behavior.

Selected Bibliographical References on Behavior Modification with Low Functioning Children - A listing of Professional References, Journals and Bibliographies; Idea Books for Teachers; Mediated In-Service Training Materials; Instructional Materials.

Series 2: In-Service Teacher Trainers

Planning With Teachers - Group role playing experience demonstrating three approaches to conducting a planning meeting prior to a workshop.

Creating Discussion Tapes - Participants design, use, and evaluate an instructional tape recording that stimulates discussion.

Discussion Leadership Simulation - Practice in the use of three different discussion leadership styles.

Structured Scripts - Designing and using a tape recording to disseminate information about instructional materials to teachers.
Evaluating Workshop Materials - The use of four criteria in identifying the strengths and weaknesses of teacher training materials.

The Leader Acts... - Analyzing the demonstrated behaviors of a workshop leader.

Series 3: Children With Learning Difficulties

Educational Planning - A three part decision making activity that focuses on educational responsibility, educational placement, and educational programming.

L.D. Planning Priorities Game - Using the diagnostic/prescriptive process.

Polar Algebra - A simulation of a learning difficulty and an opportunity to select appropriate remediation.

The Analogy Game - A competitive game built around the construction of analogies.

L.D. Card Game - A team game using diagnostic terms, symptomology, and remedial strategies.

Teaching Children With Communication Handicaps - A simulation of three different forms of sensory deprivation as related to learning.

Selected Bibliographical References on Learning Disabilities - A listing of Professional References and Journals; Idea Books for Teachers; Mediated In-Service Training Materials; Instructional Materials.

A WORD (OR TWO) ABOUT THE AUTHORS

Three members of the staff of the MSU Center, Ted Ward, S. Joseph Levine, and Nancy Carlson have been primarily responsible for the development of these kits. All three have had extensive background in the development of designed experiences for in-service teacher training. As you will notice, each kit notes the "primary" author(s). This is so indicated because all three designers were involved with the design of almost all of the kits. For each kit, however, a primary author(s) was responsible for that kit to see that it was designed, field tested, revised and re-tested.
ACKNOWLEDGEMENTS

The authors are indebted to Mrs. Lynn Kinzel, our multi-faceted secretary, who was able, in a short length of time, to develop into an untiring expert in formating, editing, proofing, and re-writing. She was responsible for taking the many versions of each kit and molding them into this final product.

Our thanks to Miss Sue Ann Yovanovich for valuable assistance in the original planning of the kits and the massive details associated with field testing. Mrs. Emilie Martin and Miss Linda Horenstein did an excellent job of organizing the supplementary information and bibliography sections.

Finally, our appreciation to all of the teachers and teacher-trainers in our three state region who participated in our field testing. We would especially like to single out the following individuals who used our materials and provided feedback regarding their use and suggested modifications: Mrs. Peggy Tenney, Michigan Curriculum Resource Consultant, Muskegon Public Schools; Mr. Fred Parker, Michigan Curriculum Resource Consultant, Farmington Schools; Mr. Jim Fleming, Assistant Professor (Education of Learning Disabled Children), MSU; Dr. Ron Wolthuis, Assistant Professor (Education of Emotionally Disturbed Children), MSU; Dr. Gene Pernell, Assistant Professor (Education of Emotionally Disturbed Children), MSU; Mrs. Carol Weller, Coordinator, Northeast Regional Instructional Resource Center for Handicapped Children and Youth, Fort Wayne, Indiana; Mr. Dave Braukman, Coordinator, Instructional Resource Materials Center, Cincinnati, Ohio; Mrs. Eunice Shonk, Coordinator, Instructional Resource Materials Center, Milan, Ohio; Mr. Arnold Trafalet, Michigan Curriculum Resource Consultant, Cheboygan- Otsego-Presque Isle Intermediate School District; Mrs. Beverly Farr, Michigan Curriculum Resource Consultant, Allegan Intermediate School District; Dr. Edward Frierson, Executive Director, Nashville Learning Center, Nashville, Tennessee; Dr. James Poteet, Director, Diagnostic Teaching Center, Indianapolis, Indiana.

Ted Ward
S. Joseph Levine
Nancy Carlson

August 1973
WORKSHOP TRAINING KIT

TASK ANALYSIS GAME

PRIMARY AUTHOR

S. JOSEPH LEVINE

USOE/MSU REGIONAL INSTRUCTIONAL MATERIALS CENTER FOR HANDICAPPED CHILDREN AND YOUTH

1230
OVERVIEW

The TASK ANALYSIS GAME is a set of two small group sorting/ordering/matching exercises designed to create an awareness of the role of task analysis in the teaching of low functioning children. The two exercises are drawn from actual teaching procedures used with deaf/blind children. In each of the two exercises the groups are presented with a pair of envelopes. The first envelope contains a set of objectives. The groups must sort them out and put them in a sequential order going from the lowest (earliest) objective to the highest (latest) objective. When completed, the group compares their construction with an overhead transparency. Then they go to the second envelope which provides a set of teaching activities that will fulfill the objectives. They must match the activities to the objectives.

After a short discussion, the groups move on to two further pairs of envelopes. This pair shows a further advanced instructional task and also contains a larger group of objectives/activities.

This second pair of envelopes also asks the groups to generate two "extra" activities to help fulfill two of the given objectives.

OBJECTIVES

Through the activity the participant will

--organize and sequence a set of instructional objectives.
--organize and sequence a set of instructional activities.

At the conclusion of the activity the participant will

--be able to list the sequence of events that make up a systematic instructional task: analysis.

PREREQUISITES

There are no special prerequisites for either the leader or participants to successfully participate in this activity.
TIME NEEDED

Approximately one hour is needed for the activity.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>10 minutes</td>
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<tr>
<td>Exercise One</td>
<td>15 minutes</td>
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<tr>
<td>Exercise Two</td>
<td>20 minutes</td>
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<tr>
<td>Discussion</td>
<td>15 minutes</td>
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MATERIALS NEEDED

1. TO BE DUPLICATED:

   All pages to be duplicated are marked "Duplicator Page #" in the upper right hand corner. Use the pages in this kit so marked as masters. The pages marked "Transparency Page #" should be used as masters to process overhead transparencies.

   ONE FOR EACH GROUP:
   --Exercise 1 Objectives/Activities* Duplicator Page 1
   --Exercise 2 Objectives/Activities* Duplicator Pages 2-4

   ONE FOR EACH PERSON:
   --Content Evaluation Form Duplicator Page 5
   --Workshop Evaluation Form Duplicator Page 6
   --Supplementary Information Duplicator Pages 7-16

2. OTHER MATERIALS:

   --Task Analysis Transparency Page 1
   --Exercise 1 - Feedback Transparency Page 2
   --Exercise 2 - Feedback Transparency Page 3
   --Envelopes (4 per group)
   --Overhead projector

*NOTE: The numbers and letters on the card have been randomly inserted and serve only for the participants to quickly check their arrangements.

PHYSICAL ARRANGEMENTS NEEDED

Tables and chairs sufficient to organize participants in groups of three or four with each group at a separate table. By providing a separate table for each group, the groups will have room to arrange their objective cards and activity cards on the table top.
PROCEDURE

1. If you will be using a pre-test (Content Evaluation), you should administer it at the very beginning.

2. Introduce the concept behind task analysis. Use Transparency #1 to provide an overview of the four main points.
   - Goal
   - Level at which student is currently functioning
   - Sequence of objectives that must be used to reach goal
   - Instructional activities that will fulfill each objective

Reinforce the concept that task analysis must consider all four. Many teachers only consider task analysis in terms of the instructional activities that will be used. This is a very shallow approach.

Discuss the necessity and importance of each of the four stages in working with low functioning children. The advantages of task analysis include:

   - Higher assurance of reaching goal if intermediate (enabling) objectives are understood.
   - Higher assurance of reaching goal if objectives are sequenced in order of difficulty to the learner.
   - Higher assurance of reaching goal if learner enters the instructional sequence at a point commensurate with his functioning level.
   - Higher assurance of observing learner change if all steps are known.

3. Divide and seat participants around tables in groups of 3-4.

4. Provide each group with two envelopes. One envelope, labelled "Objectives," contains the objective cards cut up from Duplicator Page 1. The other envelope, labelled "Activities," contains the activity cards cut up from Duplicator Page 1.

Instruct the groups to open the "Objectives" envelope and arrange the objectives in sequential order, beginning with the lowest level objective and ending with the highest level objective. Allow about 5-7 minutes.

5. Project only the left side of transparency #2 and have groups check the order of their objectives. (Cover the right half
of the transparency with a piece of paper.) Discuss any problems or questions. Before continuing the activity, make sure all groups have the objectives in the correct order.

6. Instruct the groups to open the "Activities" envelope and arrange the activity cards with the corresponding objective cards. Allow 5-7 minutes.

7. Project all of transparency #2. Have groups check their card arrangements and discuss any problems or questions. You may want to mention that the objectives and activities are designed for a low functioning child and consequently are at a very low level.

8. Conduct Exercise 2 in the same manner as Exercise 1.

9. At the end of Exercise 2, have the groups create two more activities that would help fulfill the objectives. These can be written on blank slips of paper and inserted at the appropriate places in their arrangements.

10. Large group discussion.

11. Post test (see the last pages of this guide for content evaluation and workshop evaluation forms).

DISCUSSION GUIDE

You will probably have short discussion periods at appropriate places during the activity. The following topics should be brought out either during the activity or at the conclusion.

--It is important to first understand the objectives before designing instructional activities.

--How did the objectives in the second exercise differ from the first exercise?

--Why did the first objectives in the second activity have the child place the objects on chairs? (Make sure the child is able to sort.)

--Stress the idea that (1) more than one activity can be used in fulfilling an objective and (2) an activity can assist in fulfilling more than one objective.
Task Analysis Game
Leader's Guide
Page 5

--Have groups read the activities they designed in Exercise 2. Do the activities they have created really fulfill the selected objectives?

--What rationale did the groups use in selecting the activities that they designed in Exercise 2?

--What have the participants learned about task analysis?

EVALUATION

Two forms are provided which can be used to help you gather data on content learning and the workshop activity itself. On the content evaluation form we have included in italics those answers most frequently occurring during our field testing of the kit. Perhaps they will assist you to evaluate your workshop responses.
Task Analysis Game

Task Analysis

Task analysis consists of selecting a goal (task) that is appropriate for a learner, understanding the level at which the learner is functioning, defining the steps (objectives) that the learner must sequentially accomplish, and then designing the activities that will assist the learner in fulfilling each objective.
EXERCISE 1—FEEDBACK

OBJECTIVES

1. 4
2. 9
3. 7
4. 3

ACTIVITIES

1. P
2. Z
3. K
4. F
5. C
EXERCISE 2—FEEDBACK

OBJECTIVES

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ACTIVITIES

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OBJECTIVE
WHEN GIVEN AN OBJECT, THE CHILD WILL BE ABLE TO RESPOND IN A SPECIFIED MANNER.

ACTIVITY
GIVE THE CHILD A SHOE. HAVE THE CHILD TAKE IT, SLIDE ALONG A BENCH AND PLACE IT ON A CHAIR AT THE END OF THE BENCH. MOVE WITH THE CHILD UNTIL HE IS ABLE TO DO ALONE.

OBJECTIVE
WHEN GIVEN A SECOND OBJECT THAT IS DIFFERENT FROM THE FIRST, THE CHILD WILL BE ABLE TO RESPOND IN A SPECIFIED MANNER THAT IS DIFFERENT FROM THE FIRST.

ACTIVITY
GIVE THE CHILD AN ORANGE. HAVE THE CHILD TAKE IT, WALK ALONG AN OUTSTRETCHED CLOTHESLINE AND PLACE THE ORANGE IN A WASTE BASKET AT THE END. MOVE WITH THE CHILD UNTIL HE IS ABLE TO DO ALONE.

OBJECTIVE
WHEN GIVEN A THIRD OBJECT THAT IS DIFFERENT FROM THE FIRST TWO, THE CHILD WILL BE ABLE TO RESPOND IN A SPECIFIED MANNER THAT IS DIFFERENT FROM THE FIRST TWO.

ACTIVITY
GIVE THE CHILD A BOOK. HAVE THE CHILD TAKE IT, CRAWL ON TOP OF A ROW OF TOWELS AND PLACE IT NEXT TO A BOX. MOVE WITH THE CHILD UNTIL HE IS ABLE TO DO ALONE.

OBJECTIVE
WHEN GIVEN EACH OF THE THREE OBJECTS IN THE ORDER ORIGINALLY PRESENTED, THE CHILD WILL RESPOND IN THE CORRECT MANNER FOR EACH. THE OBJECTS WILL BE GIVEN ONE AT A TIME AND THE CHILD WILL RESPOND TO EACH BEFORE GIVEN THE NEXT OBJECT.

ACTIVITY
GIVE THE CHILD A SHOE AND HAVE CHILD RESPOND ACCORDINGLY. MOVE WITH CHILD IF NECESSARY. THEN GO ON TO THE ORANGE (SECOND OBJECT) AND FINALLY THE BOOK (THIRD OBJECT).

OBJECTIVE
WHEN GIVEN EACH OF THE THREE OBJECTS IN A RANDOM ORDER, THE CHILD WILL RESPOND IN THE CORRECT MANNER FOR EACH. THE OBJECTS WILL BE GIVEN ONE AT A TIME AND THE CHILD WILL RESPOND TO EACH BEFORE GIVEN THE NEXT OBJECT.

ACTIVITY
GIVE THE CHILD AN ORANGE AND HAVE CHILD RESPOND ACCORDINGLY. MOVE WITH CHILD IF NECESSARY. THEN GO ON TO THE BOOK (THIRD OBJECT) AND FINALLY THE SHOE (FIRST OBJECT).
OBJECTIVE
WHEN A PLATE IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE FIRST OF FOUR CHAIRS.

ACTIVITY
HOLD UP A PLATE, SAY THE WORD "PLATE" TO THE CHILD, GIVE THE PLATE TO THE CHILD AND MOVE WITH THE CHILD AND PLACE ON THE FIRST CHAIR. CONTINUE UNTIL CHILD IS ABLE TO DO ALONE.

OBJECTIVE
WHEN A CUP IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE SECOND OF FOUR CHAIRS.

ACTIVITY
HOLD UP A CUP, SAY THE WORD "CUP" TO THE CHILD, GIVE THE CUP TO THE CHILD AND MOVE WITH THE CHILD AND PLACE ON SECOND CHAIR. CONTINUE UNTIL CHILD IS ABLE TO DO ALONE.

OBJECTIVE
WHEN A SPOON IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE THIRD OF FOUR CHAIRS.

ACTIVITY
HOLD UP A SPOON, SAY THE WORD "SPOON" TO THE CHILD, GIVE THE SPOON TO THE CHILD AND MOVE WITH THE CHILD AND PLACE ON THIRD CHAIR. CONTINUE UNTIL CHILD IS ABLE TO DO ALONE.

OBJECTIVE
WHEN A NAPKIN IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE FOURTH CHAIR.

ACTIVITY
HOLD UP A NAPKIN, SAY THE WORD "NAPKIN" TO THE CHILD, GIVE THE NAPKIN TO THE CHILD AND MOVE WITH THE CHILD AND PLACE ON FOURTH CHAIR. CONTINUE UNTIL CHILD IS ABLE TO DO ALONE.

OBJECTIVE
WHEN A PLATE, CUP, SPOON AND NAPKIN ARE PRESENTED TO THE CHILD (ONE AT A TIME IN THE ORDER ORIGINALLY PRESENTED) THE CHILD WILL RESPOND BY PLACING EACH ON ITS APPROPRIATE CHAIR. (THE CHILD WILL TAKE ONE OBJECT AND PLACE IT BEFORE BEING PRESENTED WITH THE NEXT.)

ACTIVITY
HOLD UP A PLATE, SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ON FIRST CHAIR. CONTINUE IN SAME WAY FOR OTHER THREE OBJECTS.
11

OBJECTIVE
WHEN A PLATE, CUP, SPOON AND NAPKIN ARE PRESENTED TO THE CHILD (ONE AT A TIME IN A RANDOM ORDER) THE CHILD WILL RESPOND BY PLACING EACH ON ITS APPROPRIATE CHAIR. (THE CHILD WILL TAKE ONE OBJECT AND PLACE IT BEFORE BEING PRESENTED WITH THE NEXT.)

ACTIVITY
HOLD UP A CUP. SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ON SECOND CHAIR. CONTINUE IN SAME MANNER WITH OTHER OBJECTS. PRESENT OBJECTS IN RANDOM ORDER.

9

OBJECTIVE
WHEN A PLATE AND A CUP ARE BOTH PRESENTED TO THE CHILD, THE CHILD WILL TAKE THEM, ONE AT A TIME, AND PLACE THEM ON THEIR CORRESPONDING CHAIR.

ACTIVITY
HOLD UP A PLATE AND CUP. SAY THE WORD "PLATE" TO THE CHILD AND HAVE THE CHILD SELECT PLATE, PICK UP AND PLACE ON FIRST CHAIR. (CONTINUE IN SAME WAY FOR CUP.)

14

OBJECTIVE
WHEN A PLATE, CUP AND SPOON ARE ALL PRESENTED TO THE CHILD, THE CHILD WILL TAKE THEM, ONE AT A TIME AND PLACE THEM ON THEIR CORRESPONDING CHAIR.

ACTIVITY
HOLD UP A PLATE, CUP AND SPOON. SAY THE WORD "PLATE" TO THE CHILD AND HAVE CHILD SELECT PLATE, PICK UP AND PLACE ON FIRST CHAIR. (CONTINUE IN SAME WAY FOR OTHER TWO OBJECTS.)

1

OBJECTIVE
WHEN A PLATE, CUP, SPOON AND NAPKIN ARE ALL PRESENTED TO THE CHILD, THE CHILD WILL TAKE THEM, ONE AT A TIME, AND PLACE THEM ON THEIR CORRESPONDING CHAIR.

ACTIVITY
HOLD UP A PLATE, CUP, SPOON AND NAPKIN. SAY THE WORD "PLATE" TO THE CHILD AND HAVE CHILD SELECT PLATE, PICK UP AND PLACE ON FIRST CHAIR. (CONTINUE IN SAME WAY FOR OTHER THREE OBJECTS.)

10

OBJECTIVE
WHEN A GROUP OF PLATES, CUPS, SPOONS, AND NAPKINS ARE ALL PRESENTED TO THE CHILD, THE CHILD WILL TAKE THEM, ONE AT A TIME, AND PLACE THEM ON THEIR CORRESPONDING CHAIR.

ACTIVITY
HOLD UP 3 PLATES, 3 CUPS, 3 SPOONS AND 3 NAPKINS. SAY THE WORD "PLATE" TO THE CHILD AND HAVE CHILD SELECT ALL OF THE PLATES AND ONE AT A TIME PLACE THEM ON THE FIRST CHAIR. (CONTINUE IN THE SAME WAY FOR THE OTHER OBJECTS.)
OBJECTIVE
WHEN A PLATE IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE DINNER TABLE.

ACTIVITY
SHOW THE CHILD A DRAWING OF THE DINNER TABLE WITH THE OUTLINE OF A PLATE DRAWN IN. HOLD UP A PLATE, SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ACCORDING TO DRAWING.

OBJECTIVE
WHEN A CUP IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE DINNER TABLE, ABOVE THE PLATE.

ACTIVITY
SHOW THE CHILD A DRAWING OF THE DINNER TABLE WITH THE OUTLINE OF A PLATE AND A CUP DRAWN IN. HOLD UP A CUP, SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ACCORDING TO DRAWING.

OBJECTIVE
WHEN A SPOON IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE DINNER TABLE, TO THE RIGHT OF THE PLATE.

ACTIVITY
SHOW THE CHILD A DRAWING OF THE DINNER TABLE WITH THE OUTLINE OF A SPOON DRAWN IN. HOLD UP A SPOON, SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ACCORDING TO DRAWING.

OBJECTIVE
WHEN A NAPKIN IS PRESENTED TO THE CHILD, THE CHILD WILL TAKE IT AND PLACE IT ON THE DINNER TABLE TO THE RIGHT OF THE SPOON.

ACTIVITY
SHOW THE CHILD A DRAWING OF THE DINNER TABLE WITH THE OUTLINE OF A NAPKIN DRAWN IN. HOLD UP A NAPKIN, SAY THE WORD TO THE CHILD AND HAVE CHILD PICK UP AND PLACE ACCORDING TO DRAWING.

OBJECTIVE
WHEN A PLATE, CUP, SPOON AND NAPKIN ARE PRESENTED TO THE CHILD (ONE AT A TIME IN THE ORDER ORIGINALLY PRESENTED) THE CHILD WILL TAKE EACH AND PLACE IT ON THE DINNER TABLE IN THE APPROPRIATE POSITION. (THE CHILD WILL TAKE ONE OBJECT AND PLACE IT BEFORE BEING PRESENTED WITH THE NEXT.)

ACTIVITY
HOLD UP A PLATE, SAY THE WORD AND HAVE THE CHILD PICK UP AND PLACE IN CORRECT PLACE ON DINNER TABLE. CONTINUE WITH EACH OF THE OTHER THREE ITEMS IN THE SAME MANNER.
CONTENT EVALUATION FORM

TASK ANALYSIS CONSISTS OF SELECTING A 
______________ THAT IS APPROPRIATE FOR THE 
LEARNER,

UNDERSTANDING THE ________________ AT 
WHICH THE LEARNER IS FUNCTIONING,

DEFINING THE ________________ THAT THE 
LEARNER MUST SEQUENTIALLY ACCOMPLISH,

AND THEN DESIGNING THE ________________ 
THAT WILL ASSIST THE LEARNER IN FULFILLING 
each ________________.
CONTENT EVALUATION FORM

TASK ANALYSIS CONSISTS OF SELECTING A _______goal_______ (task) THAT IS APPROPRIATE FOR THE LEARNER,

UNDERSTANDING THE _______level_________ AT WHICH THE LEARNER IS FUNCTIONING,

DEFINING THE _______steps_________ THAT THE LEARNER MUST SEQUENTIALLY ACCOMPLISH,

AND THEN DESIGNING THE _______activities_________ THAT WILL ASSIST THE LEARNER IN FULFILLING EACH _______objective_________.

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WORKSHOP EVALUATION FORM

1. The experience was:

   ___ a) worth the time spent
   ___ b) too long
   ___ c) too short

2. Do you think you were adequately prepared for the material presented?

   ___ Yes   ___ No   If no, explain.

3. How does this workshop enhance the skills of a teacher of low functioning children?
Sequential Teaching of the Trainable Mentally Retarded Child

Task Analysis

Reduction of a learning situation into its component parts or task analysis can be extremely effective in working with trainable mentally retarded children. By applying the principles of task analysis "...it is possible for the teacher to break the task to be learned into small sequential steps and to implement the appropriate methodology to help the child climb to the next higher level of performance."

Keeping the baseline behavior (the child's existing skills) in view, a series of sequential techniques can be developed. The following steps can assist in the development of sequential techniques:

1. The pupil is given only one new item to learn at a time.
2. A new step is not added until the old one has been thoroughly learned.
3. Any task to be taught is carefully analyzed and reduced to a series of the smallest possible steps.

Each child begins a sequence with a different composite of entering behavior. Consequently, some children move smoothly from step to step in a sequence, while others may run into difficulty along the way. When this happens, the teacher must reexamine the task where the child failed, and teach whatever behaviors may be missing, whether it be understanding of the commands, ability to manipulate objects, or any other factor. This is not a digression from the sequence, but a normal part of it.

Example: Sorting

It will be assumed for this example that the students can hear, sit in their seats, and attend for short periods, and that they are motivated by the materials used. If they cannot do these things when the sequence is begun, then teaching these behaviors must be included as part of the sequence.
Task Analysis Game

Duplicator Page #8

Task 1

Poker Chips. (The children—and the principal—may be told that these are counting discs!)

1. Each child is given a pile of 20 to 30 red and white chips. The class is told not to touch them until they are told to do so. On these first activities it is most important to develop the concepts of "begin" and "stop." A compromise at this point will cause problems later.

2. The teacher says, "Pick up one red chip." For the child who does this correctly, one of the following assumptions can be made: (a) he understands the entire instruction and is able to carry it out; or (b) he is able to copy someone who did it correctly. For the child who does not succeed, the following assumptions might be made: (a) he does not hear or is not attending; (b) he does not want to do it (for many possible reasons); or (c) he does not know the meaning of one or more of the words in the command (red, one, chip, pick up).

When the task has been successfully accomplished, children can work in pairs. "Working cooperatively is an important ability and must be included as part of the sequence." The desired learning may not occur if all of the steps are not accounted for in the analysis.

Beads of different colors and shapes were presented to the children. They were then asked to remove only the red ones. New commands were not added but new instructional materials were. A new set of instructions for teaching other colors can now be implemented.

The attention of the pupils is next drawn to the three shapes, one at a time. When first told to remove all of the balls from the pile, some children will remove all of the balls while some will remove balls of only one color. If a child does the latter, he may not yet have generalized the concept of ball to colors of balls.

When the three shapes are familiar, the pupils are told: "Remove all of the red cubes from the pile." Some children will remove all red beads, some will remove all cubes, and some will perform as instructed. Removing "red ones and yellow ones" is easier than removing "red cubes." The former involves removing anything that either word applies to; the latter involves removing only those beads that fit both parts of the command.

The next task introduced bolts, nuts, and washers each being presented in two sizes and shapes. These were first sorted according to type of fastener, then to shape among one type and finally to size among one type.

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TASK 3
The third task was to assemble nuts, bolts, and washers of the same size.

IMPLEMENTATION
The above examples were provided so that the child can learn to completely finish a given task. The next step would be implementation of a task which allows the student to work alone or the concept of self-direction. This can be carried out in some type of on-campus work experience program.

The framework of this sequence is as follows:

Task 1. Work individually, in a restricted area, with direct and constant supervision.
Task 2. Work alone in a restricted area with infrequent supervision.
Task 3. Work alone in a less restricted area with unobservable supervision.
Task 4. Work with others in one particular unrestricted area with infrequent supervision.
Task 5. Work independently, moving from place to place, as necessary to perform the task, with unobservable supervision.
Task 6. Work in small groups, moving from place to place, as necessary to perform the task, with unobservable supervision.

The ability to function successfully on Task 6 will be considered terminal behavior for this example. As with the other examples, this terminal behavior can serve as entering behavior for many different learning experiences. Some of the most relevant sequences are increased independence in the home, the use of public transportation, use of community recreational facilities, and limited employment.

The above description of task analysis is to serve as model for the types of experiences necessary in working with the trainable child.

SUMMARY
A comprehensive program for such children does not have time for long rest periods and extensive lessons on the effective utilization of egg cartons. But there is time for training these children to function in such a way as to be participating members of our society. To exist in society, trainable individuals must feel that they have a place. What better way is there to make a person feel that he is worthwhile than to make him able to do something useful?

Task analysis is a tool for the teacher to be able to analyze learning situations to assist in guaranteeing success by the learner.
The material for Sequential Teaching Of The Trainable Mentally Retarded Child has been extracted by Mrs. Emilie Martin (MSU-IMC) from the following sources:


CONCEPT DEVELOPMENT

Concept deficit seems to be an area in which many multiply handicapped children are weak. An appropriate goal would then be "facilitate the child's acquisition of organizing principles with which to comprehend and respond to his environment."

"The initial problem for the teacher is to analyze those concepts in which deficiencies are noted to determine their sensory-motor components. Problem solving and discrimination tasks are then constructed so that this basic sensory-motor component is isolated and experienced by the child and the appropriate concomitant verbal label or verbalization is introduced. Gradually, tasks are presented in which the sensory-motor cues are diminished and the verbalization is accentuated until problems are solved using only the verbal components. For example, if the concept 'shape' has not as yet developed, one might begin by presenting spherical objects differing in size, material and weight and introduce the term 'round.' After two or three specific shapes have been learned, discrimination problems are presented. Until this point, merely pointing to the correct object or labeling a specific shape is required. However, once discrimination between shapes has been demonstrated, one can then proceed to tasks requiring the child to verbalize similarities and differences in shape. Thus, when given several objects, all square but differing in size, texture, etc., the child is asked, 'How are all these the same?'

A more difficult variation of the problem is to present several objects which differ along every other continuum except that three are round and one is square. In this task, the question is asked, "Which one doesn't belong and why?" The child must then check to see that the abstraction or hypothesis holds for three of the items but not the fourth. The solution of such a task requires not only deductive and inductive reasoning but also the process of inclusive and eliminative thinking, that is, the formal testing of an hypothesis.

A good test of whether or not a verbalization is truly a concept or a symbol, as contrasted with a sign or sample association, is to introduce items verbally with which the child has had previous experience, but which were not training objects.
Children who are diagnosed as multiply handicapped and often viewed as autistic/schizophrenic or profoundly retarded would not fit into the above program. These children will demonstrate little or no receptive or expressive language and few self-care skills. A day treatment program is helpful for this type of child. Such a program requires a large room with several individual cubicles so that the therapists can work in a group or individual setting.

"The training and treatment programs are predicted on a thorough diagnostic evaluation. In developing an individual treatment plan, it is important to determine those sensory and response modalities best developed by the child, as well as those available to him. We have found, for example, that a given child may perform more adequately when presented with an auditory cue and asked for a vocal response, than when presented with a tactual cue and asked for a motor response. Another child, equally devastated intellectually, will perform in exactly the opposite manner. The goal in this program is to develop organizing principles, not at the level of concepts, but rather more simply as reliable responses to a wide range of environmental and internal cues. If recognition of object constancy or similarities in situations and the communicative verbal labeling of such events can be facilitated the program is considered a success."

Since each child is an individual and is unique it is extremely difficult to outline a specific program plan.

"In general, the child is presented first with tasks requiring the sensory-motor response mode best developed in order to broaden his experience with a variety of stimuli. Gradually tasks will be introduced which require intersensory integration and multiple modes of response. While the cues and responses selected are dependent upon the literature in child and cognitive development, the manner of presentation and task situations are derived from learning theories, primarily classified, instrumental, and operant conditioning."

GOALS

The goals of this type of program are:

1) service, 2) research, and 3) demonstration of results

The children served are rarely seen outside of a residential setting. However, some are not institutionalized. This facet brings another aspect of service into view - that of working with parents. Since any appropriate new behavior must be continually reinforced both in school and at home, it is necessary to be in close communication with the parents. Sound-Film recording made during training sessions can be extremely helpful in presenting behavior models to parents.

The material for Individualized Programs For Multiply Handicapped Children has been extracted by Mrs. Emilie Martin (MSU-IMC) from the following source:

Many methods and techniques must be employed to create a learning situation for young deaf-blind children. These children need a one to one ratio for every activity.

In working with young deaf-blind children stress is generally placed on self-help skills, motor skills and communication skills. Each skill must be carefully analyzed and then carried out precisely with the child.

**SELF-HELP SKILLS**

Self-help skills include such activities as washing, eating, dressing, and toilet training.

Washing hands is a task which requires several skills performed in a sequential order. It requires the multi-handicapped child to locate the sink, then the faucet, turn it on, get the soap, rub his hands, rinse them, turn off the faucet, get a towel, dry his hands, and discard or hang up the towel as the case may be.

The task should be started from the first step and proceed to the end of the activity.

"It is quite possible that a child will be able to perform only one isolated part in the complicated process. It is most important that he always be allowed to perform that one task when it appears. For example, if all the child can do is pull the towel from the container, then by all means always have him do it. At the same time, he receives physical cues with the other parts of the task and then cues are gradually faded until he can complete the task independently."

The development of eating skills must take in the simple act of swallowing and chewing and have an end result in independent feeding.

It takes a lot of time and many different tasks for a child to learn how to dress and undress himself.

With each successful step involved in toilet training, praise the child in a way he understands. Do not punish failures, but do not reward them.
It is highly unlikely that sequential order will be used in acquiring this skill. A child may first learn to flush the toilet, or pull down his pants. For this reason the measurement of his ability is needed on each step of the skill.

**MOTOR SKILLS**

The multiply-handicapped child requires the same motor skills as any other child but his multiple handicaps often prevent them from developing at a "normal" rate.

Through the activities of balance and posture the child determines where the line of gravity is and the direction of its force. He is also able to develop a point of origin for the relationships in the environment around him.

**Locomotion** includes these activities which result in moving the body through space. With these activities the child investigates the relationships between objects in space.

**Contact and Manipulation**—Includes skills of manipulation by which the child handles objects and explores their nature. Contact skills usually involve the hand.

**Receipt** includes those activities in which the child must relate to an object moving toward him. The child places his body in the path of the movement, as in catching and stopping. **Propulsion** includes those activities in which the child must relate to objects moving away from him as in pushing, throwing, and batting.

**Movement Exploration**—The complete awareness of one's own body and its possibilities of movement and performance are necessary for correct body image.

**Laterality** can be characterized as an internal awareness of the similarities and differences between the two sides of the body.

**COMMUNICATION SKILLS**

While the deaf-blind child is handicapped in the senses used as mediums for communication he may have some usable sight and hearing. This residual sight or hearing should be used whenever possible.

"The following communication systems are used with the deaf blind: (a) speech and vibration, (b) fingerspelling, (c) gestures, (d) sign language, and (e) communication using a machine.

Internationally, in most deaf blind departments, speech and vibration are stressed as the main form for communication. However, there are many children who never will learn to speak and, therefore, must use one of the other systems.
Vibration: The sense of touch, is used for receptive language. The student puts his hand on the face of the person to whom he is talking. The thumb covers the mouth and feels the movements of the lips, jaws, and tongue. The four other fingers are spread over the cheek and jaw to pick up vibrations.

Fingerspelling: Each letter in the alphabet has a specific finger position. The letters are spelled into the hand of the deaf blind person and the deaf blind person spells out his ideas to the person with whom he is talking.

Gesture: The normal young child finds movement and language inseparable. To the young deaf blind child, language must also be movement, and there is meaning in language for him only insofar as it includes movement. The natural method of expression should, therefore, be movement for the deaf blind child as well as for the seeing and hearing child. The young deaf blind child may express himself then, in natural gestures. This spontaneous gesturing is rare in the congenitally deaf blind child and he must be taught to use gestures as one of the first steps in learning language. Where the young seeing and hearing child shows his desire for a ball by making a gesture for a bouncing ball, this is an opportunity for adults to present speech for the child. The child should be allowed to use these natural gestures as a road-breaker for speech, but later the child substitutes the spoken word for the natural gesture. The same principle holds true for the young deaf blind child: natural gestures are necessary, but not as the final goal.

Sign language: In sign language, each word has as its symbol a movement of hands and arms. Movements are combined to form a language used mainly by deaf students. In some instances, deaf blind students can use this system, but speech and fingerspelling are more often preferred.

Communication using a machine: Two machines will be mentioned: the Tele Touch machine and the Artificial Ear. The latter was introduced by a Danish firm some years ago and translates sound into vibration patterns in a number of keys. However, it has not yet been adequately evaluated through research.

The Tele Touch machine consists of a typewriter keyboard and a braille cell. The deaf blind person puts his finger on the braille cell; the person talking to him uses the keyboard. For example, pressing 'A' on the keyboard makes the braille 'A' appear. This system is usually used by the deaf and blind people who become handicapped after school age. It can easily be used without specialized training on the part of the hearing and seeing person who needs only to know how to spell.

The method most widely taught in schools is speech with vibration. In some instances several methods such as speech, vibration, and fingerspelling are combined. It is sometimes necessary to use every available method to communicate with a deaf blind person.
The material for Skill Development in Deaf-Blind Children has been extracted by Mrs. Emilie Martin (MSU-IMC) from the following sources:


WORKSHOP TRAINING KIT

CHARTING BEHAVIOR

PRIMARY AUTHOR
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USOE/MSU REGIONAL INSTRUCTIONAL MATERIALS CENTER
FOR HANDICAPPED CHILDREN AND YOUTH

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CHARTING BEHAVIOR
--LEADER’S GUIDE--

OVERVIEW

This activity is designed so that workshop participants in dyads can evaluate two case studies of low functioning learners. Each case study contains a number of charts in differing formats which contain behavioral data on that child. Each dyad is asked to complete a worksheet and to discuss their responses in the large group. Participants are asked to utilize skills of analysis and decision making and to construct some charts based on the data given.

OBJECTIVES

Through the activity the participant will

--be able to interact with a partner in a problem-solving situation.
--be exposed to a variety of charts in different formats containing behavioral data.
--when given behavioral data in one form, construct at least one chart in another form on a low functioning learner.

At the conclusion of the activity the participant will

--be more aware of the value of charting with low functioning learners.
--be able to list at least two characteristics of behavioral data.
--be able to list at least three formats in which behavioral data can be depicted.

PREREQUISITES

For the leader: Familiarity with information presented in this kit. The leader does not have to be an expert in Behavior Management, Charting or low functioning learners. It would be helpful to carefully read the Discussion Guide section.

For the participants: Since the material in this kit is specific to low functioning learners, it can be assumed that the majority of participants will have a knowledge of or interest in low functioning learners. In any case, the material is specific
enough for participants to learn as they do. It is not necessary for participants to have any prior knowledge or experience with charting.

**TIME NEEDED**

There are two case studies. If both are used, the total time will be two hours. Each activity is self-contained, however, and the leader could schedule two one-hour sessions on different days.

**MATERIALS NEEDED**

1. **TO BE DUPLICATED:**

   All pages to be duplicated are marked "Duplicator Page ___" in the upper right hand corner. Use the pages in this kit so marked as masters.

   **ONE FOR EACH PERSON:**

   - Introduction
   - Bobby (Case Study)
   - Bobby (Worksheet)
   - Lorna (Case Study)
   - Lorna (Worksheet)
   - Content Evaluation
   - Workshop Evaluation
   - Supplementary Information

   Duplicator Page 1
   Duplicator Pages 2-7
   Duplicator Pages 8-9
   Duplicator Pages 10-15
   Duplicator Page 16
   Duplicator Page 17
   Duplicator Page 18
   Duplicator Pages 19-28

2. **OTHER MATERIALS:**

   - blank transparencies
   - overhead projector

**PHYSICAL ARRANGEMENTS NECESSARY**

Tables and chairs sufficient to organize participants in pairs. Each person should have his own materials for study purposes, but worksheets are filled out together.

**PROCEDURE**

1. Arrange seating so there is sufficient space between pairs of participants.

2. Prior to beginning the activity, talk through with participants what they will be expected to do and what you expect
to accomplish during the workshop (objectives). It might be wise to consider at this point that your primary emphasis will be on the aspect of CHARTING (observations and inference) and not the topic. If you intend to use it, the entire content Evaluation can be introduced here.

3. Hand out the information and discuss briefly characteristics of low functioning persons (ask for specific examples of behaviors) and the value of charting these behaviors.

4. Give each person a case study and Worksheet. Suggest they work in pairs to complete the worksheet after carefully reading the case study. For most groups, it will be advisable to do "kopy" first, as it appears easier.

5. Allow 30-35 minutes for most pairs to finish the worksheet. Encourage participants to write down their responses. They will be more willing to discuss in the large group if they've agreed with a conclusion and admitted that agreement to paper.

6. Conduct discussion.


DISCUSSION GUIDE

Ask participants to write their responses to the questions on the worksheet. Then, if you could list the responses on a blank transparency, there are no "correct" responses. Each pair of participants will have their own set of responses which will contribute to the group's learning.

The focus, as mentioned before, is on CHARTING. For your information, Robert exhibits many of the behaviors seen in children classified as trainable (mentally) retarded. Lorna exhibits many of the behaviors seen in classified as severely emotionally disturbed or autistic. Since we are dealing with behaviors of low functioning children, we have chosen not to classify or "label" the children depicted in the two case studies.

The "indirect" learning in this activity is concerned with behavior management, behavior modification. There are sufficient examples cited to enable a leader to focus attention on these aspects if desired.

EVALUATION

Two forms of evaluation can be used to help you gather data on content evaluation of the workshop activity itself. On the content evaluation form, italicize those answers most frequently - you are rating our field testing of the kit. Perhaps they will help in to evaluate your workshop responses.

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INTRODUCTION

Children that are classified as low functioning learners have certain characteristics in common. If we understand these characteristics, we are better able to transfer educational information about assessment, instructional strategies, evaluation, etc. to our low functioning learners. These characteristics are:

- **MINIMAL RESPONSE LEVEL**: behavioral response to stimulus is apt to be limited, whether it is movement, speech, etc.

- **NEED FOR EXTRINSIC REINFORCEMENT**: an appropriate behavior is more apt to be continued if reinforcement is given immediately and in some tangible form. At the same time, inappropriate behavior is more apt to be eliminated if it is either ignored or reinforced negatively. (This is not to be viewed as an argument for corporeal punishment.)

- **BEHAVIOR PRIMARILY SENSORY-MOTOR LEVEL**: This implies that the learner must act on his environment in order to learn (change behavior). It would be appropriate for the teacher of low functioning learners to become well acquainted with this developmental level.

Low functioning learners, therefore, exhibit certain kinds of behaviors. How do these specific behaviors lend themselves to charting? In other words, what is the VALUE of charting with low functioning learners?

Charting is of value because:

- the behaviors can be *specifically described*
- the behaviors are *observable*
- the behaviors are *countable*
- the behaviors can be *reinforced*
- the behaviors are at times so infinitesimally small they MUST be charted to verify progress

The word "chart" can be used to describe different formats for depicting behavioral data. You will be using several different types of charts in this activity.
BOBBY

Bobby is a 10 year old male, who has just been enrolled in a school setting. He spent the first nine years of his life in an institution. His primary activities there were sitting in front of a television set and occasionally listening to a record player, when an attendant could be found to start the machine.

Bobby has no self-help skills, he must be bathed, dressed, and fed. He throws a temper tantrum when he is taken into the bathroom. (A guess would be that he had some unfortunate experiences in regard to toileting at the institution.)

He has almost no verbal communication skills. When he wants something (which is seldom) he indicates so non-verbally. The vocalizations heard are confined to grunts, whines, and cries. The single exception is sub-vocal swearing. He seems to have an enormous vocabulary of swear words, which he seems to use appropriately but not aloud.

Social interaction skills are also at a minimum. His interactions with other children are limited to pushing, hitting, punching, etc., or taking away their toys or papers (which he usually rips up). His response to adults is confined to staring blankly at them. Occasionally he looks out of the corner of his eye to see if an adult is watching.

The only manipulative materials he shows familiarity and ability with are the blocks and balls. He is able to stack up to five blocks, and can roll a ball with accuracy at a target. He can throw, but not with strength or accuracy, and is completely unable to catch anything. (In fact, shows fear in the situation.) He can run and walk but cannot hop, jump, skip or do any other more complex motor activity. He goes up and down stairs in a foot-to-foot manner, clutching at the railing.

He has spent one month in the classroom. Attached are behavioral records of some of the activities which were observed. The first week or so was an observation period. During the second week, more formal conditions were set up for modifying some of his behavior; this included the selection of specific behaviors to be modified and the recording of base line information in chart form.
ANECDOTAL REPORT OF BOBBY
WORKING WITH FORM BOARD PUZZLES

Day I  Bobby was given a formboard-type of puzzle during a "time out" period following an act of aggressive behavior during free play. The puzzle was a simple one requiring him to place the same shapes (5 circles) into the appropriate hole depending upon the size of the circle (shape constant, size varied). He sat and stared at it for 10 minutes and then threw it on the floor.

Day II  The teacher chose a time when Bobby had been responding well in class. She brought the same formboard to Bobby and both gave him simple instructions ("put the circle in the hole where it fits good") and then showed him (modeled) what to do. Bobby began the activity immediately and finished, correctly placing the 5 circles in 5 minutes. He used a trial and error approach. The teacher rewarded him immediately with a cracker.

Day III  Bobby brought the same formboard puzzle to the teacher and indicated non-verbally that he wanted to do the puzzle. The teacher said "puzzle" and pointed at the formboard. Bobby said "puh" and the teacher gave him cereal and said: "Yes, that's right—puzzle." Bobby worked at the puzzle for 8 minutes, correctly completing it twice, still using a trial and error approach. At the end of the second completion, he looked around for the teacher and indicated non-verbally that he was finished. The teacher said "Done?" Bobby repeated "Done," and clapped his hands. The teacher said, "You did a good job!" and gave Bobby a cracker and a fruit loop.

Day IV  Bobby began working on the same formboard puzzle completely independently. The teacher noticed, but waited a few minutes until Bobby had successfully completed the puzzle. She then went over to him with a similar formboard with squares instead of circles. She verbally reinforced Bobby for completing the formboard and asked him if he would like to try a different one. Bobby looked at the teacher blankly, so the teacher removed the circle formboard and placed the formboard of squares in front of him. She showed him how to do it and said, "Now you do it." Bobby completed the formboard in 5 minutes. This time, however, he picked out the largest square and put it in, and then the smallest square and put it in. The three remaining squares were placed in a trial and error manner. When he had finished the square formboard the teacher gave him a cracker and said, "Good, Bobby." Bobby said, "Good" and smiled. The teacher gave him a fruit loop.

Day V  Bobby went to the shelf where the formboard puzzles were, but seemed unable to decide which to take. He finally picked up both and took them to the back table. First he did the circle formboard and then the square formboard, both times immediately placing the largest and smallest forms, but utilizing more random procedures for the middle three. The teacher reinforced him verbally for completing the two puzzles and then worked with him on the circle formboard. The teacher structured the work situation by saying things like: "Where does this circle go? Show me... Take your time. Show me where this circle goes... Good, you knew it went there because it's bigger than this one." The teacher verbalized a structure for Bobby to use. Then she let Bobby do it himself. Every time Bobby paused before he put the circle in, she said "good." Four of the 5 circles were placed correctly on the first trial. When finished, Bobby said "good" and smiled. The teacher gave him a cracker and said, "That was a good job."
BEHAVIOR OBSERVATION RECORD

NAME: Bobby Sex: Male Date of Birth: 1/2/63

Date of Observation: 4/10/73

Objectives: To decrease aggressive behavior

Observation:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Duration</th>
<th>Frequency</th>
<th>Base Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>End</td>
<td>Time</td>
</tr>
</tbody>
</table>

Type of behavior: Deficit Interfering
Description of behavior: Striking other child (children)

<table>
<thead>
<tr>
<th>Art</th>
<th>11:00</th>
<th>11:30</th>
<th>30min</th>
<th>III</th>
<th>4</th>
<th>8/hr.</th>
</tr>
</thead>
</table>

Type of behavior: Deficit Interfering
Description of behavior: Stealing other children's papers

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>1:00</th>
<th>1:45</th>
<th>45min</th>
<th>III</th>
<th>3</th>
<th>1/hr.</th>
</tr>
</thead>
</table>

Type of behavior: Deficit Interfering
Description of behavior: Sub-vocal swearing

<table>
<thead>
<tr>
<th>Elicitors</th>
<th>Appropriate Behavior Response</th>
<th>High Probability Reinforcers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity to another child</td>
<td>Non-striking behavior</td>
<td>Removing child to corner</td>
</tr>
<tr>
<td>Inability to do task</td>
<td>Indicate need for help</td>
<td>Teacher send aid</td>
</tr>
</tbody>
</table>
Name: Bobby
Dates: 1/8/73-1/31/73

A = Base line period (no structured attempt to reward or punish)
B = Reinforcement period (structured positive and negative reinforcement)
Duplicator Page #6

Charting Behavior
Bobby

Name: Bobby
Dates: 1/8/73-1/25/73

<table>
<thead>
<tr>
<th>1</th>
<th>3</th>
<th>5</th>
<th>7</th>
<th>9</th>
<th>11</th>
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<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

**A** = Base line period
(no structured attempts to increase vocalization)

**B** = Reinforcement period
(reward (cereal) given, following any attempt at imitative speech. From day 9 verbal reinforcement given ("good") along with cereal)
DAILY SCHEDULE FOR TOILET TRAINING

GOAL: Independence in toileting

OBJECTIVES: (for first two months)

1. that Bobby will be helped to overcome his reluctance to go to the bathroom.
2. that Bobby will be independent in the following activities:
   a) standing in front of toilet
   b) unfastening button or snap
      1) with button board
      2) with own clothing
   c) zipper opening and closing
      1) with zipper board
      2) with own clothing

<table>
<thead>
<tr>
<th>DAY</th>
<th>TRIALS</th>
<th>RESPONSE INCREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3**</td>
<td>Standing three feet outside of bathroom door</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Standing two feet outside of bathroom door</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Standing one foot outside of bathroom door</td>
</tr>
<tr>
<td>2</td>
<td>4**</td>
<td>Standing at bathroom door</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Standing at bathroom door</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Standing one foot inside bathroom door</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Standing two feet inside bathroom door</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Standing three feet inside bathroom door</td>
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<tr>
<td>5</td>
<td>2</td>
<td>Standing four feet inside bathroom door</td>
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<td>5</td>
<td>3**</td>
<td>Standing in front of toilet</td>
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<td>6</td>
<td>2</td>
<td>Standing in front of toilet</td>
</tr>
<tr>
<td>7</td>
<td>6***</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button</td>
</tr>
<tr>
<td>8</td>
<td>5**</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button</td>
</tr>
<tr>
<td>9</td>
<td>4*</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button and unzip zipper</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button and unzip zipper</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>Standing in front of toilet—teacher helps to unfasten clasp or button and unzip zipper</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>Standing in front of toilet with trouser button unfastened and zipper open, student helps to push trousers down.</td>
</tr>
</tbody>
</table>

*indicates unwillingness on Bobby's part to continue, procedure discontinued for that trial.
EVALUATION WORKSHEET

Discuss the case study materials with your partner and answer the following questions.

1. Which of the behaviors charted would you want to continue to modify? Why?

2. What modifications, if any, would you want to make in the charting procedure for:
   - puzzles:
   - aggressive acts:
   - attempts at speech:
   - toilet training:

3. Which chart(s) gave you the MOST information about Bobby's behavior?

4. Which chart(s) gave you the LEAST information?
5. What other behavior or behaviors would you as a teacher want to have charted? Show below how you would chart it.

6. Given the following situations, how do you think the child will now respond?
   a) Teacher: “Bobby, this is a hall. Say ball.”
      Bobby: ____________________________________________
   
   b) Situation: It is time for Bobby to be taken to the bathroom.
      Expected behavior: ____________________________________________
   
   c) Situation: Bobby approaching a group of children during free play.
      Expected behavior: ____________________________________________
   
   d) Situation: Bobby given a set of nesting blocks.
      Expected behavior: ____________________________________________
   
   e) Situation: Bobby is asked to get a chair and bring it to join the group.
      Expected behavior: ____________________________________________
LORNA

Lorna is a five year old female who has been enrolled in a school setting for one month.

Lorna's history is as follows: After a long and difficult delivery, her mother (presently aged 46) suffered a massive stroke and was hospitalized for one year. The mother then returned to the home, but is still unable to speak or move her right hand at all. Her right leg is severely paralyzed and very painful, hence she moves around very little.

Lorna's father is a busy executive who has divided his time between work and his wife, leaving Lorna's care and upbringing to his mother—a 70 year old partially senile woman who sits and rocks most of the day.

When first seen at school, Lorna seemed uninterested in everything—especially people. She did not respond when her name was called, and looked through or past people, avoiding eye to eye gaze. When placed alone in a room full of toys and materials, she ran under the table and sat cross-legged with her head on the floor for the entire 20 minute observation period.

Lorna became distressed when exposed to noises (train whistle, bell, animal sounds, etc.) and slapped her hands over her ears as if to try to shut out the noises. The exception to this was soft music—a record done by the Boston Symphony including Brahms' Lullaby elicited a soft smile. (The only smile observed during the one day testing situation.)

Various types of self-injurious behaviors were noted with high frequency. Head-banging, pinching, and pounding of herself were most frequently noted—almost always occurring when she was alone, or at least when someone else was not close to her.

When first shown the playground equipment, Lorna hid from everyone, and continued this behavior for a full week. However, after the first week a new teacher aide took her to the slide and held Lorna on her lap while sliding down, giving her a gumdrop immediately after sliding. Lorna went back to the slide again and again until finally it was decided to introduce her to other pieces of equipment. Again she was physically manipulated to introduce her to the jungle gym. The same procedure was repeated with the swing.

Attached are behavioral records of some of the activities which were observed.
OBJECTIVE: LORNA WILL RESPOND VERBALLY WHEN HER NAME IS CALLED

SUB-OBJECTIVE 1
Stimulus: Teacher calls Lorna's name
Appropriate response: Lorna moves head toward teacher
Reward: black gumdrop, contingent upon appropriate response

<table>
<thead>
<tr>
<th>DAY</th>
<th># STIMULI</th>
<th># APPROPRIATE RESPONSE</th>
<th># A.R. REWARDED</th>
<th>% APPROPRIATE RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>100</td>
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</tbody>
</table>

SUB-OBJECTIVE 2
Stimulus: Teacher calls Lorna's name
Appropriate response: Lorna looks at teacher (i.e., eye to eye gaze for at least 1 second)
Reward: black gumdrop, contingent upon appropriate response

<table>
<thead>
<tr>
<th>DAY</th>
<th># STIMULI</th>
<th>% APPROPRIATE RESPONSE</th>
<th># A.R. REWARDED</th>
<th># APPROPRIATE RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>20</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>100</td>
</tr>
</tbody>
</table>
Each column of the histogram (bar graph) represents the mean frequency of 20 five minute samples obtained over 3 days. Behaviors recorded were any type of self-injurious response (pinching self, banging head, pounding self, etc.). During the time-out condition (B) the child was physically removed from where she was and placed in a soft chair in the back of the room. A return to the baseline condition following this treatment showed an increase in self-injurious behavior, although there was evidence of control effected by the time-out technique.
Each column of the histogram (bar graph) represents the mean frequency of 20 five minute samples obtained over 3 days. The C treatment condition of the ACA procedure was conducted several weeks after the previous ABA program. The C condition consisted of the staff's immediately initiating a directed activity with Lorna. The activities were varied but always consisted of some form of kinesthetic or motor response, (tumbling, ball handling, throwing, punching a bag, etc.) During the directed activity, very little self-injurious behavior was noted. Return to baseline conditions showed a significant decrease in self-injurious behavior.
Lorna's independent use of selected playground equipment

Baseline condition
Lorna was given black gumdrop every time she used any piece of equipment

Reinforcement condition

Indicates use of:
- slide (teacher introduced on day 6)
- jungle gym (teacher introduced on day 10)
- swing (teacher introduced on day 13)
REPORT OF OBSERVATION

DAY 3

RECOMMENDATION

It was recommended during the initial session that the teacher attempt to work with Lorna in a one-to-one situation, using the record (Boston Symphony) that she had responded to earlier.

GOAL

The teacher’s goal was to get Lorna to relate to her in a controlled atmosphere (small room, one way mirror) through a medium that was mutually participative. In this case, the teacher decided to try water.

SITUATION

A large tub of water was placed in the room along with soft floatable toys and pouring utensils. The teacher was playing with the toys and the music was playing softly when Lorna was placed in the room.

Note: Lorna had not responded to this situation on the two previous days.

OBSERVATIONS

Minute 1: Lorna enters the room. Contrary to the past two days, she does not run to the corner to hide. She appears to hear the music and smiles a little.

Minutes 2-5: She watches what the teacher is doing rather intently. (The teacher is running her hand through the water very gently and letting the water drain off her fingertips. The teacher does not look at Lorna.)

Minutes 6-8: Still standing in the same place, Lorna moves her arm in imitation of the teacher’s rhythmic movement through the water.

Minutes 9-11: Lorna takes one step toward the tub of water. (She is now 6 steps away from the tub and about 8 steps from the teacher.)

Minutes 12-15: Lorna takes two more steps toward the tub. She continues to watch what the teacher is doing with her hands and continues to move her own hands in the same way. The teacher does not look at Lorna. When the record ends, the teacher and Lorna leave.
WORKSHEET

Discuss the case study materials with your partner and complete the worksheet.

1. Make a chart below to graphically depict the information presented on page 6. Leave room for recording data on the days to follow.

2. The objective on page 2 is to get Lorna to respond verbally when her name is called. What sub-objective would you place next? Show how you would chart it.

3. What OTHER behavior or behaviors would you as a teacher want to have charted? Why?
CONTENT EVALUATION FORM

1. What is the value of charting with low functioning children?

2. To construct meaningful charts you must collect data on your learner. Describe the characteristics of this data.

3. The word "chart" can be used to describe different formats for depicting behavioral data. What other words can be used to describe some of the many formats? (i.e., line graph)
CONTENT EVALUATION FORM

1. What is the value of charting with low functioning children?
   --to verify progress (especially small increment progress)
   --to change objectives when necessary
   --to better define the instructional task
   --to communicate accountability

2. To construct meaningful charts you must collect data on your learner. Describe the characteristics of this data.
   --specific
   --countable
   --recurring
   --descriptive
   --meaningful
   --applicable to learning

3. The word "chart" can be used to describe different formats for depicting behavioral data. What other words can be used to describe some of the many formats? (i.e., line graph)
   --bar graph
   --anecdotal record
   --matrix
   --flow chart
   --profile
   --rate and frequency counts
   --observation record
WORKSHOP EVALUATION FORM

1. Was this workshop worth the time you spent for it?
   _____ Yes    _____ No
   Why?

2. Do you think you were adequately prepared for the material presented?
   _____ Yes    _____ No
   If no, explain.

3. How could this workshop enhance the teaching skills of a teacher of low functioning learners?
A PIAGETIAN APPROACH TO THE DEVELOPMENT OF THE TRAINABLE MENTALLY RETARDED CHILD

"Traditionally educators and psychologists have considered intellectual development in terms of IQ and or mental age. This view of intelligence has not proved of any great worth since the concepts are nebulous and often misleading. When used to describe the Trainable Mentally Retarded (T.M.R.) they have been even less valuable. To describe a child as having a mental age of five years when he is chronologically much older, does not provide either an accurate picture of the child or sufficient information for programming. He is not like a five-year-old and to view him as such tends to portray him in negative terms."

PIAGET'S THEORY

A Piagetian theory which divides intellectual development into four stages or periods seems to be a more logical approach rather than IQ or mental age for the TMR child. In using the Piagetian theory we are able to see a child as what he is rather than what he is not.

"According to Piaget, intellectual development can be divided into four periods:

1. Sensorimotor period (usually lasting from birth to 2 years)
2. Preoperational period (usually lasting from 2 to 7 or 8 years)
3. Concrete operations (from 7 or 8 to 11 or 12)
4. Formal operations (the adolescent period)

Each stage is characterized by the development of specific abilities and by particular ways of handling the environment."

DEVELOPMENT OF TMR CHILD

Using this developmental framework, "...the Trainable Mental Retarded is one who follows the normal pattern and sequence of development but at a slower pace and who fixates at the preoperational period; i.e. his learning is characterized during the early years as motor level learning and during adolescence and adulthood as perceptual level learning."
"Normally the child reaches the end of this (the sensorimotor period) period of development between two or three years of age. The TMR reaches the end of this period of development at approximately eight to eleven years."

This period can be divided into six stages:

**Stage I**
THE REFLEX STAGE: The infant is born with a number of abilities such as sucking, grasping, etc. Gradually during the first stage (which normally lasts one month) the child begins to recognize when to suck and to grasp. In other words, what started as an automatic reflex begins to come under the child's control.

**Stage II**
THE STAGE OF PRIMARY CIRCULAR REACTIONS: During this stage the child acquires a number of habits. He becomes curious. He coordinates various schemas; e.g., he turns his head to see where a sound has come from; he can follow a moving object (such as his hand with his eyes).

**Stage III**
THE STAGE OF SECONDARY CIRCULAR REACTIONS: In stage 3 he begins to crawl and to manipulate objects. His scope of interest extends beyond himself to his environment.

**Stage IV**
THE STAGE OF COORDINATION OF SECONDARY SCHEMAS: The abilities begun in stage 3 become more complex and sophisticated. He begins to anticipate happenings (he cries when his mother puts on her hat); he begins to imitate sound and actions; he begins to realize that objects still exist when he can no longer see them.

The normal child completes these four stages of sensorimotor development in the first year of life. The chronological age (C.A.) at which the TMR reaches this stage of development is approximately three years.

Once again, it should be said that these findings have significance for the teacher of the TMR child. They indicate that the teacher must be aware of the stage of development which the children have reached in order to provide materials they can and need to handle to ensure future development. Many TMR children may still be in stage 4 when they enter school for the first time (at age five or six). Most are at stage 5. Stage 4 and stage 6 in TMR children lasts roughly from C.A. six to C.A. eleven.

**Stage V**
THE STAGE OF TERTIARY CIRCULAR REACTIONS: During this stage the child begins to invent means of doing things.
Charting Behavior
A Piagetian Approach...

He does this by active trial-and-error. It is a period of extensive experimentation. Children now become intensely interested in making objects (such as blocks) fit into containers (such as wagons). Examples of useful materials are posting boxes where the child can fit shapes into appropriately shaped slits.

Toward the end of this stage children begin to tackle problems such as fitting "nesting" toys together; they begin to tackle formboard tasks such as simple puzzles. They begin to understand verbal directions given in simple concrete situations.

Stage VI

BEGINNING OF THOUGHT: During this stage he makes the transition to symbolic thought. He attempts to think about a problem. He can imitate a model even though the model is not present. He gives evidence of verbal comprehension. He begins to be successful with items on tests like the Stanford Binet. He can handle more elaborate picture puzzles. He can be introduced to material that requires him to copy sequences, e.g. colored beads on a string.

DEVELOPMENTAL LAGS

It is useless to attempt to teach the child "academic" subject matter before he has completed the developmental stages of the sensorimotor period. His training during the sensorimotor period should concentrate on developing basic mental abilities. This can be done by providing him with the materials he can manipulate in situations which are likely to lead him on to the next stage of development.

It should be noted that while the child's intellectual development is like that of a normal two to three-year old, he is apt to be much farther advanced in his locomotor and social development. This aspect of development will be closer to his chronological age level and this may lead people to expect more of him intellectually than he can deliver. However, while the intellectual and "academic" tasks he can handle may be limited (and we should not thrust tasks upon him which he cannot handle), if he can perform at a more advanced level in motor and social development, we should expect him to do so. If we do not challenge him, we will over protect and thus retard him further in unnecessary ways.
DETERMINING DEVELOPMENTAL STAGE

Recognition of the stage at which a child is functioning is extremely important. If there is no test to determine this, other methods can be used.

"In the sensorimotor period or preoperational period the simplest way is to be aware of the characteristics of each stage and to observe the child's behavior. If his behavior is similar to that described, then he is probably at that particular stage."

USING THE MODEL

"The Piagetian model will become even more useful if teachers begin to use it in classrooms. The number of teaching programs for children who are developmentally young is increasing. If teachers will assess their children and observe which materials TMR children at different stages can use, as well as the way in which they are used, our knowledge in this area will increase rapidly. It is particularly necessary to determine the sensorimotor stage and the areas of sensorimotor development which appears relevant for matching with the various programs. For example, is imitation the area of development most relevant for achievement in language; is space the area most relevant for early development of number? If teachers will apply this (or other developmental models) in their classrooms, we may be able to expand greatly our knowledge of teaching strategies for the TMR."

The material for A Piagetian Approach To The Development Of The Trainable Mentally Retarded Child has been extracted by Mrs. Emilie Martin (MSU-IMO from the following source:

DEVELOPING VERBAL RESPONSES IN AUTISTIC CHILDREN

Behavior modification (or operant conditioning) is a method of changing undesirable behavior in a child. This technique has been used by many workers with autistic children and has produced much success.

Stark, Giddan and Meisel used behavior modification to develop language behavior with an autistic child called Kipper who at the onset was virtually unresponsive to all types of environmental stimuli. Their program began by teaching imitation of gross nonvocal responses, to more refined types of nonvocal imitation.

**PHYSICAL IMITATION**

"Kipper was seated directly opposite the clinician. At first, the clinician prompted Kipper by physically moving him through the required motion. For example, in teaching an 'arms up' gesture, the clinician first modeled the behavior and then lifted Kipper's arms above his head. The clinician provided immediate reinforcement by saying 'Good boy!' and giving him a piece of candy or cereal. A technique which facilitated Kipper's response was to hold two M&M's above his head so that he had to raise his arms to get them."

**VOCAL IMITATION**

Moving from gross concepts to more complex stimuli was also accomplished by behavior modification in developing vocal imitation.

To assist in developing vocal imitation we used a series of consonant/vowel drills. They were very simple and built around two guidelines -- 1) each must be a single sound (m, not ma; a, not at; etc.) and 2) each must demonstrate a gross contrast between vowel and consonant (a/m; u/p; etc.). As soon as Kipper acquired the ability to imitate single sounds, they were presented in consonant/vowel and vowel/consonant combinations. The stimuli were a series of phonemes where one element remained constant.

The next step after vocal imitation was verbal labeling--the sounds produced can be used to represent actions and objects.
"As soon as he was able to produce imitative responses to (m) and (a), letters representing these sounds were printed on 3" x 5" cards in different colors. The Phonovisual Symbols (Schoolfield and Timberlake, 1944) were used to represent sounds. Kipper was taught to imitate (m) with the M card on the table. The clinician placed a piece of candy on the card and he received it as soon as he imitated the sound. Soon he began to anticipate the clinician and produce the sound when the candy was placed upon the card. By the tenth trial, he was 'reading' the letter."

The final step in the program was to promote verbal discrimination.

"In addition to teaching Kipper to label more than a dozen pictures and objects, we wanted to bring more of his behavior under the control of verbal stimuli. Therefore, we had Kipper place a marker, such as a poker chip or wooden block, on the printed M or O when these were spoken by the clinician. The stimuli became increasingly complex. Kipper soon was able to discriminate (ma) and (pa) and placed a block on the appropriate picture or word card.

At this point we reintroduced some of the verbal commands we had attempted to teach earlier. Each new verbal command was introduced in isolation. For hand-clapping, the clinician first said 'clap' and modeled the action. Kipper would imitate her hand clapping as well as approximate her vocal utterance. Soon he was responding to the verbal stimulus without a demonstration. By the end of the training period he had mastered a variety of verbal commands."

Another successful program, using a therapeutic nursery school setting, for initiating verbal responses has been described by Block.

"The staff begins the speech stimulation program by engaging the child at his level of language development and use. After the initial school adjustment has been made and the staff has become more familiar with the child's functioning level and characteristic behavior, certain patterns become more apparent, among these the speech avoidance patterns."

"Frequently in the classroom it is obvious that a child is communicating nonverbally a message that is important to him and about which he has strong feelings. This is a good time for the teacher to give him a simple word with which he can verbalize his message. The child is taught in many direct and subtle ways that words have more power than other ways of communicating."

In this program a specific individualized plan to facilitate verbalization is designed for each child.
"The teacher's skill in understanding which of the child's non-verbal messages seems most urgent to him and which is a suitable word he can use to convey this message is an important initial technique."

"The teacher must always hear words rather than mute gestures. A verbal request or response, no matter how minimal and incoherent a sound, rather than a nonverbal communication is always rewarded with an immediate, positive response from staff who are always interested in encouraging verbal rather than nonverbal responses. The child who asks to 'go out' is permitted to leave; the child who asks for a 'cookie' receives one even if it is not a snack time. The child who says 'up' is picked up. By contrast, a child who has mutely refused to participate in a circle game may be coaxed or taken by the hand to be further persuaded. However, if that same child then speaks and says 'no,' the teacher discontinues her persuasive efforts immediately, permitting the verbalization to have special power and more meaning than a mute communication."

Once verbal communication has been established it is important to establish appropriate-related non-verbal behaviors.

"The autistic child's lack of facial expression and his avoidance of eye to eye gaze are also very important through their efforts on other people's reactions to him. The development of the smiling response in infants at about four to six weeks after birth serves an important function because the smile tends to induce feelings of warmth and pleasure in the mother who begins to enjoy playing with the baby. If the child shows little variation in facial expression and does not smile much, the parents are likely to feel less warmly towards the child. Similarly, later the teacher and other children will find the child less fun and less rewarding to be with or to teach.

In the same way eye contact serves a number of different functions in the relations between people. Looking someone in the eye helps the individual to get 'feedback' on the other person's reaction to him. It is closely related to physical proximity and the presence of eye contact produces a feeling of intimacy and emotional closeness. Thus, the absence of eye to eye gaze or the short duration of eye contact in the autistic child is likely to influence other people's responses to him."

The material for Developing Verbal Responses in Autistic Children has been extracted by Mrs. Emilie Martin (MSU-IMC) from the following sources:


CHARTING THE BEHAVIOR
OF YOUNG DEAF-BLIND CHILDREN

We all attempt to understand others and to predict how they
will function under a variety of circumstances and the rate of
their development in terms of the areas of the person of which
we are concerned. In doing this, all of us utilize a variety
of assessment methods. Some of these methods are observation,
careful or casual, and interviews, both formal and informal.
Comments and recommendations of the present and future func-
tioning of the person being assessed are based on these varying
degrees of association of the person.

One method of assessment that is helpful in evaluating the
progress of a deaf-blind child is the use of a chart to record
observations.

"Charts can be utilized for both the elimination of undesirable
behavior and the development of new behavior because a chart
can create teacher awareness of learner behavior. Precise ob-
servation and timing are necessary to determine the progress of
the behavior that is being examined."

Each chart should break a task into its component parts and
provide some method for recording the child's actions. An
example is given on the next page.

"Expect spotty looking charts and don't be concerned about them.
They show that the child has not learned the sequence. Your
goal is to teach the child the missing steps by using the blank
squares for your teaching goals."

Some behaviors, such as toilet training require accurate
observation of timing. A chart denoting a twenty-four hour
day divided into five minute periods and the action of the
child can be used for precise charting. Very precise charting
is helpful with behaviors that are very sporadic, hard to observe,
subtle, or particularly interactive with the teacher.

Charting of a precise nature is also valuable in assisting the
teacher in setting goals and objectives for individual learners.
"To teach toilet training, begin by keeping a record sheet pinpointing the exact time when all bowel movements and urination occur. Keep this for three or four days around the clock. This chart will show when elimination is likely to occur. When this is known training can begin."

A chart can show a child with a tendency toward a set pattern of urination by a cluster of marks. After rather random placement on the toilet without success a pattern can be recognized and the child can have nearly complete success by the fourth week of the program. Charting the behavior in this manner aids in establishing the pattern and training of the child."

Each chart can be put onto a graph to show instantly gains or losses which have taken place.

<table>
<thead>
<tr>
<th>FEEDING—When the child is fed, he is able to:</th>
<th>Will do job only with complete physical, verbal, or tactual help</th>
<th>Needs physical guidance and verbal or tactual help</th>
<th>Needs only slight physical cue and verbal or tactual help</th>
<th>Needs only verbal or tactual cue</th>
<th>Total independence: remembers to do this task in sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Raise head to eat</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>2. Keep the food in his mouth until he swallows it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Chew the food if necessary before swallowing it</td>
<td>111</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>FINGER FOODS—The child is able to:</th>
<th>Need</th>
<th>Need</th>
<th>Needs only verbal or tactual cue</th>
<th>Total independence: remembers to do this task in sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Eat finger foods when they are put in his mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Hold and eat finger foods when they are put in his hand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pick up the finger foods and put them in his mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Break finger foods into edible pieces and eat them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Bite off appropriate size pieces of finger foods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Place a mark in the appropriate box according to the learner demonstrated behavior. Make the mark whenever the behavior occurs.

The material for Charting The Behavior Of Young Deaf-Blind Children has been extracted by Mrs. Emilie Martin (MSU-IMC) from the following sources:


SELECTED BIBLIOGRAPHICAL REFERENCES
ON
BEHAVIOR MODIFICATION
WITH
LOW FUNCTIONING CHILDREN

PROFESSIONAL REFERENCES, JOURNALS AND BIBLIOGRAPHIES
IDEA BOOKS FOR TEACHERS
MEDIATED IN-SERVICE TRAINING MATERIALS
INSTRUCTIONAL MATERIALS

Nancy Carlson
August, 1973
SUPPLEMENTARY INFORMATION

--PROFESSIONAL REFERENCES, JOURNALS AND BIBLIOGRAPHIES--

TEXTS--BOOKS


*Elgar, Sybill, and Wing, Lorna. Teaching Autistic Children.


*These items can be ordered from the National Society for Autistic Children, 101 Richmond Street, Huntington, West Virginia 25705.

**JOURNALS**


*Education and Training of the Mentally Retarded.* Council for Exceptional Children, 1411 Jefferson Davis Highway, Arlington, Virginia 22202. Frequency: 4. Annual Subscription $5.00 (members) $2.00 (full-time students).


Professional References, Journals and Bibliographies


Journal of Special Education. Subscription Department, 3360 Byberry Road, Philadelphia, Pennsylvania 19154. Frequency: 4. Annual Subscription $12.00.

Journal of Speech and Hearing Disorders. Includes information on Autism and Deaf-Blind.


BIBLIOGRAPHIES

Each abstract included provides pertinent bibliographic information about the document as well as a summary of its contents. To obtain any of the bibliographies write to: CEC Information Center, The Council for Exceptional Children, (ERIC) 1411 S. Jefferson Davis Highway, Suite 900, Arlington, Virginia 22202 (include acquisition number in front of title). A price list for orders appears on next page.*

608 Behavior Modification - 81 Abstracts - Index
614 Multiply Handicapped - 52 Abstracts - Index
617 Emotionally Disturbed - Programs (includes Autism) - 83 Abstracts - Index
618 Emotionally Disturbed - Research (includes Autism) - 91 Abstracts - Index
628 Physically Handicapped/Special Health Problems/Cerebral Palsy - 100 Abstracts - Index
640 Trainable Mentally Handicapped - Programs - (includes Mongolism) - 58 Abstracts - Index
641 Trainable Mentally Handicapped - Research - (includes Mongolism) - 78 Abstracts - Index


Professional References, Journals and Bibliographies

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2. The difference between Book Rate or Library Rate and first class or foreign postage (outside the continental United States) rate will be billed at cost.

A Bibliography Related to Early Childhood Education, Child Development, and Preschool Handicapped Children, compiled by Ernest A. Gotta, Ph. D. Vol. II, No. I. Includes bibliographic information on Emotionally Disturbed (including autism); Trainable Mental Retardation, Multiply Handicapped and Blind-Deaf. No Abstracts included. Available by writing the University of Texas Special Education Instructional Materials Center, Department of Special Education, The University of Texas at Austin.

Deaf-Blind Children - A List of References by Edwin K. Hammer, Ph.D. January, 1970. Extensive list of articles, books, journals, including complete bibliographic information - does not include abstracts. Can be obtained by writing: The University of Texas Special Education Instructional Materials Center, Department of Special Education, The University of Texas at Austin.


These three bibliographies can be ordered from the National Society for Autistic Children, 101 Richmond Street, Huntington, West Virginia 25705.


Neimark, Dana E., NSAC article bibliography,(or 12908 Ruxton Road, Silver Springs, Maryland 20904.)

SUPPLEMENTARY INFORMATION
--IDEA BOOKS FOR TEACHERS--


An Educational Program for Multi-Handicapped Children. East San Gabriel Valley School for Multi-Handicapped Children, Office of Los Angeles County Superintendent of Schools, Communications Center, Duplicating Unit, Los Angeles, California, April, 1972.

Behavior Modification-Management, November 10, 1971, Lincoln Way Special Education Service Center, 4001 Addison Avenue, N. E., Louisville, Ohio 44641. Procedures, definitions, charts, programs.

Blumberg, Dr. Allen (Director). "The Training of Parents of Profoundly and Severely Mentally Retarded Children in Handling Behavior at Home." West Virginia University, Kanawha Valley Graduate Center, Nitro, West Virginia. Techniques of operant conditioning taught to parents so they can teach children daily living skills.


Handbook of Developmental Checklists and Suggested Activities, State Department of Education, Jackson, Mississippi.


McCreavy, P.; Gregory, R.; and Smith, R. Management of Individual Behavior in the Classroom: A Guide for Teachers of the Handicapped, October, 1972. Special Education Curriculum Development Center, Iowa State Department of Public Instruction, Grimes State Office Building, Des Moines, Iowa 50319. Little book packed with step by step applications to behavior modification including ideas, implementation, and even sample contracts. (Free or minimal charge.)

1294


AUTISM

AUTISM'S LONELY CHILDREN
16mm, b/w, 20 min., $75. (Rental: $3.90)
Explains the work of Dr. Frank Hewett, University of California at Los Angeles, as he attempts to teach autistic children to talk and identify objects. Discusses the possible effectiveness of the approach. Introduces a 41/2-year-old patient and shows his behavior as he meets his parents for the first time in eight months.

Instructional Media Center, Division of Extension, The University of Texas at Austin, Austin, Texas 78712.

AUTISTIC SYNDROME SERIES
16mm, b/w, $200 each (Rental: $15 each)
A four-part series, only the first two parts deal with early childhood.
Part I. (43 min.) Identical twin girls, one autistic, the other normal, are introduced at age three. Emphasis is placed on showing early treatment of the autistic child.
Part II. (42 min.) The autistic child is shown exploring and investigating new experiences. The film highlights certain physical and emotional behavior.

New York University, Film Library, 26 Washington Place, New York, N.Y. 10003.

BEHAVIOR THERAPY WITH AN AUTISTIC CHILD
16mm, b/w, 42 min., $71.75
Demonstrates the systematic application of reinforcement in the form of candy, for responsive behaviors by a 5-year-old autistic child. An introduction and final summary statement bring the demonstration within the framework of current work in behavior therapy.
National Audiovisual Center, General Services Administration, Washington, D.C. 20409.

INFANTILE AUTISM: THE INVISIBLE WALL
b/w, 27 min.
As Dr. Bernard Rimland outlines the symptomology and presents his theory of infantile autism, the film cuts to individual interviews with four mothers of autistic children who describe on a personal level the nature of the disorder. Scenes of the autistic children themselves in a wide variety of situations at home illustrate the comments made by Dr. Rimland and the mothers.

University of Tennessee, Child Development Center, 22 North Pauline, Memphis, Tennessee 38105.

A TIME FOR GEORGIA
b/w, 15 min.
This film graphically describes a four-year-old child and the pathology of infantile autism. It illustrates the value of early educational intervention. It has received an EFLA Award in the category of child development.
BEHAVIOR MODIFICATION

GENESIS
16mm, 25 min., color, $200 (Rental: $20)
A training film, this is the first in The Step Behind Series. The film illustrates behavior modification techniques, based on well-established principles of learning, for training basic self-help skills, dressing, eating, etc. Filmed at the Great Oaks Regional Retardation Center, Silver Spring, Maryland.

Hallmark Films, 1511 East North Avenue, Baltimore, Maryland 21213.

THE POPPE PROJECT: BEHAVIOR SHAPING WITH THE SEVERELY RETARDED
16mm, b/w, 23 min.
Documents a project studying a group of severely retarded children using operant conditioning techniques to shape their behavior in areas of eating, dressing, structured and unstructured play, group interaction and socialization at a beginning level.

University of California at Berkeley, Extension Media Center, Film Distribution, 2223 Fulton Street, Berkeley, California 94720.

MENTAL RETARDATION

CHIP: A FIVE-YEAR-OLD MONGOLOID BOY
b/w, 23 min.
A five-year-old boy is filmed in the home under different situations--playing with a neighbor, with his parents, and during a developmental examination by the pediatrician.

University of Oklahoma, Medical School, 800 Northeast 13th Street, Oklahoma City, Oklahoma 73104.

COLOR HER SUNSHINE
16mm, b/w, 21 min., $140 (Rental: $6)
This is the story of Mary, a mongoloid. Like other mongoloids, Mary thrives on individual love and attention. Mary is now working in a sheltered workshop and having a relatively long attention span; she can do simple tasks consistently well. Mary is seen helping at home, working at her job, and participating in recreational activities.

Indiana University, Audio-Visual Center, Bloomington, Indiana 47401.

COMMUNITY DAY PROGRAMS FOR RETARDED
color, 43 min., $179.
Was developed for training staff and volunteers working with the retarded in Community Day Centers and state operated facilities. Progresses over four major levels of programming: preschool-age, school-age, young adult, adult.

Learning Media Institute, 2310 East Mound Road, Decatur, Illinois 62526.
DANNY AND NICKY

color, 56 min., $550 (Rental: $30)

A comparison of the care and training of two mentally retarded boys (mongoloids), the one living at home with brothers and sisters and attending a special neighborhood school, and the other in a large institution for the retarded. As well as showing many aspects of training and staff methods, the film clarifies common misconceptions and will be of interest to parents, educators, community organizations and personnel engaged in working with the retarded.

National Film Board of Canada, 680 Fifth Avenue, New York, N.Y. 10019.

ETERNAL CHILDREN

16mm, b/w, 30 min., $165 (Rental: $14)

Presents an intimate study of the special problems of retarded children who through heredity, brain injury or various other causes are not equipped to keep pace with others. The film gives a frank and timely appraisal of the problem and shows care and training methods being evolved in special schools and institutions. Attention is focused on the urgent need to improve communication facilities.

National Film Board of Canada, 680 Fifth Avenue, New York, N.Y. 10019.

EXCEPTIONAL CHILDREN (CONFIDENTIAL FILE)

b/w, 26 min.

Dramatic presentation of parents' views and adjustments to retarded child. Included are interviews with doctors and with parents of a 3½-year-old mentally retarded child. Shows school community provisions of the trainable child.

University of Minnesota, Film Library, 2037 University Avenue, S.W., Minneapolis, Minnesota 55455.

A FIVE YEAR OLD MONGOLOID BOY

b/w, 23 min.

Shows, with little comment, the daily activities of a five-year-old mongoloid boy as he goes about normal activity. Shown as motion picture "snapshots." Shows testing methods.

University of Oklahoma, Medical Center, Behavior Sciences Audiovisual Laboratory, Department of Psychiatry, 800 Northeast 13th Street, Oklahoma City, Oklahoma 73104.

LONG CHILDHOOD OF TIMMY (in two parts)

16mm, b/w, 53 min., $275 (Rental: $25)

Timmy is a mongoloid child whose mental capacities will never develop beyond those of a 10-year-old child. The film presents a warm portrayal of this mentally retarded child who must make the transition from an understanding and devoted family setting to a superior school for the mentally retarded. In telling Timmy's story, the film gives much factual information about these special children and induces positive attitudes toward a greater compassion for these people with their very special needs.

MENTALLY HANDICAPPED CHILDREN GROWING UP
b/w, 30 min. (Rental: $3.50)
Research projects in a British institution which studied severely retarded children in a small cottage-type residence and compared their development with children remaining in traditional institutions.
Kinsmen NIMR Building, York University, 4700 Keele Street, Downsview, Toronto, Canada.

PATTERNS
color, 17 min., $160 (Rental: $4)
The use of physical facilities demonstrates how motor development is promoted and how physical fitness is improved. Commentary features the need for physical education for the mentally retarded, trainable or below.
Educational Service Center, Region XIII, 6504 Tracor Lane, Austin, Texas 78721.

REPORT ON DOWN'S SYNDROME
16mm, color, 21 min., $250 (Rental: $15)
The film outlines general characteristics and treatment methods and the latest findings in the area of genetics, using both direct photography and animation. Sequences of two mongoloid children over a six-year period supply information on the advantages and rewards of family life and application of the routine-relaxation-repetition formula. The film provides information on the entire subject from first diagnosis through guidance and help offered by the professional disciplines in the field of child mental retardation. Clinical film report and observations are by Richard Koch, M.D., University of Southern California School of Medicine and the Los Angeles Children's Hospital.
International Film Bureau, 332 South Michigan Avenue, Chicago, Illinois 60604.

TEACHING MONGOLOID CHILDREN TO COMMUNICATE
16mm, b/w, 26 min.
Illustrates daily teaching procedures applied in the instruction of preschool mongoloid children at the Harris County Center for the Retarded.
Harris County Center for the Retarded.

MULTIPLY HANDICAPPED
EDUCATION OF EXCEPTIONAL CHILDREN
color, 25 min.
All phases of a well-rounded program for the education of exceptional and handicapped children, in operation to aid the hard-of-hearing, speech-handicapped, mentally retarded and those with impaired sight are shown.
THE EXCEPTIONAL CHILD
16mm, color, 20 min., $330 (Rental: $15)
Shows how the perceptually handicapped and brain damaged children can be helped through new and encouraging methods of treatment and therapy.

NBC Educational Enterprises, 30 Rockefeller Plaza, New York, N.Y. 10020.

EXCEPTIONAL CHILD SERIES
16mm, b/w, 29 min. each, $125 (Rental: $6.75 each)

Cerebral Palsied Child - Defines cerebral palsy and explains how physical disability, psychological problems, mental sub-normality and the great number of clinical types add to the complexity of this affliction. Dramatizes the problems faced by parents whose children are afflicted. Shows characteristics of cerebral palsy.

Mentally Retarded: Trainable - Illustrates the relationships of the severely retarded children to their family and neighbors. Describes the use of private and public day schools and their objectives. Uses classroom scenes to show the mentally retarded and the training methods used for them. Stresses the need for supervision.

Indiana University, Audio-Visual Center, Bloomington, Indiana 47401.

GROWTH AND DEVELOPMENT OF A MULTIPLY-HANDICAPPED INFANT
16mm, b/w, 10 min. $80 (Rental: $7.50)
This film is a unique longitudinal record of the growth and development of a profoundly retarded blind infant's first three and one-half years of life, designed to stimulate thought and discussion in areas where precise guidelines for clinical judgments do not exist. Clinical examinations during the first year of life are juxtaposed with a typical day at home at 22 months of age. His family's decision to institutionalize the child is recorded, as is a visit from his mother when he is 42 months old and a resident of the State School for the Retarded.

New York University, Film Library, 26 Washington Place, New York, N.Y. 10003.

THE HEADBANGERS
16mm, b/w, 30 min., $52.
Describes a treatment program for retarded, severely self-destructive children. Pictures several institutionalized children who manifest such behavior through the symptom of headbanging, one of whom blinded herself and was subsequently placed in a special study unit. Emphasizes the persistent cooperative effort of the staff and therapist as the primary mode of treatment.

Du Art Film Labs, Inc., 245 West 55th Street, New York, N.Y. 10019.

ONE SMALL CANDLE
16mm, color, 22 min.
Describes procedures in a clinic and private school for the severely retarded and multiply handicapped. Discusses occupational therapy, psychological testing, recreation and job training for the retarded child. Stresses correct parental guidance of the child.

Pennsylvania State Department of Public Welfare, Division of Community Planning, Harrisburg, Pennsylvania 17120.
SOMEBODY WAITING
16mm, color, 25 min.
Describes the condition of severely multiply handicapped retarded children. Demonstrates therapeutic handling of those children—effect on the children and staff.
University of California, Film Library, San Francisco, California 94122

TESTING MULTIPLY HANDICAPPED CHILDREN
16mm, b/w, 30 min.
Educational evaluation of three severely handicapped children. One child has athetoid cerebral palsy, another is blind and deaf, and the third child is hyperactive and distractible.
United Cerebral Palsy Association, Inc., 321 West 44th Street, New York, N.Y. 10036.

TESTING THE MULTIPLY HANDICAPPED CHILD, MILICENT
b/w, 30 min.
For lay and professional audiences. "Milicent" is age four and one-half, hyperactive, distractible, mentally retarded. Educational evaluation.
Professional Services Program Department, United Cerebral Palsy Association, Inc., 66 East 34th Street, New York, N.Y. 10016.

THURSDAY'S CHILD
b/w, 22 min.
Children ranging in age from two to six years who have cerebral palsy in its various forms, hemiplegia, speech and hearing defects, or mental retardation are shown not as case histories, but with all the other needs people have as well.
Health Film Association, 1838 100th Avenue, N.E., Bellevue, Washington 98004.

THE TWICE AFFLICTED
color, 20 min.
Deals with the problems and progress in the education of the multiply handicapped.
National Audio-Visual Center, Suiteland, Maryland.
SUPPLEMENTARY INFORMATION
--INSTRUCTIONAL MATERIALS--


Developing Understanding of Self and Others (DUSO). The DUSO activities focus upon helping children understand themselves and others and toward this end, make extensive use of a listening, inquiry and discussion approach to learning. The total program is organized around eight major unit themes:

I. Understanding and Accepting Self  
II. Understanding Feelings  
III. Understanding Others  
IV. Understanding Independence  
V. Understanding Goals and Purposeful Behavior  
VI. Understanding Mastery, Competence and Resourcefulness  
VII. Understanding Emotional Maturity  
VIII. Understanding Choices and Consequences

The activities of the program have been designed to achieve three basic goals:

a. Learning more words for feelings  
b. Learning that feelings, goals and behavior are dynamically related  
c. Learning to talk more freely about feelings, goals and behavior.

American Guidance Service, Publisher's Building, Circle Pines, Minnesota 55014. Available through SEIMC, Erickson Hall, Michigan State University, East Lansing, Michigan 48824.


Health and Safety for the Special Child, Kit No. 60. Education Projections Corporation, P. O. Box 1187, Jackson, Mississippi 39205. Includes filmstrips, tape, pre and post tests, transparencies, record albums and teacher's manual.

Interpretive Education, 400 Bryant Street, Kalamazoo, Michigan 49001. Produces multi-media kits for teaching self care skills. Each kit includes three cassettes, five filmstrips, and a teacher's manual.

Self Care Series - Male $84.00  
Self Care Series - Female $74.00  
Clothing Care Series $74.00

Lawson Training Kit, by Gary D. Lawson, Sup., Special Education Classes, Elk Grove Unified School District, Elk Grove, California. Kits designed for student use in areas of money, signature, survival words, and foods. Includes illustrated cards, worksheets, pictures, coloring items, foods and money envelopes, teacher's guide.

1302
Readiness for Learning Assessment. Produced by Megacity Instructional Resource Materials Center, ESEA, 442A-A0-71, Montgomery County Board of Education, 15 N. Main Street, Dayton, Ohio 45402. An informal readiness survey to aid teachers in focusing on a child's strengths and in determining appropriate activities and materials to strengthen weak areas.

"Self Care" Part I: Guide to Early Developmental Training. Prepared by Wabash Center, Lafayette, Indiana. This section includes units on toilet training, eating, and dressing. Check lists, suggested activities, ideas for parent conferences, etc., are included.

Shoelace Aide. American Printing House for the Blind, 1839 Frankfort Avenue, P. O. Box 6085, Louisville, Kentucky 40206. $9.25.

Teacher Produced Materials, Shonk, Eunice. Lincoln Way Special Education Service Center, IRMC, 4001 Addison Avenue, N. E., Louisville, Ohio 44641. Entire booklet composed of ideas for easy to make materials designed to aid instruction of a low functioning learner.


RECORDS

The following records are applicable for use with low function children.

Animals - Bowmar

Basic Songs for Exceptional Children, Vol. 1 - Concept Records

Basic Training in Auditory Perception, Vol. 3 - Concept Records

Brave Hunter - Ginn & Co.

Chicken Fat - Educational Activities

Child's World of Sound - Bowmar

Color Concepts - Bowmar

Favorite Folk Tales - Bowmar

The Five Senses - Bowmar

Get Fit While You Sit - Children's Music Center

Learning to Listen - Children's Music Center

Listening and Moving Series - Educational Activities

Listening Skills for Pre-Readers - Classroom Materials

Listening Skills Program - SRA

Listening Time Stories -

Modern Classics - Bowmar

Say Along Stories - Bowmar

Sights and Sounds - Series 2 - Bowmar

Songs for Children with Special Needs - Bowmar

Stories for Listening - McGraw-Hill
WORKSHOP
TRAINING
KIT

POLAR ALGEBRA

PRIMARY AUTHOR
TED WARD

USOE/MSU REGIONAL
INSTRUCTIONAL MATERIALS CENTER
FOR HANDICAPPED CHILDREN AND YOUTH

1304
OVERVIEW

POLAR ALGEBRA is a workshop activity that is designed to:
--demonstrate what it feels like to have a learning problem.
--demonstrate alternative instructional approaches that can be used with someone that has a learning problem.

Participants are shown a mathematical problem and asked to solve it using the "rules of Polar Algebra." Almost all of the participants will have difficulty solving the problem. Each participant then is asked to select one of four instructional approaches to assist in remediating the problem. Following the remediation they are presented with another problem. There will still be some participants who will have difficulty with this new problem. Once again, remediation is provided. Finally, a last problem is provided and almost everyone will get it correct. The activity concludes with a discussion period.

OBJECTIVES

Through the activity the participant will
--experience what it feels like to have a learning problem.
--have an opportunity to select a preferred remedial approach.

At the conclusion of the activity the participant will
--be able to list four different remedial approaches that can be used with children who have learning problems.
--be able to relate the feelings of a learner who is experiencing learning problems.

PREREQUISITES

There are no special prerequisites for either the leader or participants to successfully participate in this activity. However, the leader should become very familiar with the rules of Polar Algebra prior to the activity.
TIME NEEDED

The entire activity takes approximately one hour.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5 min</td>
</tr>
<tr>
<td>Problem #1</td>
<td>5 min</td>
</tr>
<tr>
<td>Remediation</td>
<td>10 min</td>
</tr>
<tr>
<td>Problem #2</td>
<td>5 min</td>
</tr>
<tr>
<td>Remediation</td>
<td>10 min</td>
</tr>
<tr>
<td>Problem #3</td>
<td>2 min</td>
</tr>
<tr>
<td>Discussion</td>
<td>20 min</td>
</tr>
</tbody>
</table>

MATERIALS NEEDED

1. TO BE DUPLICATED:

   All pages to be duplicated are marked "Duplicator Page #" in the upper right hand corner. Use the pages in this kit so marked as masters. The pages marked "Transparency Page #" should be used as masters to process overhead transparencies.

   --Step-Wise Approach  Duplicator Pages 1-4
   --Independent Investigation Duplicator Page 5
   --Rules of Polar Algebra  Duplicator Page 6
   --Learning Through Observation  Duplicator Page 7

   NOTE: You will need a quantity of each of these handouts (Duplicator Pages 1-7). Since, however, participants will select which one they want, it will be impossible to know in advance how many to prepare. Make sure you have enough!

2. OTHER MATERIALS:

   --Problem #1  Transparency Page 1
   --Optional Instructional Approaches  Transparency Page 2
   --Problem #2  Transparency Page 3
   --Problem #3  Transparency Page 4
   --Envelopes for Duplicator Pages 1-7
     (Label each envelope according to what instructional approach it contains--Step-Wise Approach, etc.)
   --Overhead projector
PHYSICAL ARRANGEMENTS NEEDED

Movable chairs set up in an auditorium arrangement is okay, but tables and chairs is preferable. If tables are used, four participants per table is advisable. It is important to have flexible seating for this activity to allow participants to change seats if needed.

PROCEDURE

1. If you will be using a pre-test (Content Evaluation), you should administer it at the very beginning.

2. Briefly describe the activity:

"During this activity you will have an opportunity to experience what it feels like to have a learning problem. You will also have an opportunity to work through your problem. I am going to show you a transparency that will demonstrate a problem that has been solved according to the rules of Polar Algebra. I will then ask you to solve a Polar Algebra problem."

3. Project Transparency #1 (cover the bottom part with a piece of paper).

"Solve this problem according to the rules of Polar Algebra. You may use a piece of paper to help in your computations."

(A Allow 3 or 4 minutes)

Call for participants to tell their answers.

4. Uncover the answer.

"How many got the problem right?"

5. Project Transparency #2.

"You will now have an opportunity to select the manner in which you will receive instruction in Polar Algebra. Examine these four options and select the option you would like to use for receiving instruction."

Read through the four options with the participants.

6. Hand out to each participant an envelope with the type of instruction that participant would like to receive.

(Duplicator Pages 1-7)
7. Allow about 10 minutes for individual instruction.

8. Briefly discuss the four different options and the participants' reactions to them.

9. Introduce next problem:

"Now you have had a chance to better understand the rules of Polar Algebra. Let's see if you are able to do the next problem."

10. Project Transparency #3 (cover the bottom part with a piece of paper).

"Solve this problem according to the rules of Polar Algebra."

NOTE: The participants do NOT realize that a vertical line means "subtraction." The problem is easy to solve if turned on its side and treated as a normal subtraction problem.

Allow 3 or 4 minutes.

Call for participants to tell their answers.

11. Uncover the answer.

"How many got the problem right?"

At this point, assign those that got the problem correct as "teacher assistants" to help those that didn't get it correct. Have the assistants first ask their "students" to specify how they would like to receive instruction. Then, the assistants should provide instruction in that manner.

Allow about 10 minutes for instruction.

12. Briefly discuss the instructional procedures that the assistants used.

13. Introduce the last problem (project Transparency #4 with the bottom part covered).

By now everyone should be able to solve the problem.


15. Post test (see the last pages of this guide for content evaluation and workshop evaluation forms).
DISCUSSION GUIDE

There are two different topics that you should probe during the discussion. The following questions should assist in your discussion of the activity.

**Topic 1 - The feelings associated with having a learning problem.**

"What kinds of feelings did this activity promote?" 
(i.e., frustrated, annoyed, challenged, belittled, etc.)

"Why did the activity promote these feelings?" 
( Didn't know the rules at the beginning, went too fast, saw others being successful, etc.)

"How are these feelings similar to the feelings of a child with a learning problem?"

"What can be done to assist in alleviating the negative feelings?"

**Topic 2 - Optional procedures for instructing children with learning problems.**

"How did you like the opportunity of having optional instructional approaches that you could select?"

"Did the optional instructional approaches assist you in learning?"

"How can optional approaches be used successfully in the classroom with a child who has a learning problem?"

**EVALUATION**

Two forms are provided which can be used to help you gather data on content learning and the workshop activity itself. On the content evaluation form we have included in italics those answers most frequently occurring during our field testing of the kit. Perhaps they will assist you to evaluate your workshop responses.
PROBLEM #1

THIS PROBLEM IS CORRECT ACCORDING TO THE RULES OF POLAR ALGEBRA

\[
\begin{array}{cccc}
8 & 7 & 8 & 7 \\
E & 2 & G & 1 \\
E & F & C & G \\
\end{array}
\]

SOLVE THIS PROBLEM

\[
\begin{array}{c}
? \\
G \\
D \\
\end{array}
\]

WRITE YOUR ANSWER ON A SHEET OF PAPER

THE ANSWER IS 9

1310
OPTIONAL INSTRUCTIONAL APPROACHES

YOU HAVE FOUR OPTIONS FOR RECEIVING INSTRUCTION IN HOW TO SOLVE THIS POLAR ALGEBRA PROBLEM.

OPTION #1—STEP-WISE APPROACH
Programmed Instructional Sequence

OPTION #2—INDEPENDENT INVESTIGATION
Using Prior Learning in an Unstructured Setting

OPTION #3—THE RULES OF POLAR ALGEBRA

OPTION #4—LEARNING THROUGH OBSERVATION
Watching How Others Learn
### Problem #2

This problem is correct according to the rules of Polar Algebra.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Solve this problem:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>?</td>
</tr>
</tbody>
</table>

Write your answer on a sheet of paper.

The answer is 3.
### PROBLEM #3

THIS PROBLEM IS CORRECT ACCORDING TO THE RULES OF POLAR ALGEBRA.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>G</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>D</td>
<td>A</td>
</tr>
</tbody>
</table>

SOLVE THIS PROBLEM

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>D</td>
<td>?</td>
</tr>
</tbody>
</table>

WRITE YOUR ANSWER ON A SHEET OF PAPER

THE ANSWER IS 2 OR C
STEP-WISE APPROACH

You have elected to use a Step-Wise Approach (Sequenced Approach) to learning Polar Algebra. In this step-wise approach you will be presented a programmed instructional sequence to assist you in learning the basics of Polar Algebra. Go through each step in order. Do not omit steps. Make sure you have completed each step correctly before going to the next step. The answer for each problem in the instructional program is given at the top of the page directly following the problem.

Good luck!

P.S. Please leave your envelope face up on the table.

PROBLEM #1

\[
\begin{align*}
D + D &= 6 \\
E + E &= 8 \\
F + F &= 10 \\
G + G &= ? \\
\end{align*}
\]

ANSWER TO PROBLEM #1

\[
G + G = 12
\]

PROBLEM #2

\[
\begin{align*}
D + 3 &= 6 \\
E + 4 &= 8 \\
F + 5 &= 10 \\
G + 6 &= ? \\
\end{align*}
\]
### Problem 2

\[ G + 6 = 12 \]

### Problem 3

\[ B + E = 5 \]

### Problem 4

\[ A + D = 3 \]

### Problem 3

1. \[ B + B = 2 \]
2. \[ B + C = 3 \]
3. \[ B + D = 4 \]
4. \[ B + E = ? \]

### Problem 4

1. \[ A + A = 0 \]
2. \[ A + B = 1 \]
3. \[ A + C = 2 \]
4. \[ A + D = ? \]

### Problem 5

1. \[ B + C = 3 \]
2. \[ C + C = 4 \]

- OR-  
  \[ 3 \]

- OR-  
  \[ \frac{3}{B} \]
  \[ \frac{C}{C} \]
<table>
<thead>
<tr>
<th>Problem #5</th>
<th>Answer: C</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem #6</td>
<td>Answer: C</td>
<td>D</td>
</tr>
<tr>
<td>Problem #7</td>
<td>Answer: D</td>
<td>D</td>
</tr>
<tr>
<td>Problem #8</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

1316
ANSWER TO PROBLEM #8

6 5

D  C
D  D

ANSWER TO PROBLEM #9

C = 2
2 = C

PROBLEM #9

A = 0
0 = A
B = 1
1 = B
C = ?
2 = ?

PROBLEM #10

NOW TRY THE ORIGINAL PROBLEM
INDEPENDENT INVESTIGATION

You have elected to use an *Independent Investigation* approach to learning Polar Algebra. Use your time as you feel will be most beneficial. Work independent of the other learners. You may want to find a quiet corner.

Good luck!

P.S. Please leave your envelope face up on the table.
RULES OF POLAR ALGEBRA

You have elected to use the *Rules of Polar Algebra* to help you learn Polar Algebra. The rules for Polar Algebra are:

Rule #1 Each letter of the alphabet has a digital value.  
A = 0, B = 1, C = 2, D = 3, etc.

Rule #2 In Polar Algebra the adding is done upward.

Rule #3 The sum of adding is shown above the horizontal line.

Rule #4 Numbers and letters may be mixed.

Rule #5 Above the letter "G" only numerals are used.

P.S. Please leave your envelope face up on the table.
LEARNING THROUGH OBSERVATION

You have elected to learn Polar Algebra by Learning Through Observation. You may move freely about the room and observe how others are learning. You may ask questions of the other learners, but try to limit your interaction since they are also trying to learn.

Good luck!

P.S. Please leave your envelope face up on the table.
CONTENT EVALUATION FORM

1. List four optional instructional procedures that can be used with a child who is having a problem learning how to multiply.

   ____________________________________________________
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

2. What feelings does a child with a learning problem usually have when confronted with a difficult problem?
1. List four optional instructional procedures that can be used with a child who is having a problem learning how to multiply.

   - Provide rules
   - Provide step-by-step programmed instruction
   - Allow independent investigation
   - Allow learners to watch other learners
   - Provide drill and practice

2. What feelings does a child with a learning problem usually have when confronted with a difficult problem?

   - frustrated
   - annoyed
   - belittled
   - bewildered
   - etc.
WORKSHOP EVALUATION FORM

1. The experience was:
   ___ a) worth the time spent
   ___ b) too long
   ___ c) too short

2. Do you think you were adequately prepared for the material presented?
   ___ Yes  ___ No  If no, explain.

3. How does this workshop experience enhance the skills of a teacher of children with learning problems?
SOME FINAL EVALUATIONS OF VARIOUS ASPECTS OF THE MEDIA AND MATERIALS DEVELOPMENT UNIT
EVALUATION OF REPORT FORM
"PROMISING PRACTICES IN EDUCATING DEAF-BLIND CHILDREN"

A report form (questionnaire) was designed to survey teachers of deaf-blind children in regards to promising practices and materials that are used in educational programs. Copies of the report form were sent during the Spring of 1972 to the Regional Deaf-Blind Centers throughout the United States. The directors of these Centers were asked to distribute the forms among teachers of the deaf-blind and ask that they be returned to the MSU Regional Instructional Materials Center.

79 questionnaires were returned. Of those questionnaires returned, 69 were acceptable. The following questionnaires were unacceptable for the following reasons:

- 6 had no usable information
- 1 was answered by a substitute teacher
- 1 was a duplicate questionnaire submitted by the same person
- 2 were answered by people teaching in a field other than Deaf-Blind Education

Copies of the Report Form and the cover letter can be found at the conclusion of this report.

The data collected from the form was analyzed by comparing a number of different aspects found within the form. The following pages show the results of these comparisons.
SECTION A - EXAMINING LENGTH OF GENERAL TEACHING EXPERIENCE

Of the 69 teachers responding to the questionnaire, 22 had one year or less teaching experience, 10 had two to six years teaching experience, and 37 had seven to twenty-five years teaching experience.

Of the 22 that had one year or less teaching experience:
5 (45.4%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
5 (45.4%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.).
1 (9.0%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 10 that had two to six years teaching experience:
8 (34.7%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
4 (17.3%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.).
11 (47.0%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 37 that had seven to twenty-five years teaching experience:
4 (28.5%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
6 (42.8%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.).
4 (28.5%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

* Some teachers listed more than one.
SECTION B - EXAMINING LENGTH OF TEACHING EXPERIENCE WITH DEAF-BLIND CHILDREN

Of the 69 teachers responding to the questionnaire, 12 had six months or less experience teaching Deaf-Blind, 35 had six to twenty-four months experience teaching Deaf-Blind, and 22 had two or more years experience teaching Deaf-Blind.

Of the 12 that had six months or less experience teaching Deaf-Blind:

3 (42.0%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.

2 (28.0%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)

2 (28.0%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 35 that had six to twenty-four months experience teaching Deaf-Blind:

11 (40.0%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.

8 (29.6%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)

8 (29.6%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 22 that had two or more years experience teaching Deaf-Blind:

3 (21.4%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.

5 (35.7%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)

6 (42.8%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.
SECTION C - EXAMINING LENGTH OF SPECIALIZED TRAINING (IN TEACHING DEAF-BLIND CHILDREN)

Of the 69 teachers responding to the questionnaire,

36 had no specialized training in teaching the Deaf-Blind,
10 had up to six months of specialized training in teaching the Deaf-Blind, and
23 had six months or more specialized training in teaching the Deaf-Blind.

Of the 36 that had no specialized training in teaching the Deaf-Blind:

11 (45.0%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
6 (25.0%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)
7 (29.1%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 10 that had up to six months of specialized training in teaching the Deaf-Blind:

1 (14.0%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
1 (14.0%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)
5 (71.0%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.

Of the 23 that had six months or more specialized training in teaching the Deaf-Blind:

5 (29.4%) listed helpful procedural advice to pass on to a new teacher related to control procedures to use.
8 (47.0%) listed helpful procedural advice to pass on to a new teacher related to instructional procedures to use (reinforcement, motivation, etc.)
4 (23.5%) listed helpful procedural advice to pass on to a new teacher related to information to collect concerning the child.
SECTION D - COMPARING TEACHERS SPECIALLY TRAINED IN DEAF-BLIND WITH TEACHERS NOT SPECIALLY TRAINED

Of the 69 teachers responding to the questionnaire, 36 had no specialized training in teaching the Deaf-Blind and 33 had specialized training in teaching the Deaf-Blind.

Of the 36 that had no specialized training in teaching the Deaf-Blind:

6 (25.0%) listed a procedure or material associated to physical skills.
7 (29.1%) listed a homemade device or material associated to physical skills.
6 (25.0%) listed a procedure or material associated to language skills.
5 (20.8%) listed a homemade device or material associated to language skills.

Of the 33 that had specialized training in teaching the Deaf-Blind:

2 (12.5%) listed a procedure or material associated to physical skills.
2 (12.5%) listed a homemade device or material associated to physical skills.
7 (43.7%) listed a procedure or material associated to language skills.
5 (31.2%) listed a homemade device or material associated to language skills.

Of the 33 that had specialized training in teaching the Deaf-Blind:

2 (33.0%) listed a projected medium teacher-made related to a promising procedure or material.
2 (33.0%) listed a projected medium related to a promising procedure or material.
0 (0.0%) listed an audio medium teacher-made related to a promising procedure or material.
2 (33.0%) listed an audio medium related to a promising procedure or material.
Of the 33 that had specialized training in teaching the Deaf-Blind:

0 (0.0%) listed a projected medium teacher-made related to a useful instructional material.

3 (42.0%) listed a projected medium related to a useful instructional material.

1 (14.0%) listed an audio medium teacher-made related to a useful instructional material.

3 (42.0%) listed an audio medium related to a useful instructional material.

SECTION E - COMPARING EXPERIENCED TEACHERS OF DEAF-BLIND WITH NON-EXPERIENCED TEACHERS

Of the 69 teachers responding to the questionnaire, 7 had no experience teaching the Deaf-Blind, and 62 had experience teaching the Deaf-Blind.

Of the 62 that had experience teaching the Deaf-Blind:

5 (45.4%) listed a projected medium teacher-made related to a promising procedure or material.

2 (18.1%) listed a projected medium related to a promising procedure or material.

1 (9.0%) listed an audio medium teacher-made related to a promising procedure or material.

3 (27.3%) listed an audio medium related to a promising procedure or material.

Of the 62 that had experience teaching the Deaf-Blind:

2 (16.6%) listed a projected medium teacher-made related to a useful instructional material.

3 (25.0%) listed a projected medium related to a useful instructional material.

1 (8.3%) listed an audio medium teacher-made related to a useful instructional material.

6 (50.0%) listed an audio medium related to a useful instructional material.
SECTION F - COMPARING TEACHERS OF THE DEAF-BLIND (WHO HAVE HAD EXPERIENCE TEACHING THE DEAF) WITH TEACHERS OF THE DEAF-BLIND (WHO HAVE HAD EXPERIENCE TEACHING THE BLIND)

Of the 69 teachers responding to the questionnaire, 50 had no experience in teaching the Deaf or Hard of Hearing.  
19 had experience in teaching the Deaf or Hard of Hearing.

Of the 19 that had experience in teaching the Deaf or Hard of Hearing:

4 (22.2%) listed a procedure or material related to visual development.
3 (16.6%) listed an instructional material related to visual development.
3 (16.6%) listed a homemade device or material related to visual development.
2 (11.1%) listed a procedure or material related to auditory development.
3 (16.6%) listed an instructional material related to auditory development.
3 (16.6%) listed a homemade device or material related to auditory development.

Of the 69 teachers responding to the questionnaire, 47 had no experience in teaching the Visually Handicapped.  
22 had experience in teaching the Visually Handicapped.

Of the 22 that had experience in teaching the Visually Handicapped:

5 (20.8%) listed a procedure or material related to visual development.
6 (25.0%) listed an instructional material related to visual development.
7 (29.1%) listed a homemade device or material related to visual development.
3 (12.5%) listed a procedure or material related to auditory development.
3 (12.5%) listed an instructional material related to auditory development.

0 (0.0%) listed a homemade device or material related to auditory development.

Of the 19 teachers with experience teaching the Deaf or Hard of Hearing and the 22 teachers with experience teaching the Visually Handicapped:

0 (0.0%) teachers listed a promising procedure or material or a useful instructional material related to olfactory development.

1 (50.0%) teacher with up to 6 months teaching experience teaching the Visually Handicapped listed a homemade device related to olfactory development.

1 (50.0%) teacher with two to three years teaching experience with the Deaf or Hard of Hearing listed a homemade device related to olfactory development.

SECTION G - DEAF-BLIND TEACHING EXPERIENCE OF RESPONDENTS

YEARS OF TEACHING EXPERIENCE

OF TEACHERS

0 Yrs. (7) 10.1%
Up to 6 Months (5) 7.2%
6-24 Months (35) 50.7%
2-3 Years (18) 26%
4 or more Years (4) 5.8%
Total Teaching Experience of Respondents

YEARS OF TEACHING EXPERIENCE

AMOUNT of Specialized Deaf-Blind Training of Respondents

YEARS OF SPECIALIZED TRAINING
SECTION H - SELECTED COMMENTS (IDEAS, PROCEDURES, ETC.) OF RESPONDENTS

For socialization we have used a trampoline and a waterbed. All the children and teachers get on together and bounce and roll and try to get the children to interact with each other.

--Lynn Wittkamp
7627 Cayton
Houston, Texas 77017

Teaching key--an index card box with double size cards. Three holes in the file box and 3 holes in each card for 3 answers. If the child chooses the correct answer, the card pulls out; if not, it will not come out.

--Virginia I. Smith
2418 Cabin Hill Road
Nashville, Tennessee 37214

Tactual-auditory-visual feedback machine made for people in the Oklahoma Deaf-Blind Program.

--Charles Lynd
165 La Media SW
Albuquerque, New Mexico 87105

This device is useful in teaching a child to suck through a straw. I took a "dream whip" plastic container with a tight fitting lid. I drilled a small hole in the lid (just large enough for a plastic straw to squeeze in). When liquid is in the container and the lid in place by gently pressing down on the cover liquid will be forced up the straw. Many of our children first accepted the straw with syrup on the top. A gentle pumping motion, on the cover, seemed to help develop the sucking skill quicker than single pushes.

--M. Jane Grauer
1895 Old Clinton Rd.
Macon, Georgia 31201

I am using selected items from the Hunt scale for the purpose of assessing sensory-motor behaviors in severely delayed rubella et. al. children.

A manual for the teaching of self care to Multiply Handicapped children--written by me for Peabody College. Also the team of MH teachers has produced manuals for teaching motor skills and communication skills.

--Dr. Rebecca DuBose
Box 326, Dept. of Special Ed.
Peabody College
Nashville, Tenn. 37202

1336
Homemade conditioning device with 3 different colored lights and a buzzer for reinforcement. Used for conditioning for auditory training and for reinforcement in speech work to increase attention span.

Notebook system--teacher writes in book every day, college aides and houseparents write in it and notebook is sent home with child on weekends. Parents write in it and send it back on Monday.

--Ms. Kathy Hyman  
The Maryland School for the Blind  
3501 Taylor Ave.  
Baltimore, Md.  21236

Color coding--The children's plates, cups, toothbrushes, chairs, bedspreads, and bureau drawers are of one particular color that identifies it as belonging to them. Also place mats are permanently affixed to the table so that each child has his own place in which to sit.

Voice Vibrator--This is a speaker enclosed in a small plastic box that vibrates when a child vocalizes through a microphone. The child places his hand on the box or the box is placed on a sensitive area of child such as his stomach. This vibration motivates the child to use his voice.

--Deaf/Blind Program  
Respite House  
Community Association for Retarded, Inc.  
3864 Middlefield Road  
Palo Alto, Ca.  94303

A moving electrical animal that moves when a child responds to noise, signal, or voice in a free field audiometric testing situation.

--Nancy S. Rowland  
2234 Lochlevin Dr.  
Memphis, Tenn.  38138

Color Audiometer--This is a device built for us by an engineering class at Oklahoma University. Has a steering wheel that turns and changes frequencies of sound; as frequencies vary the lights on a screen vary also. Certain colors of light react to certain frequencies of sound.

--Barbara Porter  
403 E. Brooks, Apt. A-32  
Norman, Oklahoma  73069

A concentrated sense training program developed here by my supervisor to expand experiences. Mr. Bill Peck's Language Development Program from Oregon School for the Deaf (associating the printed word with personal needs). Seen demonstrated at
another Deaf-Blind unit, the Project Life materials.

--Mrs. Mary Tinsman
Rt. 2, Box 110E
Battle Ground, Wa. 98604

Toy lamb with eyes that light up when child talks to it. A tape recorder is attached to lamb so that each session can be recorded and played back. The children enjoy listening to their own voice and listening to the sessions is helpful for the evaluation of the teacher.

--Jone Ubbenga
805 138th N.E., Apt. I
Bellevue, Wa. 98005

A string of Christmas tree lights hung on a wall over the toilet. When the child has used the toilet, the lights are flashed. Result: the child now uses toilet, no lights.

--Katherine Morgan
One Plaza Street
Brooklyn, N.Y. 11217

We developed our own communication curriculum based on behavior modification techniques.

--Robert E. Stewart, Jr.
Minnesota Braille and Sight Saving School
Faubault, Minn. 55027

A light box with 6 flashing lights and a student panel and experimenter control panel used for reading readiness and teaching children to read names of colors with large print. Box has a variety of uses. Write for further information.

Rear view projection screen--from acetate over a 18" x 18" cardboard box. Good for individualized instruction and prevents child from being distracted by light from projector.

--Ms. Meredith M. Schroeder
1122 Pine St., N.E.
Salem, Oregon 97310

We're working on a rear view projection screen about 2' x 3' with plexiglass front to it.

--Mrs. L.L. Wiltshire
California School for the Blind
3001 Derby St.
Berkeley, Ca. 94707

Our media specialist devised a telephone intercom system using real phones and an electrical switch for tuning in the children's voices. This is an excellent device for teaching language.
Overhead projector, flashlights, candles, lighted drum, etc. for darkroom activities.

24" x 16" picture of each child's upper torso showing him holding a large card with his name on it. I use this in teaching self-identification.

--Betty Scalaet
333 First St., Fl02
Seal Beach, Ca. 90740

The Ellisville Deaf-Blind Program and ability Screening Test. This test is a useful tool as an individual screening instrument for both children and adults with multiple handicaps of Visual and Auditory impairment.

--Terry Graham
Ellisville State School
Ellisville, Miss. 33437

We use a wide variety of materials in the class, all of which seem to have purpose to the children. Rather than listing specific materials I thought it would be better to give you an idea what these materials offer. Materials that have cause and effect—in other words if the child acts on material it changes in some way and the child is able to get the feedback of that change; sequenced materials; materials which have their own control of error; lots of big motor materials, such as balls that can be climbed over and through and balls that can be rolled over with the whole body; practical life activities such as making pudding, washing windows, washing clothes, peeling carrots, making salads, etc. Age of child: from 0-17 years. Developmental level: from 4 months to 16 years. Degree of vision: varies from total blindness to minimally impaired vision. Degree of hearing: from profound hearing loss to within normal limits.

TAV Unit (Tactile Auditory Visual Unit). This is a unit which when sound stimulus is introduced to the receiver it is transmitted via light impulses via the sound board which vibrates and via the earphones which give amplification to the sound. Another material found especially fun for the majority of children I see is placing paper over a window screen with a large crayon making scribbles and marks in all directions. The child is able to get a raised impression from the marks he has effected on the paper. Another activity that I am relying on a good bit now is very simple sequenced motor exercises with which a language label is associated. These materials are used to present sound in multi-sensory manner and to give the child an idea of the effect of his voice upon this apparatus and to conduct all sorts of auditory training and language training. The screen coloring that I described is used to coordinate in the child's mind the movement of his hands and the image that remains from this movement; for those children who have vision, it is used for eye-motor coordination, laterality training, practicing crossing midline, and for fun. It has that advantage of offering a tactile impression. We emphasize the multi-sensory approach.
The Walking Xylophone--This is a device that was manufactured by a group of engineering students at the University of Oklahoma. They observed the children in school, met with the teachers and we described to them the kind of material we wanted. The walking xylophone is a very, very large xylophone with railings. As the child steps on the first section of the xylophone it lights up and makes a low frequency sound. The next step would also light up and emit a higher frequency sound. As the child walks across the xylophone he is getting color changes and higher frequency sounds. This material encourages walking, crawling, color and sound association.

Another material that the engineers developed is called the "Color Audiometer." This is a device where if the child speaks into the microphone he gets many types of light patterns on a screen. The light varies from green to orange, etc. There is a wheel on the machine that a child can turn that increases the frequency changing the pitch of the sound stimulus. There is a lever which the child can manipulate by moving the lever up and down. This changes the intensity of the sound. This device again has many cause and effect characteristics. The specifications on these pieces of equipment and future pieces of equipment should be developed soon and are going to be available.

--Cathy Groves
623 N.W. 19th
Oklahoma, City, Oklahoma 73103
### SECTION I - RAW DATA

#### YEARS OF TEACHING EXPERIENCE

<table>
<thead>
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#### YEARS OF TEACHING DEAF-BLIND

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#### YEARS OF TEACHING DEAF

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<td>2-3 years</td>
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### Years of Teaching Other Areas Than Those Listed

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### Years of Specialized Training in Teaching Deaf-Blind

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<tr>
<td>auditory development</td>
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<td>tactile development</td>
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<td>kinesthetic development</td>
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<td>visual-audio</td>
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<tr>
<td>perceptual-motor</td>
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### Type of Promising Procedure or Material

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### PROMISING PROCEDURE OR MATERIAL ASSOCIATED TO

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<td>reading skills</td>
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<tr>
<td>language (communication, total communication, etc.)</td>
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<tr>
<td>physical skills</td>
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<tr>
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<td>expression--arts</td>
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### USEFUL INSTRUCTIONAL MATERIAL RELATED TO:

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<td>perceptual-motor</td>
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### TYPE OF USEFUL INSTRUCTIONAL MATERIAL

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<td>procedure</td>
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<td>reading skills</td>
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<td>language (communication, total communication, etc.)</td>
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<td>language (communication skills, total communication, etc.)</td>
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MEMORANDUM

TO: Colleagues in the Education of Deaf/Blind Children

FROM: Lou Alonso, Coordinator of Training Programs for Teachers of Deaf/Blind Children and Director of the IMC

SUBJECT: A Request for your Ideas

As a teacher of deaf/blind children or associated with teacher preparation, we know you are constantly searching for new teaching ideas and have, in the process, formed opinions regarding materials and techniques which are useful in training multi handicapped children.

Ted Ward and I at the USOE/MSU Regional IMC plan to collect information about promising practices in the education and training of deaf/blind children, share the ideas with others, and use the descriptions to guide our future studies, development and reporting to the field.

Will you take a few moments, complete the attached form, and return it to us? We appreciate your willingness to cooperate.
SURVEY OF DEAF-BLIND TEACHING PRACTICES
Report Form

1. Describe a promising procedure or material that you have begun to use this year:

________________________________________________________________________

(Age of child: ____ Developmental level: ____ Degree of vision ____
Degree of hearing: ____________________________ )

2. What is the most useful instructional material that you use frequently:

________________________________________________________________________

(Age of child: ____ Developmental level: ____ Degree of vision ____
Degree of hearing: ____________________________ )

3. Describe a device or material that you made, or had made, that is particularly useful:

________________________________________________________________________

(Age of child: ____ Developmental level: ____ Degree of vision ____
Degree of hearing: ____________________________ )

4. What is the most helpful procedural advice you would pass on to a new teacher of the deaf/blind:

________________________________________________________________________

Years of teaching:
Months of teaching deaf/blind: ________ Deaf: ________ Visually Handicapped: ________ Mentally Retarded: ________ Emotionally Disturbed: ________ Other: ________

Months of specialized training in teaching the deaf/blind: ________

I would like a copy of the report: ________

Name: __________________________
Address: ____________________________________________________________
City __________________ State / Zip __________________

THANKS FOR YOUR HELP!

Return to: Lou Alonso
213 Erickson Hall
Michigan State University
East Lansing, Michigan 48823

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21
INSTRUCTIONAL MATERIALS PRODUCTION

The production of instructional materials is, reasonably, a concern of the Instructional Materials Center. Nevertheless the IMC is not in a position to engage in production. Therefore, some way or ways must be identified and established (or regularized) so that important instructional materials developments may be put into the mainstream of educational and school-market products.

Development, Authorship, Production, and Marketing

Distinction must be made between four different links of the idea-to-classroom chain. Each is separate from the other and must be seen as having its own problems.

Development. The raw idea about an instructional material must first be put into some sort of illustrative form and "played with" by insightful materials developers and practitioners. This link in the process calls for creative and imaginative design and objective evaluation. Interaction of the creative and evaluative efforts can result in a rapid-fire cycling and re-cycling of the raw idea into increasingly workable instructional materials.

The output of the development phase is, at most, prototypes and pre-production samples. If the development step has been sponsored by public funds, the products of this step are in public domain. This requires that free access must be provided to any producer who wishes to arrange for his own authorship, production and marketing. It further disallows any attempt to claim exclusive rights through copyright or patent to the particular material prototypes already developed. The posture of this IMC is to participate actively in materials development.

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Authorship. Most instructional materials are essentially the product of an author or authors who have expanded into full-blown form some particular instructional material idea. There is no intention in this Instructional Materials Center to assign staff to authorship, nor to allow staff persons to use their on-duty time and engage in writing instructional materials scripts, text manuscripts, scenarios or other acts of authorship. (This restriction does not pertain to the authorship of prototypes described above -- which alone have no commercial value.) The posture of this IMC is to stimulate and encourage responsible authorship of promising instructional materials.

Production. Before scripts, manuscripts or other large-scale authorship is undertaken by the knowledgable author, he has some distinct assurance that production will be effected by an appropriate publisher. This Instructional Materials Center does not intend to engage in production other than the minimal production of its own dissemination material for teacher in-service education. (Such small quantities of these materials as are required to support the field services and field representatives hardly constitutes serious production.) The posture of this IMC is to encourage and to participate in promoting the production of promising instructional materials. This does not include participation in promotional activities on any preferential basis other than to disseminate information about the ultimate productions of center-developed materials. "Promoting the production" is a specialized activity involving the locating of appropriate publishers or manufacturers and encouraging their interest in the production of important materials for use with handicapped children. As this IMC views its responsibilities, this is an important aspect of dissemination.

Marketing. The final link in the chain is marketing, an intensely competitive and highly specialized phenomenon of the free-enterprise system. It has been said that without an effective marketing system you couldn't sell dollar bills for a dime each. Since there is much truth in this, there is a
concern in this Instructional Materials Center that the production of promising materials be in the hands of those who can adequately market to the nationwide school constituency. It is, however, the posture of the IMC to remain aloof from marketing matters other than those which are contingent upon production decisions.

Product Realization Plans

Following are three schematic diagrams which represent (I) the basic production plan followed in this IMC, and (II and III) closely related derivative plans to meet special needs.

The basic plan and its derivatives are designed to maximize the development contribution of the IMC while completely avoiding involvement in copyright and production responsibilities. All contributions of the IMC are in public domain, are restricted to prototypes of less than full sets of materials, and generally have no commercial value until enlarged by able authors into full-scale sets.
I. Basic Plan -- in which the IMC engages only in development of an idea, returning the development to its originator(s) within the profession for their disposition, while also disseminating the particular contribution of the IMC.

<table>
<thead>
<tr>
<th>Innovators and Authors</th>
<th>IMC</th>
<th>Publishers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idea or rough-form instructional material</td>
<td>Assessment of worth: development including experimental prototypes</td>
<td>Publisher-author agreements, production and marketing</td>
</tr>
<tr>
<td>Writing into full-scale materials or series</td>
<td></td>
<td>Public domain dissemination of the ideas, refinements, and prototypes contributed by the IMC</td>
</tr>
</tbody>
</table>
II. Plan for Assuring Production -- suitable for small quantities of materials when user or distributor is an outside public agency.

<table>
<thead>
<tr>
<th>Innovators and Authors</th>
<th>IMC</th>
<th>Bureau of Publication or University Press</th>
<th>Public School, Library, State Department, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analysis and assignment to innovator-author</td>
<td>Initiating request to meet known need</td>
</tr>
<tr>
<td>Design and prototyping</td>
<td></td>
<td>Evaluation and Development</td>
<td></td>
</tr>
<tr>
<td>Authorship of full material</td>
<td></td>
<td>Production</td>
<td>Responsibility for costs</td>
</tr>
</tbody>
</table>

Public domain dissemination of the ideas, refinements and prototypes contributed by the IMC
EVALUATING INSTRUCTIONAL GAMES AND SIMULATIONS

Ted Ward
Professor of Education
Michigan State University

Evaluation of instructional games and simulations has two purposes. First, evaluation can provide a basis for making modifications and improvements in the learning exercise. Evaluation for this purpose has become known as formative evaluation. The second set of purposes for which evaluation is done is the more classical — determining how effective the learning exercises are. Evaluation for this purpose, summative evaluation, is concerned with determination that an instructional material or system has accomplished the learning objectives for which it was intended. Summative evaluation is essentially product evaluation or outcome evaluation, where the outcome is in terms of changed learners or accrued learning.

Evaluations of instructional games and simulations should give account of three aspects of the instructional materials and experience. First, as would be the case with any educational evaluation, there must be a concern for what has been learned. Learning is typically evaluated in terms of the change in the learner which can be credited to the given instructional experience. This first aspect of evaluation is concerned with the gain or changes in content knowledge (and all other significant aspects of learning) which can be seen as a consequence of the instructional game or simulation. A taxonomic approach to learning — concern for the specific kinds and levels of cognitive, affective and psychomotor learnings — is required. The second aspect of instructional games and simulations that should be
considered for evaluation is motivation. One of the major reasons for the use of instructional games and simulations is to increase the interest level of the learners while moving toward the desired learning outcomes. Motivation, in this sense, is concerned with the degree to which an instructional experience draws the interest and is able to hold the interest of the learner. The third aspect of instructional games and simulations that must be considered for evaluation is the crucial concern for transfer of learning. Although much of formal education evades the test of demonstrated positive transfer of learning to the assumed equivalent tasks of life, concern for transfer is often the primary reason for using instructional games and simulations. Thus it is incumbent upon designers and users of instructional games and simulations to be concerned about transfer of learning when they are planning an evaluation program.

Evaluating Learning

Although it is more characteristic to evaluate learning by giving a test at the end of a learning experience, any valid claims about change in the learners must be based on comparisons of data from tests at the end of the experience and comparable tests at the beginning. Thus a pretest/post-test approach to evaluating the learning increment is indicated. There should be a high degree of consistency between the stated objectives for the experience and the items to be examined in the pretest/post-test routine. Typically, in a well designed instructional program it is possible to infer the objectives by examining the tests or to project the tests by examining the statement of objectives.
One of the commonly overlooked concerns in evaluation of content gain is the possibility that learners may be regressing in some important area while they are apparently gaining on the intended learning. The classical example, of course, is the tendency of students to grow to dislike arithmetic, even though they may be gaining computational skills through continued exposure to arithmetic instruction. A comprehensive evaluation of learning should give some attention to the sorts of "bad learnings" or unintended accomplishments that may accompany a learning experience. This can be accomplished by providing for a monitoring (in the pre/post testing) of crucial concomitant learnings that should not be allowed to regress or develop in the wrong direction as a byproduct of the instructional simulation.

Evaluating Motivation

Evaluating motivation can be accomplished best by observing learners of different sorts while they are engaged in a learning experience. Often the developer or leader can pay attention to the levels of interest and the points in the game or simulation at which interest lags or the students become disengaged from one another or from the experience itself. It is helpful to make a chart, blocking off on the horizontal the various phases of the instructional experience, and to mark a series of points representing highness and lowness of interest at many points in time. Thus it is possible to derive a relatively reliable picture of the rising and falling of apparent interest during each phase of the experience. A simple graph can be produced using several colored pencils to represent the interest level of several students under observation. Another commonly used technique for evaluating motivation is to ask participants to write their level of interest.
or to respond to questions that ask specifically about their interests in, as well as enjoyment and satisfaction derived from, various parts of the instructional exercise. It has been our experience that, in general, students are able to add significant information through this sort of questionnaire or open-ended response to questions about motivation, interest and enjoyment. But such information is no substitute for direct observation of a group of students engaged in the experience under conditions for which it was designed.

**Evaluating Transfer of Learning**

In fairness, there would seem to be no strong reason why instructional simulations and games should be expected to pass a more critical test of transferability from the school environment to the real world than are other school experiences. Nevertheless it has been accepted among designers and users of instructional games and simulations that their concern for evaluating transfer of learning is required because of the claims that are made about simulation and instructional games. If instructional games and simulations are used in order to increase the relevancy of learning to the real world, designers and users should determine that, in fact, such a claim is valid.

The most valid tests of transfer would necessarily be done in longitudinal studies. Testing the learners as they encounter the real situation for which the simulation had supposedly trained them would be required. Since in many instances the moment of encounter with the real world equivalent may be months or years later, a longitudinal approach, while ideal,
may be impractical. (It is just this impracticality that has been used historically to exempt the school from answering the tough questions about the relevancy and the transferability of learnings gained within formal education.) Thus instructional simulation designers and users often use a second approach when longitudinal studies are impractical; a second simulation is designed in which the major purpose is to test the application of skills gained in the first simulation. In other words, the transfer of learning gained in a particular simulation or game is assessed in terms of the degree to which the student can competently deal with the problems in a new but related situation. Thus some simulations have as their primary purpose training while others have as their primary purpose the evaluation of the learning from a previous simulation.

Distinctions Between Formative and Summative Evaluation

With reference to the evaluation of learning (content acquisition), both formative and summative evaluation is indicated. Of primary concern during the development of or the refinement of an instructional game or simulation is evaluation that indicates which of the learnings are being accomplished and which are not and -- to some degree -- what sorts of learners are learning and what sorts are not. Such information should be made available from a formative evaluation so that designers can take steps to make corrections or adjustments as indicated by the patterns of strengths and weaknesses in the learning exercises. From a summative point of view, evaluation of learning is necessary in order to establish the validity of the game or simulation in terms of its potentialities for
achieving its claimed learning objectives. For the users, whether or not to use the particular instructional experience again is decided by summative evaluation. Summative evaluation can also be useful to determine what auxiliary experiences must be provided in order to broaden the learnings and to clear up the less well accomplished objectives.

Summative evaluation, especially if derived at several different points during an experience, is also useful as an instructional input to the learner. As the learner gets information on the results of his actions and decisions he becomes more fully a party to the whole learning process, making changes and corrections as needed to more fully accomplish his own learning objectives.

Most evaluation of motivation of an instructional game or simulation is done for formative purposes. Such evaluations are very helpful in the refinement of an instructional experience, assuming that the designer is free to alter the characteristics in such a way that the phases of an activity in which interest wanes can be rebuilt or redesigned so as to keep the interest level higher. As a summative evaluation, indications of the observed motivation level of the game or simulation can be useful in making decisions about whether or not to use it for particular groups.

Evaluations of transfer of learning can serve formative and summative purposes. In both instances they serve as the crucial indicator of whether or not the experience in its present form will be justified in terms of cost and time as the educational intervention leading toward a certain competency in the real world. For the designer, this sort of information --
usually derived from a research study of the relationship of learning acquired in the exercise to the learning demanded in the real world — is extremely useful in the redesign of a faulty game or simulation. For the user of the exercise, data concerning the degree of transfer can be a basis for making decisions about whether or not to use the experience.

Summary

Instructional games and simulations are a product of the technological approach to educational design. As such they are necessarily subject to the major criteria of effective educational technology: precisely defined objectives and precisely measured learning outcomes.
The Use of MSU SEIMC Teacher Training Kits in Michigan, Indiana, and Ohio
S. Joseph Levine

On March 9, 12 and 13, 1973, a telephone survey was conducted in Michigan, Indiana, and Ohio. The purpose of this survey was:

a) to ascertain the extent to which the MSU SEIMC teacher training materials are being used by state designated teacher trainers;

b) reactions from these teacher trainers regarding the usefulness of these materials;

c) reactions from these teacher trainers regarding new materials that should be developed.

A total of thirty-seven (37) phone calls were completed during this three day period. This represents 50% of the seventy-four (74) designated teacher trainers in the three states.

<table>
<thead>
<tr>
<th>State</th>
<th># of designated teacher trainers</th>
<th># of calls completed</th>
<th>% surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>45</td>
<td>18</td>
<td>40%</td>
</tr>
<tr>
<td>Indiana</td>
<td>13</td>
<td>8</td>
<td>62%</td>
</tr>
<tr>
<td>Ohio</td>
<td>16</td>
<td>11</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>74</td>
<td>37</td>
<td>50%</td>
</tr>
</tbody>
</table>

A "User Reaction" form was developed to standardize the inquiry procedure (see Appendix A). Three MSU SEIMC staff members made the survey phone calls. Each staff member was assigned a single state.

RESULTS

Question 1: Are you familiar with the MSU SEIMC teacher-training kits?

Thirty-three (33) of the thirty-seven (37) trainers that were surveyed were familiar with the MSU SEIMC teacher-training kits. This represents 89.2% of those surveyed.
This percentage indicates that dissemination of information about the teacher training kits has been effective. Of the four "trainers" who were not familiar with the kits, two were not offering in-service training to their teachers (residential institutions), and one was new to the job and not yet fully operational in serving teachers.

<table>
<thead>
<tr>
<th></th>
<th>Familiar</th>
<th>Not Familiar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>16 (88.9%)</td>
<td>2 (11.1%)</td>
</tr>
<tr>
<td>Indiana</td>
<td>7 (87.5%)</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Ohio</td>
<td>10 (90.9%)</td>
<td>1 (9.1%)</td>
</tr>
<tr>
<td></td>
<td>33 (89.2%)</td>
<td>4 (10.8%)</td>
</tr>
</tbody>
</table>

Question 2: Have you used any of these kits?

Twenty-four (24) of the thirty-three (33) trainers that indicated they were familiar with the teacher-training kits have actually used the kits. This represents 72.7% use from those that are aware of the kits.

In terms of the total sample, 64.9% (24 of 37) of those surveyed have used the materials.

These percentages indicate that the teacher training kits are being used. It is felt that this high use is strongly related to the dissemination effort as reported in Question #1. Further, it is an indication of the large amount of local in-service education that is being conducted by local personnel. This last point has been a guiding concern in the development of the teacher-training kit concept. The model for in-service education in these three states has shifted considerably during the past six years during which time the in-service training kits have been developed and disseminated.

<table>
<thead>
<tr>
<th>Those that are familiar</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Used</td>
<td>Have not Used</td>
</tr>
<tr>
<td>Michigan</td>
<td>12 (75.0%)</td>
</tr>
<tr>
<td>Indiana</td>
<td>6 (85.7%)</td>
</tr>
<tr>
<td>Ohio</td>
<td>6 (60.0%)</td>
</tr>
<tr>
<td>24 (72.7%)</td>
<td>9 (27.3%)</td>
</tr>
</tbody>
</table>

Question 2A: How many different kits have you used?

Of those trainers who have used the kits, each trainer has used an average of 4.04 different kits. The highest number of different kits used by a trainer is 10 (reported by 4 trainers) and the lowest number is 1 (reported by 7 trainers).
## Telephone Survey

### Page 3

<table>
<thead>
<tr>
<th># of different kits used</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Michigan</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

46 different kits used by 12 different trainers (average = 3.8 kits/trainer)

<table>
<thead>
<tr>
<th><strong>Indiana</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

25 different kits used by 6 different trainers (average = 4.2 kits/trainer)

<table>
<thead>
<tr>
<th><strong>Ohio</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

26 different kits used by 6 different trainers (average = 4.3 kits/trainer)

<table>
<thead>
<tr>
<th><strong>Three states combined</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

97 different kits used by 24 different trainers (average = 4.04 kits/trainer)

### Question 2B: What are the names of the kits you have used?

The names of the kits that have been used and the number of trainers who have used them are:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Name of Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Workshop Planning Kit</td>
</tr>
<tr>
<td>6</td>
<td>Toward an Understanding of Instructional Objectives</td>
</tr>
</tbody>
</table>

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### Question 2C: Of the kits that you have used, which one or two have you found to be particularly useful?

The kits found to be most useful by the teacher trainers are listed below.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Name of Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Learners' Approaches to Learning</td>
</tr>
<tr>
<td>6</td>
<td>Toward an Understanding of Perceptual-Motor Programs</td>
</tr>
<tr>
<td>6</td>
<td>L.D. Card Game</td>
</tr>
<tr>
<td>5</td>
<td>Designing Instructional Games</td>
</tr>
<tr>
<td>5</td>
<td>Games Teach</td>
</tr>
<tr>
<td>4</td>
<td>Evaluating Instructional Materials</td>
</tr>
<tr>
<td>4</td>
<td>Tapes Teach</td>
</tr>
<tr>
<td>4</td>
<td>Building a Perceptual Motor Experience</td>
</tr>
<tr>
<td>4</td>
<td>Problems and Hints</td>
</tr>
<tr>
<td>3</td>
<td>Objectives-Oriented Instruction</td>
</tr>
<tr>
<td>3</td>
<td>Puzzles and Mazes Teach</td>
</tr>
<tr>
<td>3</td>
<td>Experiments Teach</td>
</tr>
<tr>
<td>3</td>
<td>Describe Your Learner</td>
</tr>
<tr>
<td>2</td>
<td>Observation Teaches</td>
</tr>
<tr>
<td>2</td>
<td>Goals for Education</td>
</tr>
<tr>
<td>2</td>
<td>Designing Criterion Measures</td>
</tr>
<tr>
<td>1</td>
<td>Using Video Tape Recorders</td>
</tr>
<tr>
<td>1</td>
<td>Polar Algebra</td>
</tr>
<tr>
<td>1</td>
<td>The Analogy Game</td>
</tr>
<tr>
<td>1</td>
<td>You Are...</td>
</tr>
<tr>
<td>1</td>
<td>Low Vision Kit</td>
</tr>
<tr>
<td>1</td>
<td>Reinforcement Mystery Games</td>
</tr>
<tr>
<td>1</td>
<td>Planning Priorities</td>
</tr>
</tbody>
</table>

*NOTE: Though Question #2A reports 97 kits used, some respondents were not able to identify by name all of the kits that they have used. Consequently only 82 were identified by name.*
Question 2D: How many workshops or other instances have you had where you have used these kits for part or all of the activity?

The 24 teacher trainers who have used the kits have provided approximately 345 workshops when the kits have been used. An average of 14.4 workshops, using the MSU kits, have been held by each of the teacher trainers. As reported by these trainers, this figure represents workshops held primarily during the past 24 months. Therefore, approximately 7 workshops have been held each year by each trainer that utilize the MSU kits.

<table>
<thead>
<tr>
<th># of workshops held where MSU kits have been used</th>
<th># of teacher trainers</th>
<th>Average trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>127</td>
<td>12</td>
</tr>
<tr>
<td>Indiana</td>
<td>154</td>
<td>6</td>
</tr>
<tr>
<td>Ohio</td>
<td>64</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>345</td>
<td>24</td>
</tr>
</tbody>
</table>

Question 2E: How many teachers have you reached through the use of these kits?

A total of approximately 4857 teachers were reached through the 345 workshops that were held that utilized the MSU kits. This represents an average of approximately 14.1 teachers per session.

<table>
<thead>
<tr>
<th># of teachers reached</th>
<th># of workshops offered</th>
<th>Average session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>1760</td>
<td>127</td>
</tr>
<tr>
<td>Indiana</td>
<td>1525</td>
<td>154</td>
</tr>
<tr>
<td>Ohio</td>
<td>1572</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>4857</td>
<td>345</td>
</tr>
</tbody>
</table>

Question 3: Have you adapted or modified any of the kits to better fulfill your needs?

This question was designed to ascertain if the teacher-trainers have adapted or modified any of the kits for their specific use. Of the 24 trainers who have used the kits, 67% of them (16) have adapted or modified the kits for their own use. This is a further indication that local teacher trainers are accepting the responsibility for in-service education. The concept of adaptation and modification is continually stressed in all communications with the teacher trainers.

<table>
<thead>
<tr>
<th># of trainers who have adapted or modified</th>
<th># who have not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan 8 (66.7%)</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>Indiana 4 (66.7%)</td>
<td>2 (33.3%)</td>
</tr>
<tr>
<td>Ohio 4 (66.7%)</td>
<td>2 (33.3%)</td>
</tr>
<tr>
<td>16 (66.7%)</td>
<td>8 (33.3%)</td>
</tr>
</tbody>
</table>
**Question 4:** Are other groups or agencies in your area using the kits?

This question showed that other groups or agencies are using the MSU kits in 12 (50%) of the locations where the kits are being used.

<table>
<thead>
<tr>
<th>State</th>
<th>Using</th>
<th>Not Using</th>
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</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>4 (33.3%)</td>
<td>8 (66.7%)</td>
</tr>
<tr>
<td>Indiana</td>
<td>2 (33.3%)</td>
<td>4 (66.7%)</td>
</tr>
<tr>
<td>Ohio</td>
<td>6 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12 (50%)</strong></td>
<td><strong>12 (50%)</strong></td>
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</table>
COMMENTS:

A number of the teacher trainers surveyed offered suggestions and comments relevant to the development and offering of the teacher training kits. The following comments were made:

1. It seems that a second level of teacher trainer is steadily emerging in the three state region. Local supervisors and coordinators are working through the teacher trainer to actually provide the teacher training sessions. In these cases, the teacher trainer provides the supervisor with the materials for conducting the workshop. As such, the self-contained teacher training kits, as developed by the MSU SEIMC, will be getting continued usage due to the ease of communicating the training procedure to a different trainer.

2. A number of those surveyed requested that we develop training kits that take a shorter amount of time for delivery. They spoke of 20 minute to half-hour sessions where a short experience could be provided as part of a regular teacher meeting by a local building principal or administrator. These experiences should be self-contained and very simple for the trainer to understand and communicate to a group. A series of 10 to 20 of these short sessions could form the basis of a whole year's worth of regularly scheduled teacher meetings. By making the experiences short in nature, the chance that they will actually be used will be heightened. This type of training session should not be confused with the training session that the SEIMC has been working toward in the current group of training materials. This type of session would be that session which is really called for some other purpose and the training is offered as an adjunct to the primary reason for the meeting.

3. Some of the teacher trainers who operate out of associate centers have bound the MSU kits into a handy reference publication to immediately answer local coordinators' requests for materials for training sessions. This idea of grouping materials together for handy reference should be reinforced through this year's set of materials which has been designed for dissemination as three separate publications containing a total of 18 or more separate training experiences.

4. One respondent mentioned the problem of finding time to examine all of the training materials for developing an understanding of the dynamics of the material and how and when to use. The suggestion was offered that a short cassette tape accompany each training experience to assist the local trainer in quickly scanning a kit to find out whether it will meet local needs. This idea of short reported overviews was tried immediately after the telephone survey at the TRI-STATE WORKSHOP and was found to be quite successful with those attending the workshop. Based on this comment and the experience at the workshop, some form of overview recording will be developed for this year's series of training materials.
5. It seems that there is still a concern in the field for "hands on" media workshops where participants learn to use the various pieces of media that are available to them. It would seem appropriate for the MSU SEIMC to collect some of the many materials that are available for media workshops and to make them available to the teacher trainers. Since there is a great deal of information of this type already available, it would not be appropriate for the MSU SEIMC to develop actual training kits on the topic of media.

6. The WORKSHOP PLANNING KIT seems to fulfill a great need in the field for assistance to local coordinators in actually planning their own workshop. The idea of providing more material to the local workshop leader to assist in planning and developing a workshop is further supported by the growing interest in the MSU SEIMC booklet entitled "Yours...For A Better Workshop." To guarantee the further and expanded use of the MSU SEIMC training materials, it would seem appropriate that some further short publication (with an s) be developed that would further establish the necessary individual competencies for setting up a local workshop. Ideally, such a publication would allow the local trainer to better utilize the MSU material and at the same time feel more comfortable about the design and development of their plan for the training of local teachers.

7. It was evident from the telephone survey that a good percentage of the teacher trainers that utilize the MSU teacher training kits have trouble remembering the content of the kit from the title. Many of the titles, though descriptive, do not specify exactly what is contained in the experience. A suggestion to assist in alleviating this problem would be the development of a chart whereby the different kits are shown in terms of the different types of objectives that are met. Such a chart would list the kits along one axis and a series of possible objectives along the other axis. X's or dots would be shown for the objectives that each kit meets. This chart would accompany the abstracts of the kits and thereby provide a full understanding of the capabilities of the kits.
USER REACTIONS

The MSU SEIMC is putting together a three-state survey of associate centers and resource consultants and their uses of the MSU teacher-training kits.

1. Are you familiar with the MSU SEIMC teacher-training kits?

2. Have you used any of these kits?
   2A. How many different kits have you used?
   2B. What are the names of the kits that you have used?

   2C. Of the kits that you have used, which one or two have you found to be particularly useful?

   2D. How many workshops or other instances have you had where you have used these kits for part or all of the activity?

   2E. How many teachers have you reached through the use of these kits?

   ___ under 50   ___ 50-100   ___ 100-150   ___ over 150

3. Have you adapted or modified any of the kits to better fulfill your needs?

4. Are other groups or agencies in your area using the kits?

Name: ____________________________________________
Address: __________________________________________
Phone No.: ________________________________________
FIRST DRAFT

A SYSTEM FOR THE CLASSIFICATION AND CATEGORIZATION OF INSTRUCTIONAL MATERIALS

S. JOSEPH LEVINE
JULY 1973

FOR LIMITED DISTRIBUTION
INTRODUCTION

This paper is concerned with the development of a national system for the classification and categorization of instructional materials for handicapped learners. It is organized in a number of specific sections in an attempt to systematically deal with the problem and provide a workable solution. The sections are:

-- a quick overview of the application of a systems approach to the development of an information system.
-- a statement of the problem.
-- a comparison of existing systems, broken into two sections to facilitate comparison.
-- the exclusion of judgmental options in the categorical system.
-- the suggestion for using two existing systems that contain a cross section of items found in other systems.
-- a suggested plan for the interlock and further building of these two systems based on user feedback.

THE APPLICATION OF A SYSTEM TO THE DEVELOPMENT OF A CLASSIFICATION SCHEME

To develop a unified system of information about instructional materials that have value for use with handicapped children requires a number of separate actions. First, it is necessary to examine and ascertain the current state of such a system. Then, to create an initial working system that can be continually improved and modified through information collected about how the system operates.
To attempt to develop a "perfect" operational system at the "first pass" would certainly present the possibility of creating a non-functional system that is not responsive to needed modifications that may surface in the future. The charge, then, in creating a system for the systematic collection and dissemination of information about instructional materials is to develop a system that is responsive to the needs of the system users. Responsiveness must be the initial impetus for the original design of the system (based on what has occurred in the past) and the impetus to keep the system growing (built on operational feedback that provides direction to the system based on the results of what the system attempts.)

Appropriate feedback to such a collection and dissemination system must be contingent upon the careful examination of the interaction of two components. Typically, the system is entirely built around the development of an information base. As such, little attention is paid to the user referent and the viability of the information base as seen by the user. The question of dissemination of the information must be examined early in the development of such a system to increase the probability that the information
will, in fact, get to the user and be used. The development of the dissemination plan must be parallel to the development of the information base. By so doing, the likelihood of actually disseminating the information will be increased.

THE PROBLEM

The most basic part of any system for the collection and dissemination of information about instructional materials is the utilization of a reliable set of categorical descriptors. Such a set of descriptors serves to:

-- provide a direct method of comparison between materials.
-- provide basic objective information about individual materials.
-- assist in the cataloging and retrieval of materials.
-- promote unified collection of information about materials.

To date there have been many attempts to establish systems of categorical descriptors at local levels. Such systems have, to varying extents, fulfilled local needs. There has been, however, no national effort to design a set of categorical descriptors that will meet the needs of all users. This paper addresses itself to a procedure for creating such a national system. The unique aspect

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of this description is its foundation in existing systems as a base for the responsive development of a system that will serve its users.

AN EXAMINATION OF CURRENT SYSTEMS

There are a number of currently used systems and also systems that have been abandoned that provide an excellent overview of the wealth of aspects that must be covered in a national system. The following matrices present a comparative look at a number of these systems. It was found that a natural dividing point existed in the types of items included on the various forms. Matrix A shows objective information of a strictly "physical" nature. Matrix B presents a comparison of items of an "educational" nature calling for more subjective analysis by the individual completing the form. The 10 forms that were analyzed are denoted on the matrices by the letters "A" through "J".
## MATRIX A

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1374
## MATRIX B

### EDUCATIONAL INFORMATION

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A comparison of the forms displayed in Matrix A shows:

-- Form A is most comprehensive.

-- The most often included items are title, category (disability area), author, date, publication date, price, and source (producer).

-- Form A includes a greater number of items that are appropriate for a national system.

A comparison of the forms displayed in Matrix B shows:

-- a large difference in the number of items on each form (low = 2, high = 16),

-- a range in items from non-judgmental (descriptive) to judgmental.

-- the most often included items are educational level, content, purpose (objective), group setting, and learner skills.

-- Form B includes all five of the most often included items listed above.

In examining Matrix B, there are found a number of items included that can be considered of a judgmental nature. Since the purpose of this paper is to investigate non-judgmental items, the following items were eliminated from consideration due to their judgmental nature.*

Accuracy, Adequacy, Appropriateness, Attractiveness, Clarity, Compatibility, Effectiveness, Flexibility, Informative, Motivation, Relevancy, Technical Quality, and Variety.

* The examination of a system for judgmental evaluation of instructional materials is being conducted by another subcommittee within the Network Evaluation Group.
The following 6 items are seen as highly specific and not general enough to be used to describe a great variety of instructional materials.

Illustrations, IQ, Literary Style, Mental Age, Repetition, and Vocabulary.

The exclusion of these 19 items from Matrix B leaves a total of 22 items remaining. The following percentages are found when each form is compared with the 22 selected items.

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This analysis shows Form B as containing the most conclusive set of "educational" items of the 10 forms that were examined.

**A RECOMMENDED PROCEDURE**

Based on the analysis of the ten forms, it is suggested that Forms A and B be utilized in a complimentary manner to form a comprehensive instrument to collect classification information about instructional materials. By so doing, it will be possible:

-- to utilize two available instruments (rather than going about the task of creating yet another form).
to extend the comprehensiveness of each.

-- to provide the basis for moving beyond the collection of information and deal with the problem of dissemination.

The following changes, however, should be examined in relation to Form B to broaden its scope based on the information examined in Matrix B.

-- chronological age, curricular function, interest level, and teacher manual should be examined for possible inclusion (physical characteristics is already included as form designation).

-- entering task, follow up, input mode, and output mode should be examined for possible exclusion.

It is suggested that such a comprehensive form be developed and utilized by members of the Federal Network. Further, once a small base of data has been collected through the use of the form, teacher reaction and use of the information should be carefully examined to assist in the finalization of the selection of items to be included in the form. The focus of that examination should be on:

-- which items do provide valuable information to the teacher to assist in selection and utilization of instructional materials.

-- through what dissemination formats can teachers best receive and utilize the information.

RELIABILITY OF THE INFORMATION COLLECTED

A recurring problem in the collection of information about
instructional materials is the interpretive differences found between those persons collecting data. These differences appear at two levels. First, and the hardest to control, is the judgmental decisions made regarding the value of a material. In the combined use of Forms A and B as amended, this aspect of reliability should be controlled through the use of non-judgmental items. The second problem is in the specificity or understanding of the items and the type of information required. This can be accommodated through the use of a guide to accompany the form. Such a guide would provide explicit definitions and directions for filling in each item.

A guide has already been developed for Form B. It is suggested that a similar guide be developed to accompany Form A. Inter-rater reliability can be examined after both forms have been utilized for a short period of time to uncover specific weaknesses in the guides or items. If an item is found to vary greatly among different raters and it is impossible to decrease the variance through changes in the guide, the item can be considered judgmental and should, therefore, be considered for exclusion from the form.

**FORMAT FOR COLLECTION AND DISSEMINATION OF INSTRUCTIONAL MATERIALS**

There is great difference found in the existing formats utilized for the collection and dissemination of information about instructional materials. Formats range from simple prose descriptions to complex computer programs and printouts. It is suggested that no
single format be adopted at this time for collection and dissemination. By allowing individual groups to design their own format around the items specified in this paper, it should provide further opportunity to examine the effectiveness of the formats. The important aspect is that all groups utilize the same common set of items.

CONCLUSION

The preceding discussion has focused on the creation of a viable national system for the collection and dissemination of non-judgmental information about instructional materials. This system would form one module of a larger system comprising both teacher judgmental evaluations and field test results. Such a comprehensive system would form the basis of an information base to allow teachers to select instructional materials in a more defined manner.

The two forms suggested in this paper as a basis for a non-judgmental system are:

Form A - "Cataloging Format", CEC Information Center
Form B - "Media Analysis and Retrieval System", Midwestern Educational Resource Center

Further information about either form can be requested from:

Carl Oldsen
CEC Information Center
1411 S. Jefferson Davis Highway
Suite 900
Arlington, Virginia 22202
Carolyn Rude  
Media Programmer  
Midwestern Educational Resource Center  
114 Second Avenue  
Coralville, Iowa  52240

It is suggested that all members of the Federal Network utilize the items that have been selected in this paper for any non-judgmental classification of instructional materials. Further, that any use of the items be reported to the Network Evaluation Group. This group has been vested with the responsibility of coordinating and consolidating the various material's evaluation procedures that are currently being used. It is expected that the Network Evaluation Group will serve to:

-- collect and organize information about the use of the non-judgmental items.
-- provide consultative help to projects that are designing and using non-judgmental forms.
-- provide feedback to the Network regarding the further development of the forms.
-- assist in conducting specific studies regarding item reliability, form construction, and user reaction.

To assist in this developmental effort, all use of the items should be reported to:

Jenny Armstrong  
University of Wisconsin SEIMC  
221 Waismann Center  
2605 Marsh Lane  
Madison, Wisconsin  53706
FORMS EXAMINED IN MATRICES A AND B

CEC INFORMATION CENTER

GEORGE WASHINGTON UNIVERSITY SEIMC

UNIVERSITY OF KANSAS SEIMC

UNIVERSITY OF KENTUCKY SEIMC

MICHIGAN STATE UNIVERSITY SEIMC

MIDWESTERN EDUCATIONAL RESOURCE CENTER

NEW YORK SEIMC

UNIVERSITY OF OREGON SEIMC

UNIVERSITY OF SOUTH FLORIDA SEIMC
May 24, 1973

MEMORANDUM

TO: IMC Staff
FROM: Lynn Kinzel
SUBJECT: Compilation of Teacher Training Kit reactions

This project was initiated in February, 1972, to obtain feedback from those individuals who requested any of our 18 teacher training kits being disseminated at that time. (See page 2 for a listing of those kits.)

Approximately three months after the kit was sent, a follow-up reaction form was mailed to the individual requesting the kit. (Page 3 is a copy of the reaction form.)

The data following is a general compilation of the responses to each question on the reaction form. The pages that follow the general data contain the responses to each particular kit.

A total of 322 kits were sent out from February, 1972 through May 20, 1973, with reaction forms following in three months. In this same period, 99 reaction forms were returned.

NOTE: The comments on a number of the reaction forms seem to confirm my opinion that many reaction forms were either not returned at all or were returned with very brief comments because the individual received the kit at the beginning of the summer with the reaction form following at the end of the summer allowing only limited opportunities for the individual to utilize the material. (73 kits were mailed between May 15 and June 30, 1972.)

ALSO NOTE: TEACHER TRAINING NEWS announced that three kits, Problems and Hints (May, 1972 issue), Toward an Understanding of Perceptual-Motor Programs (June, 1972 issue), and Toward an Understanding of Instructional Objectives (August, 1972 issue), were available from our Center by returning a reader reply card. 137 requests (42.55% of total kits mailed) came from that source.
TEACHER TRAINING KITS

Building a Perceptual-Motor Experience
Defining Objectives for the Teaching of Concepts
Designing an Instructional Game
Designing Criterion Measures
Designing Objectives-Oriented Instruction
Experiments Teach
Focus on Feedback
Games Teach
Goals for Education
Interaction Teaches
Learners' Approaches to Learning
Observation Teaches
Problems and Hints
Puzzles and Mazes Teach
Tapes Teach
Toward an Understanding of Instructional Objectives
Toward an Understanding of Perceptual-Motor Programs
Simulations Teach
Recently we sent you the following teacher-training kit:

We are most interested in your reactions to this material and would appreciate if you would take a few minutes to respond to the following questions.

1. How many times did you use the kit? 0 1 2 3 4 or more
2. What type(s) of teachers attended the session?
3. Was the kit easy to use? Yes No
4. What would make it easier to use?

5. Were the objectives of the kit met? Yes No
   Comments:

6. Will you be using this kit again? Yes No
7. How many of our training kits have you used?
8. Suggestions for other topics that should be covered in a kit.
   Comments:

When finished, just fold this form so that our address appears on the outside, staple or tape closed, and mail.

Thank you for your cooperation.

Sincerely,

S. Joseph Levine
Coordinator: Technology of Dissemination

1385
GENERAL DATA

HOW MANY TIMES DID YOU USE THE KIT?

0 42  1 23  2 17  3 4  4 or more 7

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

Special education (30)  All (2)
EMR (8)                Speech clinicians (1)
LD (3)                 Staff members (1)
Elementary (11)        Secondary (1)
Undergraduates (9)     Experienced (1)
Regular (8)            
Graduate students (3)  

WAS THE KIT EASY TO USE?  YES 60  NO 0

WHAT WOULD MAKE IT EASIER TO USE?  * See Specific Kit

WERE THE OBJECTIVES OF THE KIT MET?  YES 52  NO 0

COMMENTS:  * See Specific Kit

WILL YOU BE USING THIS KIT AGAIN?  YES 63  NO 6

HOW MANY OF OUR TRAINING KITS HAVE YOU USED?

None (5)  Portions from several (2)
One (9)   Ideas from some (1)
Two to five (28)  
Six to ten (5)  
Eleven or more (8)

1386
SUGGESTIONS FOR OTHER TOPICS THAT SHOULD BE COVERED IN A KIT:

Individual instruction (2)
Precision teaching (2)
Developmental learning
Money kits
Discrimination learning
Increasing reading comprehension
Reading skill, inventory or diagnostic structure and procedure
Prescriptive teaching
Physical health and training for greater efficiency
More actual teaching procedures
Contingency management
Values development
Specific teaching procedures for teaching a math concept
Common sense
Professional responsibility and commitment
Socialization (also one for trainable)
How to re-evaluate a school system

COMMENTS: * See Specific Kit
BUILDING A

NAME OF KIT: Perceptual-Motor Experience

# KITS SENT: 8 # RESPONSES RETURNED: 2

HOW MANY TIMES DID YOU USE THE KIT? 0 2 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

WAS THE KIT EASY TO USE? Yes 1 No

WHAT WOULD MAKE IT EASIER TO USE?

Did not pertain to our level of instruction. (i.e. too simple)

WERE THE OBJECTIVES OF THE KIT MET? Yes No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes No 1

COMMENTS:

Time was not available in the course to use the material.
Defining Objectives for the Teaching of Concepts

Name of Kit: ____________________

# Kits Sent: 8  # Responses Returned: 1

How many times did you use the kit? 0 1 2 3 4 or more

What type(s) of teachers attended the session?
Elementary and Special Education

Was the kit easy to use? Yes 1 No

What would make it easier to use?

Were the objectives of the kit met? Yes 1 No

Comments:

Will you be using this kit again? Yes ____ No 1

Comments:
NAME OF KIT: DESIGNING AN INSTRUCTIONAL GAME

# KITS SENT: 6  # RESPONSES RETURNED: 0

HOW MANY TIMES DID YOU USE THE KIT? 0 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

WAS THE KIT EASY TO USE? Yes No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes No

COMMENTS:
NAME OF KIT: Designing Criterion Measures

# KITS SENT: 8  
# RESPONSES RETURNED: 0

HOW MANY TIMES DID YOU USE THE KIT? 0  2  3  4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

WAS THE KIT EASY TO USE? Yes  No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes  No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes  No

COMMENTS:

1391
NAME OF KIT: Designing Objectives-Oriented Instruction

# KITS SENT: 7  # RESPONSES RETURNED: 1

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
Elementary and Special Education

WAS THE KIT EASY TO USE? Yes 1  No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 1  No

COMMENTS: Good for initial introduction to behavioral objectives.

WILL YOU BE USING THIS KIT AGAIN? Yes 1  No

COMMENTS:
NAME OF KIT:  Experiments Teach

# KITS SENT: 7  # RESPONSES RETURNED: 3

HOW MANY TIMES DID YOU USE THE KIT?  0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

EMR

WAS THE KIT EASY TO USE?  Yes 1  No __

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET?  Yes 1  No __

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN?  Yes 2  No __

COMMENTS:

Only wanted to examine and show other teachers.

Kit used by consultant who has since left.

1393
NAME OF KIT: Focus On Feedback

# KITS SENT: 5  # RESPONSES RETURNED: 1

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

Regular and Special Education

WAS THE KIT EASY TO USE? Yes 1 No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 1 No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 1 No

COMMENTS:
NAME OF KIT: Games Teach

# KITS SENT: 7  # RESPONSES RETURNED: 2

HOW MANY TIMES DID YOU USE THE KIT? 0 1 1 2 1 3 ___

4 or more ___

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
Special and General Education

WAS THE KIT EASY TO USE? Yes 1  No ___

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 1  No ___

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 1  No ___

COMMENTS:
Kit was used by a consultant who has since left.
More on perceptual training.

1395
NAME OF KIT: _______ GOALS FOR EDUCATION ________

# KITS SENT: ___ # RESPONSES RETURNED: ___

HOW MANY TIMES DID YOU USE THE KIT? 0 ___ 1 ___ 2 ___ 3 ___ 4 or more ___

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
Elementary and Special Education

WAS THE KIT EASY TO USE? Yes ___ No ___

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes ___ No ___

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes ___ No ___

COMMENTS:

1396
NAME OF KIT: Interaction Teaches

# KITS SENT: 8  # RESPONSES RETURNED: 0

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

WAS THE KIT EASY TO USE? Yes No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes No

COMMENTS:

1397
NAME OF KIT: Learners' Approaches To Learning

# KITS SENT: 7 # RESPONSES RETURNED: 2

How many times did you use the kit? 0 1 1 2 3 4 or more

What type(s) of teachers attended the session?
Elementary
Elementary and Special Education

Was the kit easy to use? Yes 2 No

What would make it easier to use?

Were the objectives of the kit met? Yes 1 No

Comments: Awareness - yes, skill in modifying instruction - no.

Will you be using this kit again? Yes 1 No

Comments: We are reviewing your kits in search for ways of teaching skills and techniques. Most of your kits provide an experience which increases awareness, but lack specific skill teaching.
NAME OF KIT: Observation Teaches

# KITS SENT: 10
# RESPONSES RETURNED: 2

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
Elementary
EMR

WAS THE KIT EASY TO USE? Yes 2 No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 2 No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 2 No

COMMENTS:
NAME OF KIT: PROBLEMS AND HINTS

# KITS SENT: 58   # RESPONSES RETURNED: 23

HOW MANY TIMES DID YOU USE THE KIT?  0 11 2 3 3
4 or more 2

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

Teachers of MR and speech clinicians
Elementary
Special Education (2)
Elementary and Secondary
Staff members
Student teachers
College class

WAS THE KIT EASY TO USE? Yes 11 No ___

WHAT WOULD MAKE IT EASIER TO USE?

I had seen it previously.

WERE THE OBJECTIVES OF THE KIT MET? Yes 10 No ___

COMMENTS: Follow-up session was necessary, though.

Practical ideas that can be put into immediate use and which will foster more ideas.

WILL YOU BE USING THIS KIT AGAIN? Yes 13 No 1

COMMENTS:

May use in future--good idea--need to define "hint" early in description of exercises otherwise procedure difficult to understand. I didn't catch on until read very last page.

We haven't used yet, but states may have.

Haven't had opportunity to use myself but have told others about it.

Haven't used yet--intend to this fall.
PROBLEMS AND HINTS: Comments (continued)

Keep the good work coming!

Thank you!

Very impressed. Share it in house. Intend to share it further.

Haven't had time to look at it yet.

Unable to answer at this time. I have not used it due to summer vacation.

Have had no opportunity to use the kit yet but it looks mighty helpful.
NAME OF KIT: Puzzles and Mazes Teach

# KITS SENT: 7 # RESPONSES RETURNED: 2

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
- ENR
- General and Special Education

WAS THE KIT EASY TO USE? Yes 2 No

WHAT WOULD MAKE IT EASIER TO USE?
One of the puzzles was missing.

WERE THE OBJECTIVES OF THE KIT MET? Yes 2 No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 2 No

COMMENTS:
NAME OF KIT: ___ SIMULATIONS TEACH ___

# KITS SENT: 11  # RESPONSES RETURNED: 2

HOW MANY TIMES DID YOU USE THE KIT? 0 2 1 3 4 or more 1

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
  EMR
  Experienced

WAS THE KIT EASY TO USE? Yes 2 No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 2 No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 1 No 2

COMMENTS:
  Think it is a bit long.
NAME OF KIT: TAPES TEACH

# KITS SENT: 7

# RESPONSES RETURNED: 1

HOW MANY TIMES DID YOU USE THE KIT? 0 1 2 3 1
4 or more

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?
Education students.

WAS THE KIT EASY TO USE? Yes 1 No

WHAT WOULD MAKE IT EASIER TO USE?

WERE THE OBJECTIVES OF THE KIT MET? Yes 1 No

COMMENTS:

WILL YOU BE USING THIS KIT AGAIN? Yes 1 No

COMMENTS:
TOWARD AN UNDERSTANDING OF INSTRUCTIONAL OBJECTIVES

NAME OF KIT: ______________________

# KITS SENT: 96  # RESPONSES RETURNED: 35

HOW MANY TIMES DID YOU USE THE KIT? 0 16 1 8 2 7 3 4 or more 3

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

- Undergraduate students (3)  
- Graduate students (2)  
- Special Education (6)  
- EMR - LDBD

WAS THE KIT EASY TO USE? Yes 22  No __

WHAT WOULD MAKE IT EASIER TO USE?

- No problems
- It looks good—but I don't know from experience.

WERE THE OBJECTIVES OF THE KIT MET? Yes 18  No __

COMMENTS: For the parts I used teachers responded positively. We did modify the kit somewhat both times. Not as practical Yet to be determined, but has considerable potential.

WILL YOU BE USING THIS KIT AGAIN? Yes 23  No 1

COMMENTS:

Done by sub.

I never use the kit in total without modification. I especially like "Objectives Have To Make Sense" and "Objectives Oriented Instruction."

States may have used though we haven't.

This specific kit involves the participants in the process well—so that on completion they indeed can "understand instructional objectives."
TOWARD AN UNDERSTANDING OF INSTRUCTIONAL OBJECTIVES: Comments (continued)

We like to keep the Michigan Kits on file for Resource Information—and suggestions for teacher trainers in the field. We thoroughly recommend them.

Our calendar is filled—but I hope to work this series in at the end of this school year.

Have not used the kit at this time. Shared the information with other professionals in the department and made it available for use by any staff member.

Thank you for providing us such an excellent resource.

Good guidelines for inservice.

I wish there were ways to individualize the program. Some of the students had a great deal of background, some little, and some none.

I did not feel that this kit was an efficacious way to teach the writing of objectives.

I have not used the kit per se, but have referred to it to several people.

I am sorry that I have not had the opportunity as of yet to introduce this to my agency personnel. I will hopefully be able to do so soon.
TOWARD AN UNDERSTANDING OF

NAME OF KIT: Perceptual-Motor Programs

# KITS SENT: 54  # RESPONSES RETURNED: 21

HOW MANY TIMES DID YOU USE THE KIT? 0 8 7 3 2 3 3 3
4 or more 1

WHAT TYPE(S) OF TEACHERS ATTENDED THE SESSION?

All
Learning Disabilities
L.D. Graduate students
Student teachers
Regular elementary
Special Education (2)
General and Special Education
Students

WAS THE KIT EASY TO USE? Yes 11 No

WHAT WOULD MAKE IT EASIER TO USE?

No problems using.

Only one misunderstanding—when asked to plan a series of remediation activities, one teacher included material not available at the workshop.

(more—see next page)

WERE THE OBJECTIVES OF THE KIT MET? Yes 11 No

COMMENTS: Teachers really seemed to enjoy experience and objectives were demonstrated.

I found this to be an easy method of developing understanding and continuity of perceptual motor programs.

Yes, if supplemental material used.

WILL YOU BE USING THIS KIT AGAIN? Yes 14 No

COMMENTS:

Some states may have, but we haven't.

We are presently using your workshop as resources for our staff and circulating a copy upon request from members. They're good!

Have not had opportunity to use this kit but it looks promising.

I like the kit and plan to use parts of it extensively.

No opportunity to use but showed to teachers who were interested enough to want to order one.
What would make the kit easier to use?

- Pages labeled as to which of the five parts it belongs so we could keep them together.
- Directions for Alphabet and Numbers Game somewhat confusing.

Comments:

I don't like "Introduction" and "Why Bother To Move," they confuse the group. I use an illustrative 10 minute film to provide more information than Warehouse Game. "Simple To Complex" is helpful, but I often prefer "Building a Perceptual-Motor Experience" using such materials as DLM. "Now That You're Moving" I seldom use. Some of my exclusions are for economy reasons. They can learn as much from elaboration of fewer kits. Also, some seem far closer to their real needs.

If you have some sort of list of materials you have available I would appreciate receiving one.

I was most impressed with it and would like to have the opportunity to respond to this questionnaire later in the year.

Kit will be used in conjunction with mini workshops, "Perceptual Motor Techniques and Activities" in November, January, and April.

When I use the kit next, I will be sure to specify that all activities or experiences should be planned for whatever materials are available at the time.

Perceptual Motor kits may need more guidelines on time it takes as I have misjudged the necessary time each time I've used it.