

ED 403 678

EC 302 316

TITLE Listening and Sensory Integration: What To Do before Speech and Language Develop. A Series for Caregivers of Infants and Toddlers. Model for Interdisciplinary Training for Children with Handicaps: MITCH Module 5.

INSTITUTION Dade County Public Schools, Miami, Fla.; Monroe County School District, Key West, FL.

SPONS AGENCY Florida State Dept. of Education, Tallahassee. Bureau of Education for Exceptional Students.

PUB DATE 90

NOTE 103p.; For related documents, see EC 302 310-325.

PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS Attachment Behavior; Caregiver Speech; Child Caregivers; Day Care; \*Disabilities; Imitation; Individual Differences; Infants; Inservice Education; \*Interpersonal Communication; \*Language Acquisition; Language Processing; \*Listening Skills; Preschool Education; \*Sensory Integration; \*Special Needs Students; Toddlers

IDENTIFIERS Florida; Model of Interdisciplinary Training Child Handicap

## ABSTRACT

Intended for use in Florida training programs for caregivers of infants and toddlers with disabilities, this guide presents an overview of the Model of Interdisciplinary Training for Children with Handicaps (MITCH); a user's guide to the series; and specific information for presenting Module 5, which focuses on the development of listening skills and sensory integration in the preverbal child. After the introduction to the MITCH program as a whole, the user's guide provides information on the instructor's role, the 3-hour training session, the use of videotapes and audiotapes, and follow-up activities. For this module, goals and objectives focus on providing participants with an understanding of prelinguistic communication, the importance of sensory integration, listening in relation to bonding and attachment, tuning into the infant's personal style, strategies to encourage vocal imitation, subskills and categories of language development, and the encouraging language environment. For each hour of training, a script, suggested activities, and relevant handouts are provided. Attached are lists of recommended resources and references, reproducible forms and handouts, and forms for the 6-week follow up. (DB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

# MITCH Module 5

## Model of Interdisciplinary Training for Children with Handicaps

ED 403 678

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

*A Series for Caregivers of Infants and Toddlers*  
*Listening and Sensory*  
*Integration: What to Do*  
*Before Speech and*  
*Language Develop*

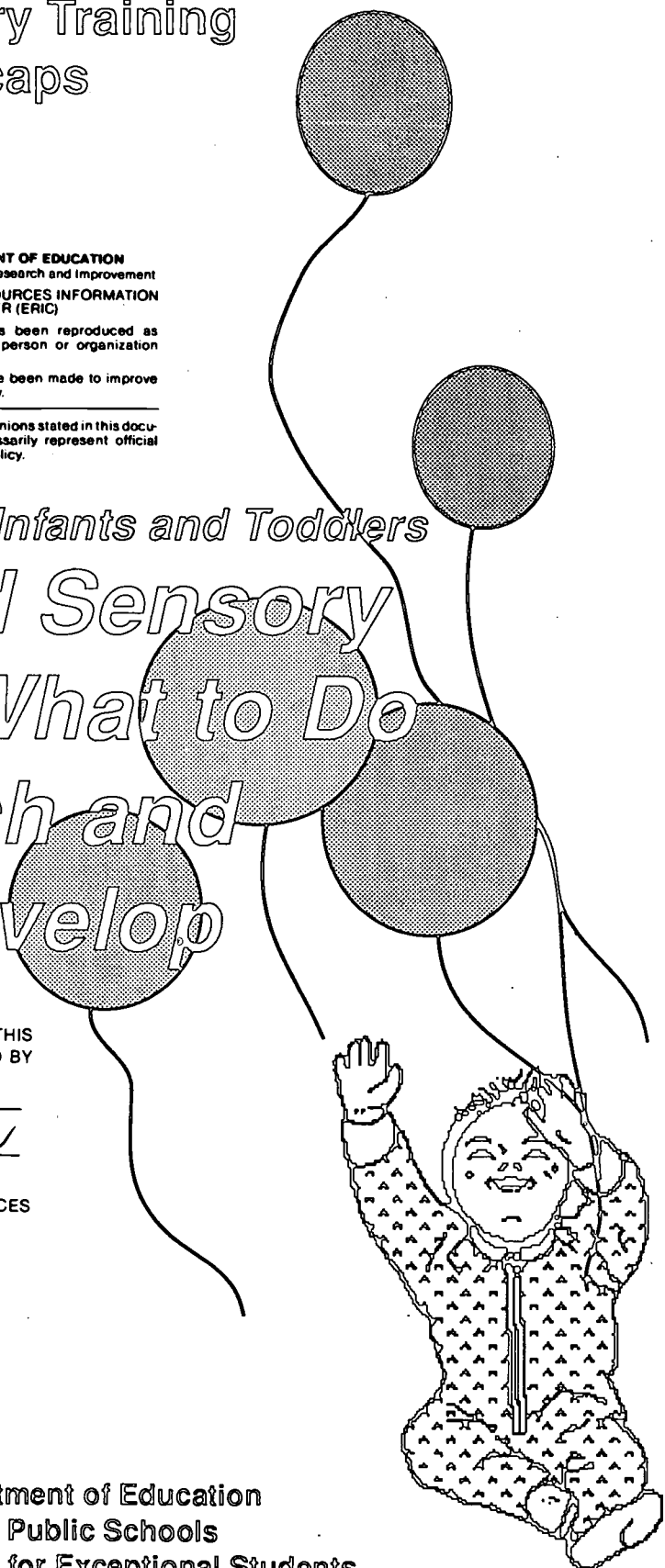
"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*Arlene M.*  
*Duncan*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

EC 302316

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students  
 1990



This training series is one of many publications available through the Bureau of Education for Exceptional Students, Florida Department of Education, designed to assist school districts, state agencies which operate or support educational programs, and parents in the provision of special programs for exceptional students. For additional information on this training series, or for a list of available publications, contact the Clearinghouse/Information Center, Bureau of Education for Exceptional Students, Division of Public Schools, Florida Department of Education, Florida Education Center, Tallahassee, Florida 32399-0400 (telephone: 904/488-1879; Suncom: 278-1879; SpecialNet: BEESPS).

MITCH Module 5

**Model of Interdisciplinary Training  
for Children with Handicaps**

*A Series for Caregivers of Infants and Toddlers*

***Listening and Sensory  
Integration: What to Do  
Before Speech and  
Language Develop***

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students  
1990

This training series was developed through the MITCH (Model of Interdisciplinary Training for Children with Handicaps) Project, FDLRS/South Associate Center, Dade and Monroe County Public Schools, and funded by the State of Florida, Department of Education, Division of Public Schools, Bureau of Education for Exceptional Students, under State general revenue appropriation for the Florida Diagnostic and Learning Resources System.

Copyright  
State of Florida  
Department of State  
1990

MITCH Module 5

**Model of Interdisciplinary Training  
for Children with Handicaps**

*A Series for Caregivers of Infants and Toddlers*

***Listening and Sensory  
Integration: What to Do  
Before Speech and  
Language Develop***

**Steffi R. Berkowitz, M.S.  
Speech and Language Pathologist  
Dade County Public Schools  
Miami, Florida**

---

## Dade County School Board

---

Mr. William H. Turner, Chairperson

Ms. Betsy Kaplan

Ms. Janet R. McAliley, Vice-Chairperson

Dr. Michael Krop

Mr. G. Holmes Braddock

Mr. Robert Renick

Dr. Rosa Castro Feinberg

---

## Project MITCH Staff

---

Carole Fox Abbott, Ph.D.  
MITCH Project Specialist  
FDLRS/South - Miami

Diana M. Fernandez  
MITCH Project Assistant  
FDLRS/South - Miami

---

## Project MITCH Advisory Board

---

### Host Agencies

Mary Anne Brost  
Project Director  
FDLRS/Gateway - Jasper

Dr. Eleanor L. Levine  
Supervisor  
FDLRS/South - Miami

Dr. Susan Gold  
Adjunct Assistant Professor  
Mailman Center - Miami

Dr. Keith Scott  
Project Director  
FDLRS/Mailman - Miami

Terri Kanov  
Executive Director, Division of  
Exceptional Student Education  
Dade County Public Schools - Miami

Dr. Mary Theresa Urbano  
Director of Nursing  
Mailman Center - Miami

### Other

Dr. Mimi Graham  
Adjunct Assistant Professor  
Florida State University - Tallahassee

William Osterhoudt  
Director  
Exceptional Student Education  
Monroe County Public Schools -  
Key West

Lois Klezmer  
Coordinator, Early Childhood Education and  
Sim Lesser  
Assistant Professor, Early Childhood Education  
Miami Dade Community College - Miami

Elizabeth P. Ridgley  
Director, Pinecrest Presbyterian  
Preschool - Miami

Linda Machado  
Parent Advocate  
Chairperson, State Advisory Council on  
Exceptional Student Education - Miami

Dr. Sharon Vaughn  
Associate Professor of Education  
University of Miami - Miami

Dr. Joyce McCalla  
Director  
Metro Dade Child Development Services -  
Miami

Sondra Wallace  
Director of Education  
Head Start - Miami



## ACKNOWLEDGEMENTS

In addition to the MITCH Advisory Board members, special thanks are given to the following:

### **The Bureau of Education for Exceptional Students (BEES) Editorial Committee:**

Doris B. Nabi  
Administrator  
Program Services

Ruth S. Jones, Ph.D.  
Supervisor  
Program Services

Connie Cauley, Ph.D.  
Program Specialist  
Infants and Toddlers Program  
Prekindergarten Handicapped Programs

Arlene Duncan  
Program Specialist  
Clearinghouse/Information Services  
Program Services

Elizabeth Devore, D.C.  
Program Specialist  
Prekindergarten Handicapped Program

### **Critical readers and persons who piloted, reviewed, and tested this module**

Robert L. Cannon, CCC-Sp  
Speech and Language Pathologist  
FDLRS/South - Miami

Kim Eversole  
Educational Director  
Debbie School  
Mailman Center for Child Development - Miami

Judy Heavner, Ph.D.  
Program Specialist  
Hearing Impaired  
BEES/Program Development - Tallahassee

Janice C. Kelley  
Pre-K Handicapped Specialist  
FDLRS/Gateway - Jasper

Lillian Poms  
Director  
Hearing and Speech Center of Florida, Inc. -  
Miami

L. Penny Rosenblum  
Teacher of the Visually Impaired  
Mailman Center for Child Development -  
Miami

Dorothy Schoupe  
Teacher of the Hearing Impaired  
Miami

Helena Jimenez-Ulloa  
Homebound Teacher of  
Hearing Impaired Infants  
Dade County Public Schools - Miami

Rhonda Work  
Program Specialist  
Speech and Language Impaired  
BEES/Program Development -  
Tallahassee

## **Other contributors**

**Lisa A. Rozpad, Program Specialist for desktop publishing, Mailman Center for Child Development - Miami**

**Ellen White, for design and production of handouts, FDLRS/South - Miami**

**Susan Becker - Miami**

**Joshua, Lindsay, and Arthur Berkowitz - Miami**

**Debbie Friedman - Colorado**

**Dennis Hoffman, FDLRS/South - Miami**

**Dr. Eydie Sloane, FDLRS/South - Miami**

# TABLE OF CONTENTS

	Page
Introduction .....	1
Project MITCH Overview .....	1
MITCH Modules .....	2
MITCH Booklets .....	3
User's Guide to Series .....	5
Instructor .....	5
Instructor Qualifications .....	5
Role of Instructor .....	5
Instructor Preparation and Follow-Through .....	6
The Session .....	7
Time .....	7
Handouts/Overheads .....	7
Videotapes .....	8
Audiotapes .....	8
MITCH Theme Music .....	9
Attendance .....	9
Six-Week Follow-Up Activity .....	9
Certificate of Completion .....	9
Record of Completion .....	9
Specific Information for Presenting Module 5 .....	11
Goals and Objectives .....	11
Other Recommended Instructors .....	12
Contact List .....	12
Equipment, Materials, and Supplies .....	12
Equipment .....	12
Supplies .....	13
Materials Contained in This Manual .....	13
Videotape .....	13
Materials Not Contained in This Manual .....	13
Hour 1	
Goals and Objectives .....	17
Content .....	18
Hour 2	
Goals and Objectives .....	31
Content .....	32
Hour 3	
Goals and Objectives .....	45
Content .....	46
Resource List .....	55
References .....	57
Appendices	
A. Reproducible Forms for Three-Hour Module	
B. Reproducible Copies of Handouts/ Overheads/Booklets	
C. Reproducible Forms for the Six-Week Follow-Up Activity	

# Introduction

Information in the Introduction should be reviewed by each instructor or user of this material. The Users Guide to Series begins on page 5. Information relating to this module begins on page 11.

## PROJECT MITCH OVERVIEW

The purpose of the Project MITCH (Model of Interdisciplinary Training for Children with Handicaps) training series is to assist local school districts in Florida in providing interdisciplinary training and resources to parents, non-degreed daycare workers, and healthcare providers who work with special needs infants and toddlers ages 0-5, with emphasis on ages 0-2.

This series was funded by a grant to the Florida Diagnostic and Learning Resources System/South (FDLRS/South), on behalf of the FDLRS Network, from the Florida Department of Education, Bureau of Education for Exceptional Students (BEES).

In 1987, the Florida Legislature designated \$100,000.00 of the total appropriation for the FDLRS Network to "expand services to infants and preschool children." The application submitted by Dade County on behalf of the FDLRS/South Associate Center serving Dade and Monroe Counties was selected for funding and was initiated on May 25, 1988. FDLRS/South collaborated with FDLRS/Mailman at the University of Miami and FDLRS/Gateway, serving Hamilton, Columbia, Lafayette, Madison and Suwannee Counties, to complete the work under the grant. Outcomes of the project include:

- assessment of the status of training and resources for the designated population
- design of a collaborative implementation and training model to include development of competencies, replicable training modules which enhance or expand the HRS eight-hour special needs child care module, an adapted training plan for daycare providers, recommendations for curricula to be used in daycare and preschool programs, and recommendations for provision of consultation to parents
- validation of the training modules in Dade, Monroe, and counties served by FDLRS/Gateway
- provision of training for potential instructors and other interested personnel in the 18 FDLRS Associate Center service regions.

Topics for the eleven training modules, as well as information which provided the basis for the competencies, policy framework, and other products of Project MITCH, were obtained from a literature search, interviews, and letters of inquiry and needs assessments sent to over 600 persons throughout the State of Florida. The modules were written by several authors from various disciplines, including early childhood education, exceptional student education, nursing, occupational and physical therapy, speech and language, nutrition and social work. Each module was read by several critical readers and was piloted in both north and south Florida at least three times before final rewriting took place.

The training series emphasizes developmentally appropriate practice and normal development as the means for working with youngsters who have special needs. The eleven three-hour modules that currently make up the series have relevance for caregivers of normally developing children as well as caregivers who may be working with children who are handicapped, experiencing delays, or who may be at-risk. Although several of the modules specifically address normal and abnormal development from birth to 36 months of age, the material is also meaningful to caregivers of preschoolers who are chronologically older but who are functioning developmentally within the birth to three year range.

---

## MITCH MODULES

---

Eleven MITCH training modules have been developed.

- (1) *Intellectual Development: What You Can Do to Help*
- (2) *Speech and Language Development: What You Can Do to Help*
- (3) *The Child Who Seems Different: Meeting Special Needs*
- (4) *Family Functioning: The Impact of a Child with Special Needs*
- (5) *Listening and Sensory Integration: What to Do Before Speech and Language Develop*
- (6) *The Caregiving Environment: Planning an Effective Program*
- (7) *Behavior Management: Preventing and Dealing with Problem Behavior*
- (8) *Health Care: Infection Control, Medication Administration, and Seizure Management*
- (9) *Motor Development: What You Need to Know*
- (10) *Nutrition and Feeding Practices: What You Need to Know*
- (11) *Working Together: Communication Skills for Parents, Caregivers, and Other Professionals.*

Each of the three-hour modules can be used independently. Although the modules are numbered sequentially, they may be presented in any order since no module provides prerequisite material for another. Each module contains a script for the instructor, activities, references, resource list, and reproducible handouts/overheads. In some cases, a videotape and/or an audiotape and other materials are available to supplement the written material.

## MITCH BOOKLETS

---

Three booklets have also been produced through MITCH. These may be used with modules as indicated or may be used independently. The booklets are listed below:

- *A Simple Introduction to Physical and Health Impairments*, to be used with Module 3
- *Welcome to the World: An Overview of Your Growing Child*, to be used with Modules 1, 2, 3, 6, and 7
- *Curricula for Use with High Risk and Handicapped Infants and Toddlers*, for use as a supplement to the modules.

# User's Guide to Series

## INSTRUCTOR

### Instructor Qualifications

Unless otherwise stated, the MITCH modules are designed to be presented by qualified and credentialed instructors in fields such as early childhood special education, early childhood education, special education, child development, psychology and nursing. and  
Home Economics

### Role of Instructor

Although the modules do contain scripts, the instructor is encouraged to add to them with his own style, personality, anecdotes, information, handouts, references and resources. It is expected that the instructor will exercise judgement in tailoring the material to the needs, interests, and level of the participants. The best presentations will be those that are specifically designed for the participants by the instructor who best knows their needs.

The instructor may change the lecture/discussion and activity ratio depending upon the group's needs. If all modules are being scheduled for presentation within a relatively short period of time for the same group of participants, the instructor may choose among the activities in order to offer variety since several modules share similar types of activities. The instructor will need to plan adequate time in order to become familiar with the material and tailor it to the needs of each specific audience.

A successful presentation of the material is heavily reliant upon an enthusiastic style on the part of the instructor. Suggestions for achieving this include:

- allow for introductions of participants
- accept and acknowledge interaction from all
- paraphrase questions and responses from the participants loudly enough for all to hear
- create a comfortable atmosphere
- summarize the content of each session before closing.

The audience may include a broad range of persons, including those who knowingly work with very young children with special needs, to others who may have children under their care who have special needs that are not yet recognized. The instructor should assist all caregivers in becoming more comfortable with:



- recognizing indicators that a child may be at-risk or may have special needs
- working with that child
- getting additional support and assistance regarding such a child.

It will be important to emphasize that all children are more like one another than they are different. Keeping children in the most natural or normal environment is a major goal for caregivers.

## **Instructor Preparation and Follow-Through**

Prior to presenting any of the eleven three-hour modules, we recommend that each instructor:

- become entirely familiar with the content and format of presentation
- preview any videotape and/or audiotape
- set date for training
- arrange for a comfortable room in which to present the training
- advertise training in a timely fashion (see reproducible flier in Appendix A)
- arrange for the use of an audiocassette player, VHS videocassette recorder, overhead projector and screen, as needed
- photocopy all handouts and the List of Participants
- prepare overhead transparencies and/or other materials
- collect any additional materials not provided in this packet (see materials list)

After presenting any of the eleven three-hour modules, the instructor should:

- photocopy the reminder letter for each participant regarding the return of the Six-Week Follow-Up Activity
- mail the reminder letters three to four weeks after presenting the training module
- collect, or have participants mail, the completed Six-Week Follow-Up Activity
- review completed Six-Week Follow-Up Activity for each participant
- photocopy Certificate of Completion
- complete Certificate of Completion
- deliver or mail Certificates of Completion to each participant who successfully completed the Six-Week Follow-Up Activity



- maintain a complete record of persons who have successfully completed the module, using the List of Participants.

Reproducible copies of the Instructor's Time Table, Advertising Flier, List of Participants, Mailer, and Certificate of Completion are in Appendix A.

---

## THE SESSION

---

### Time

This module, if presented as written, is three hours in length. It may be presented in a single three-hour session, with a 15-minute break after one-and-three-quarter hours, or in three one-hour sessions.

Each module contains a five minute time allotment for opening each hour session, and a five minute time allotment for closing each hour session. If a module is being presented in one three-hour session, the instructor should eliminate the closing time allotment from hour one and the opening time allotment for both hours two and three in order to gain 15 minutes to use for the break. The 15-minute break should occur between presentation of the second and third hours of the module.

It is important to start and end each session on time. Estimates of presentation time are written in the left hand margins for specific segments or activities within each hour. However, the instructor may choose to expand on one or more of these segments or activities while shortening others.

Remember that a limited amount of information that is thoroughly presented will be more meaningful for participants than a larger quantity of information that has been inadequately understood by the participants.

### Handouts/Overheads

Each training module comes complete with specially designed handouts. Since the modules complement one another, some handouts and booklets are recommended for use with more than one module. Reproducible originals of these materials are included in each of the appropriate modules. The Curricula booklet is available separately. The instructor should monitor and make decisions regarding reproduction and distribution of all handouts. The instructor also should supplement them with others that are appropriate.

When deciding which of the original handouts to reproduce as overhead transparencies, the instructor should choose only those with print large enough to be seen and easily read when projected on a screen. Many of the originals are not suited for use as overhead transparencies.

It is suggested, in a time saving effort, that all handouts be compiled into a single packet and distributed at the beginning of the first hour if the entire three-hour module is being presented, or at the beginning of each one-hour session if the module is being presented in one-hour segments. Only the handouts that will be discussed during the presentation should be reproduced and handed out. Some of the handouts present main points but are designed so that participants can use them for note taking. This should be called to the attention of the participants when appropriate.

MITCH printed materials may be reproduced and used in a manner that best meets the needs of the participants. Reproducible originals of handouts, overheads, and booklets (excluding the Curricula booklet) are in Appendix B of each module.

## **Videotapes**

Videotapes have been chosen to supplement the material of several of the modules (Modules 1, 2, 3, 4, 6, 7, 8, and 9). All of the tapes will provide valuable information for the instructor, even if the videotape is not used during presentation of the three-hour module. Therefore, it is important for the instructor to view the tape that is associated with a specific module prior to presenting the module.

The videotapes have not been included in the designated time allotments suggested in each of the module manuals. The instructor may wish to substitute all or a part of a videotape for material written in the module, extend the three-hour time period, show the videotape at another session, or leave the videotape with the participants to watch as follow-up. See the Specific Information section of each module regarding the videotape for that module. Videotapes may not be copied without written consent of the producer. Information for obtaining videotapes is also provided in the Specific Information section.

## **Audiotapes**

Audiotapes are recommended for the presentation of Modules 5 and 7. See the Specific Information section of each of those modules regarding the audiotapes. The audiotape presentations have been built into the designated time allotments suggested in each of the module manuals.

## **MITCH Theme Music**

Included on the reverse side of the two audiotapes, one each for Module 5 and Module 7, is a three-minute segment of the MITCH theme music. The instructor may wish to play this as participants enter the session, as a signal to return from the break and/or in any other suitable manner.

## **Attendance**

At the opening session of each three-hour module, participants should sign the List of Participants form (see Appendix A). The instructor should use this form to verify attendance for all three hours of training and completion of the Six-Week Follow-Up Activity.

## **Six-Week Follow-Up Activity**

Three to four weeks after presenting the training module, the instructor, or another person representing the training agency, should contact all participants to remind them to submit their final Six-Week Follow-Up Activity (see Appendix C). This may be done by phone or by mail using the prepared mailer (see Appendix A).

The instructor, or some other qualified person designated by the instructor, should evaluate the quality and content of the performance of the Six-Week Follow-Up Activity by each participant. This may be done by a visit to each participant's place of work or by having each participant mail the completed follow-up activity form to the instructor. The instructor will prepare and give a Certificate of Completion to every participant whose performance meets the instructor's criteria.

## **Certificate of Completion**

Only those participants who attend all three hours of training and who successfully complete the Six-Week Follow-Up Activity are eligible to receive a Certificate of Completion (see Appendix A).

## **Record of Completion**

The instructor should keep the completed List of Participants forms on file in the training agency. Information should be retrievable by the participant's name.

# Specific Information for Presenting Module 5

## GOALS AND OBJECTIVES

Goal for Hour 1: Participants will gain knowledge regarding the process of communication that begins long before the onset of conventional speech and language.

Objective - Participants will gain an understanding of:

- prelinguistic communication
- the importance of sensory integration as a prerequisite to developing linguistic ability.

Goal for Hour 2: Participants will gain knowledge regarding the integration of listening with the development of the child's personality and interpersonal relationships.

Objective - Participants will gain an understanding of:

- listening as an important attitude when creating an atmosphere for bonding and attachment
- characteristics that might enable the caregiver to become more tuned into the infant's personal style
- strategies which create an auditory environment which contributes to early imitation.

Goal for Hour 3: Participants will gain knowledge regarding the conditions which help us perceive or relate to situations in order to express what we mean.

Objective - Participants will gain an understanding of:

- subskills and categories of language development
- strategies for developing an appropriate language environment for infants and toddlers.

## **OTHER RECOMMENDED INSTRUCTORS**

---

Because of the nature of the content of this specific three-hour module, the training agency presenting this module may wish to contact other specialized persons within its local area who are willing to perform this duty, such as:

- speech/language therapists
- infant specialists
- psychologists.

## **CONTACT LIST**

---

Persons to contact if the instructor has questions regarding this module include:

Carole Fox Abbott, Ph.D.  
MITCH Project Specialist  
FDLRS/South  
9220 S.W. 52nd Terrace  
Miami, FL 33165  
(305) 274-3501

Susan Gold, Ed.D.  
Assistant Professor of Pediatrics  
Department of Behavioral Sciences  
Mailman Center for Child Development  
P.O. Box 016820  
Miami, FL 33101  
(305) 547-6624

Steffi R. Berkowitz  
Speech and Language Pathologist  
Dade County Public Schools  
Miami, FL  
(305) 274-3501

## **EQUIPMENT, MATERIALS, AND SUPPLIES**

---

### **Equipment**

This module can be enhanced with the equipment listed below:

- overhead projector
- projection screen or alternative
- audiocassette recorder.

## Supplies

The instructor should also have the following supplies available:

- chalk
- crayons or markers
- overhead (transparency) pens
- chart paper
- extension cord
- 3 prong/2 prong adapter plug
- masking tape
- transparent tape
- thumb tacks
- extra batteries
- extra pencils for participants.

## Materials Contained in This Manual

The following materials are contained in this manual:

- reproducible forms (Appendix A)
- reproducible handouts/overheads and booklets (Appendix B)
- reproducible Six-Week Follow-Up Activity forms (Appendix C)
- audiotape that was designed for use with this module (available through any FDLRS Associate Center, the Clearinghouse, or see Materials Not Contained in This Manual section, below).

## Videotape

No videotape accompanies this module.

## Materials Not Contained in This Manual

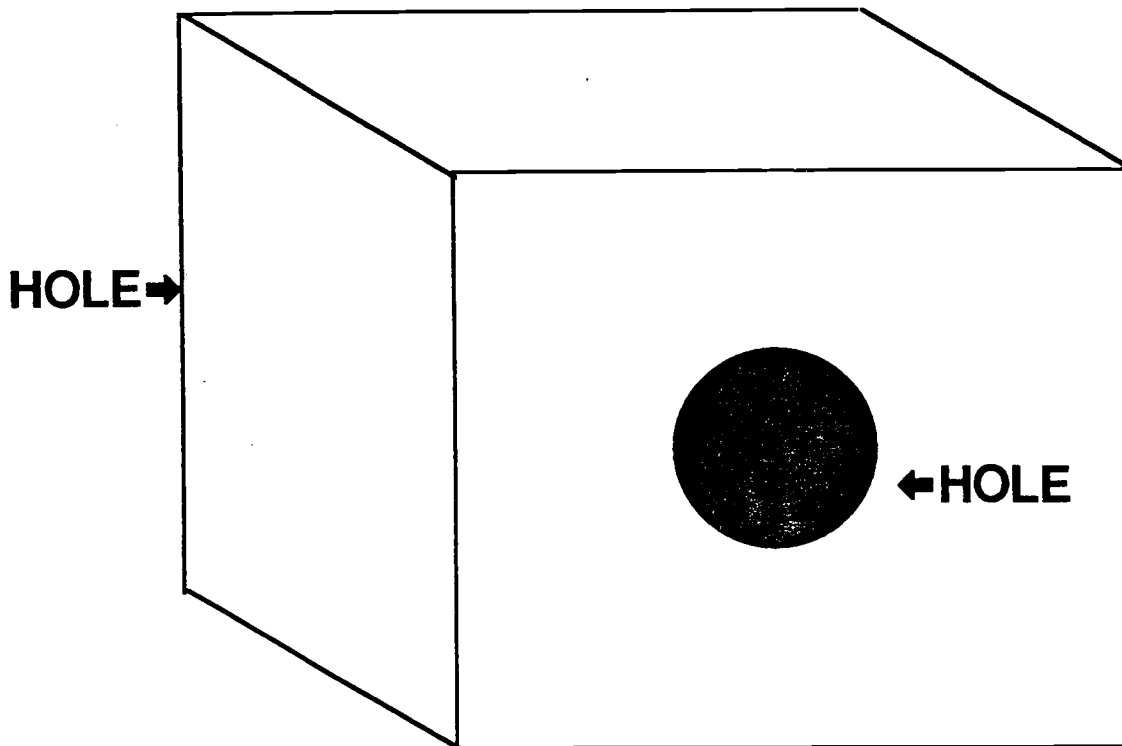
In order to present this specific three-hour module, the following materials, which are not included in the packet, need to be obtained by the instructor:

- if instructor is not able to secure a copy of the original MITCH audiotape for this module, instructor should record the following on an audiotape: sound of telephone ringing, toilet flushing, garbage disposal running, and timer ticking, and instrumental renditions of popular or well-known songs such as Brahms' "Lullaby," "Put on a Happy Face," or "Twinkle, Twinkle, Little Star" (Hour 1)
- Touch Feely Box (Hour 1) - see directions for making this box at the end of this section.

- current event article from newspaper (Hour 2)
- small assortment of rattles, other sound producing toys, soft sculpture toys, books (Hour 2)

## Activity: Touchy-Feely Box

Directions: Take a cardboard box (approximately one cubic foot or larger) and cut out two round circles on opposite sides of the box making holes large enough for entry of hands.



Inside the box place a number of objects which need to be identified by touch, e.g.: pencil, crayon, magic marker, pen, chalk, paint brush, etc.

Module	Hour	Activity
5	1	1a

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps



**Module 5**  
**LISTENING AND SENSORY INTEGRATION:**  
**What to Do Before Speech and Language Develop**

**Hour 1**

**Goal: PARTICIPANTS WILL GAIN KNOWLEDGE REGARDING THE PROCESS OF COMMUNICATION THAT BEGINS LONG BEFORE THE ONSET OF CONVENTIONAL SPEECH AND LANGUAGE.**

**Objectives - *Participants will gain an understanding of:***

- prelinguistic communication
- the importance of sensory integration as a prerequisite to developing linguistic ability.

5 minutes

## GREETING, SIGN IN, DISTRIBUTION OF HANDOUTS

10 minutes

## SESSION BEGINS

### ACTIVITY: Audiotape Warm-Up

Note: Instructor may wish to eliminate this activity or replace it with a role play activity which demonstrates the same points if the MITCH audiotape is not available.

Instructor begins audiotape of communication between caregiver and infant. When completed, instructor turns off tape and asks the following questions while writing on the flipchart or chalkboard.

- What is happening?
- Who is involved?
- What message is the infant attempting to communicate?
- What message is the caregiver attempting to communicate?
- Was the communication effective?

Allow time for participants to respond and discuss.

Expected responses:

- communication between infant and caregiver
- infant and caregiver
- infant is upset and needs caregiver's response
- caregiver is attempting to comfort the child
- infant calmed in second example because the caregiver met needs and provided distracting, pleasant interaction.

*Say:* To summarize this activity, you heard two different caregiver responses to the unhappy infant. One just sympathized with the infant's distress. The baby continued to cry because it didn't feel comforted. The second caregiver response began in the same manner. However, when the child's crying did not stop, the caregiver used other strategies and succeeded in stopping the child's crying by distracting the

child and providing positive, pleasant interaction. Sometimes, one type of response from a caregiver may not be enough to comfort a child. It is important to try a variety of interactions if one is not successful.

Instructor then greets participants.

*Say:* I would like to welcome you and I am glad that so many of you were able to tell us what you heard in the opening activity so easily. We are going to continue this activity by investigating the process of communication. In our first hour, we will recognize that infants begin the process of learning to communicate long before the onset of true or conventional speech and language. That is, long before children actually say their first word.

During the second and third hours, we will learn activities to help develop the relationship between the infant and caregiver. We will review subskills and key concepts of how children learn to speak. We will adapt activities which should assist the child to become an active participant in the world of communication.

Instructor refers to **Handout/Overhead 5-1-1**, reviews it and/or continues to refer to the handout as the session continues.

**Handout/  
Overhead  
5-1-1**

10 minutes

### **LECTURE/DISCUSSION: Pre-linguistic Communication**

*Say:* Let's begin our discussion by talking about what communication is, and what skills are necessary for the development of communication.

*Ask:* What is communication?

Instructor writes responses on flipchart or chalkboard and leads discussion to include the following, elaborating on definitions when necessary:

- Communication is an active process of exchanging information and ideas. Speech and language are only two parts of the communicative process.
- Prelinguistic communication refers to the process that the infant and caregiver use to "talk" or explain what is wanted before the infant is able to understand that words have meaning, or is able to actually talk.

*Say:* It is very important that we recognize that the infant begins the process of learning to communicate effectively long before the onset of what we call speech and language. Too often, in the process of learning to communicate effectively, we do not consider or think about all of the aspects or subskills involved.

Instructor writes "Communicative patterning" on flipchart or chalkboard. Demonstrate and elaborate on information given as much as necessary.

*Say:* Communicative patterning is the formal name of a language skill. It refers to the awareness of auditory information as it is heard by the infant. Those first sounds heard by the infant are not remembered as meaningful words. They are tones which involve the rhythm, duration, and pitch of the person speaking. Rhythm refers to the "beat" of a statement, duration refers to the length of a statement, and pitch refers to the melody or highs and lows of the incoming tones. What this means is that a person hearing a conversation is really hearing many frequencies, or bands of sound waves, which develop into patterns when meaningful language is processed.

*Say:* These communicative patterns help the infant understand what the adult is trying to say. Research indicates that these patterns established during the first year or two of life are critical to development in language, cognition or learning, and social skills. This information is very important in helping us to

understand communication that takes place before the infant understands spoken words.

The period of prelinguistic communication is actually one of preparation. The infant begins by gathering acoustic information or information that is heard. After the information is gathered, the child sorts it out. Then, the child prepares it for future use.

An infant's communication during the first few months of life may not start out as intentional. For example, imagine an infant in a crib with a wet diaper. The diaper makes the infant unhappy. Crying begins. Soon, a caregiver responds. At first, the baby doesn't realize that crying can bring someone to help. When the baby does realize this, a pattern begins. As infants develop they begin to understand that their sounds and movements produce responses from other people. They learn that their sounds can make things happen around them. They begin to engage in a variety of intentional or purposeful behaviors to express their wants and needs. These wants and needs can be further defined or called precommunicative functions. These functions are reactions to situations or attempts to control the environment.

There are some fairly sophisticated words that are used to describe what we are talking about. They are very useful in helping us organize our thoughts. Don't worry about memorizing these words because they are on your handout. We can always look here to find them if we need them. What is important is understanding the meaning of the words.

**Handout/  
Overhead  
5-1-2**

Instructor refers to **Handout/Overhead 5-1-2** and asks participants to please look at the handout entitled "Prelinguistic Communication".

*Say:* The first behaviors observed are referred to as perlocutionary. Perlocutionary behaviors occur during the first few months of life and can

continue as late as the eighth month. Often these behaviors are reactions and are not intentional. They may be understood and have meaning to the caregiver. They are responded to or interpreted by caregivers as if they were intentional, making the infant a more active participant. Eventually these behaviors become voluntary communicative acts. When they do, we refer to them as illocutionary because they are intentional interactions.

Illocutionary behaviors usually occur around nine or ten months of age. They are sometimes described by functions which can be labeled and categorized.

**Handout/  
Overhead  
5-1-2**

Instructor refers to **Handout/Overhead 5-1-2** and reads and discusses information with participants. Ask participants for additional examples to ones listed on **5-1-2**.

Instructor discusses:

- perlocutionary behaviors
- illocutionary behaviors.

10 minutes

### **ACTIVITY: Role Playing**

*Say:* Let's do some role playing where we will try to imitate what goes on in a baby's auditory environment. We will practice some prelinguistic "conversations" using varying pitches and intonations with nonsense syllables.

Instructor selects a participant to take part in Role Play I.

Setting: "Infant" (instructor) and "caregiver" (participant 1) are engaged in a feeding activity. Caregiver is instructed to communicate with the infant using words, gestures, and movements that we typically use in a feeding situation. The instructor, as the infant, reacts with unintentional perlocutionary (crying, smiling, cooing, looking or gazing, reaching) behavior. Try to vary the behavior as much as possible.

Instructor asks other participants to describe what happened. List as many interactions as possible, and decide whether an exchange of information or ideas transpired.

Instructor selects another participant to take part in Role Play II.

Setting: "Infant" (instructor) and "caregiver" (participant 2) are engaged in the same feeding activity. The caregiver gives the infant food. The infant takes the spoon, says "Mmm..," gives spoon back to caregiver indicating intentional behavior.

Instructor asks other participants to describe the activity and decide whether an exchange of information or ideas transpired. Encourage the use of appropriate labelling.

*Say:* In summary, communication is an active process of exchanging information and ideas. There are several unintentional and intentional behaviors and functions of communication which occur before the child says a single word. These functions are referred to as prelinguistic communicatives. It is important to remember that these attempts to communicate may not be categorized or thought of as true or conventional speech and language. However, they are crucial to children's development in several areas, including language, cognition, and social skills.

10 minutes

### **LECTURE/DISCUSSION: Auditory Perceptual Processing and Sensory Integration**

*Say:* Listening occurs all during a child's waking hours. For listening to be meaningful as part of a child's foundation for learning, it needs to be developed as early in life as possible. This means attention is directed to various basic or environmental sounds.

Sounds must be related naturally and should occur throughout the day. They should be verbalized or spoken for reinforcement by the caregiver. The caregiver should describe what is

happening in the infant's world as often as possible.

Some children do not respond to the presence of sounds as easily as others. When the child has difficulty sorting out or screening what is heard, the child becomes overloaded and often overstimulated. This can create problems when the child tries to interpret or understand what is heard. This overloading, or hearing too much at one time, may make it difficult for the child to focus on or respond appropriately to incoming sounds. The caregiver's voice or sound in the environment may be heard without meaning. The child may show you this is happening by becoming fussy, irritable, disorganized, or stressed to the point of not eating or napping.

Let's look at a simplified analysis of listening, which is more technically referred to as auditory perceptual processing, in order to understand how acoustic information is categorized. An important concept to remember is that ears hear, but the brain listens. What this means is that different interpretations occur when we identify sounds.

Instructor asks participants to close their eyes. Instructor knocks on wooden table or desk, and asks participants what they heard. Expected responses include:

- someone knocking on door
- someone knocking on desk or table.

Point out to participants that the ear heard the sound of two objects coming together with force. The brain identified the sound as a person knocking on a door or a desk. Taking it further, the interpretation of the sound is that someone wants to come in through the door, or that someone wants to send a signal or indicate an emotion (anger, make a point) by striking the table. The brain does a lot with the simple information that comes in through the ear.

Instructor refers to **Handout/Overhead 5-1-3** and asks participants to please look at the handout entitled "Auditory Perceptual Processing."

**Handout/  
Overhead  
5-1-3**



Instructor uses the following information in helping to interpret **Handout/Overhead 5-1-3.**

*Say:* When we listen, we unconsciously ask the following questions.

In stage I:

- Was there sound? This has to do with level of awareness.
- Where was it? This has to do with focus.
- Was there more than one sound? This has to do with picking out the sounds that are near from the ones that are far.
- Were the sounds the same? Were they different? This has to do with discriminating between sounds.

In stage II:

- What was the sequence of sounds? That is, what sound came first, what came next? How many were there?
- What was the length of time between sounds? This has to do with synthesizing the sounds.
- Have I heard that sound before? Where have I heard the sound? This has to do with the process of scanning information.

In stage III:

- What do the sounds mean? This information helps us to classify or organize the sounds we hear.
- What do the words mean? Where can this information be put relative to that which is already known? This involves integrating the information.
- Do I identify this word? The sound is identified and the meaning is memorized or recalled. This is the final stage, or goal,

in speech and language development. At this stage a child "owns" the word and can use it.

Instructor points out that information appears to be taken sequentially, in a step by step manner, but it actually happens simultaneously within each person. The results are stored in the child's memory.

*Say:* I'd like you to listen to the following auditory patterns and identify them on a sheet of paper. What you hear is known as nonlinguistic information.

Instructor turns on tape of telephone ringing, toilet flushing, garbage disposal whirring, and timer ticking. These sounds appear on the MITCH audiotape or, if the MITCH audiotape is not available, they may be taped prior to the session by the instructor.

*Ask:* Who can identify these first patterns of sounds?  
Allow time for responses.

*Say:* Great! You are very perceptive people. Now, try to identify the second group of patterns of sounds on a sheet of paper.

Instructor plays tape of instrumental versions of any two popular or well-known songs, such as "Brahms' Lullaby," "Put on a Happy Face," or "Twinkle, Twinkle, Little Star."

*Ask:* Who can identify these patterns of sounds? How do they differ from the first?

Expected response: They are songs with only the melody to cue us to their identity. Hopefully, participants will be able to supply the titles.

*Ask:* How were you able to identify these songs without words? How many of you have hummed a song to try and trigger your memory into giving you the title?

Instructor waits for responses and then continues.

*Say:* When that happens, your brain helps you out by remembering that it had associated the title and the words with the melody you had previously heard. For some of you, all that was needed was the melody to activate the recall mechanism

within the brain. That forwarded the information.

*Say:* Does this process remind you of a computer? Actually, this is the way computers work, and it is called processing. In this case, we refer to it as auditory processing because that information came in through audition or the hearing sense. Let's learn about the body's ongoing participation in the sensory integration game.

Now that we are more aware of communication as it involves categories for listening, let's investigate how infants apply information that they hear by identifying it through other senses. This is called sensory integration. It is based on the idea that children's awareness of their environment comes before their reaction to it.

**Instructor asks participants if anyone has ever heard of the term sensory integration. Allow time for input and write key terms on chalkboard or flipchart.**

*Say:* Development of the sensory integration system begins when the baby first forms in the mother's womb. Research shows that this system develops in a predictable sequence, providing there are no major disturbances or disruptions during the course of development. This ongoing process is said to take place from infancy to childhood.

Let's say that in another way. Sensory integration is the ability to take in, sort out, and connect information which comes from our environment through our senses. Our brain and spinal cord automatically sort out and connect, or interpret, this information. This is done in a sequential, step by step manner.

**Instructor asks participants to refer to Handout/Overhead 5-1-4, entitled "Sensory Integration" during the next activity as a point of reference.**

**Handout/  
Overhead  
5-1-4**

*Say:* There are several levels involved when sensory input is introduced to the sensory system. In Level I we take in stimuli through one or more of our senses. In Level II and III we organize and incorporate it, and in Level IV we try to understand and apply the meaning. For example, in Level I, information comes into our bodies through touching, smelling, tasting, sight, and hearing. These are our senses. (Balance is part of our sense of touch and has to do with where our body is in space.)

Once the information comes in, it goes to Level II, where our sensory system filters the information, and begins to sort it out. Our body identifies the information about the experience, responds or reacts to the information, and refers it on to Level III.

In Level III, a plan of action is created. Our body assesses or evaluates the information, interacts with it, and adjusts to it.

Finally, in Level IV, the integration of the input and the action plan take place. At this level our bodies apply the information through learning and through daily activities of living. The resulting behavior, or output, comes from the integration of the input with the sensory system.

10 minutes

### **ACTIVITY: Sensory Integration**

Instructor requests volunteers for sensory integration activity.

Instructor brings out previously constructed Touchy-Feely box. (See **Activity 5-1-1a** in the Specific Information for Presenting Module 5 section for directions.) Participants will describe what they feel.

*Say:* How many of you have watched the TV show "The \$25,000 Pyramid"? That show is based on categorizing. Today we are going to play that game with our Touchy-Feely box.

**Activity  
5-1-1a**

Instructor selects a volunteer to reach into the box and feel the objects without looking at them. The volunteer is instructed to describe, but not name, the objects so that the other participants can guess what they are. Each person in the group should write down the descriptions and then decide on a general category to which the items described belong.

Instructor then allows for responses from participants.

Objects: pencil, crayon, magic marker, pen, chalk, paint brush.

Category: things you write with

*Say:* This is an example of how the brain sorts out, evaluates, and applies the information that comes in through the sense of touch. Actually this is an activity that can be used with your children. It will help them use the information from their senses, stimulate their thinking abilities, and is fun.

To begin with, you can verbally describe the objects for the children to help direct the process. The ultimate goal is to give a minimal amount of help. You can do this even if your children have not learned to speak. Have them feel the objects (smell or taste them, when appropriate) as you describe them. Another way to play is to put the objects into a box and help the children find the ones you describe. Only the older children will be able to find them in a Touchy-Feely box like this. Younger children will need to use their vision too. You can put the objects in an open box.

Encourage the children to look (use sense of sight); feel (use sense of touch); taste, if appropriate (use sense of taste); smell, if appropriate (use sense of smell); and so on. You don't have to tell them what senses they are using, but you will know they are using many senses. You will know that they are integrating their other senses with the auditory or hearing sense (while you are talking). Remember to keep this fun.

The more senses the children can use to help identify and understand information, the easier it is for the children to learn. Even babies will benefit from sorting activities. You may want to use only one or two objects at a time with a baby. Remember to repeat the same objects daily. Babies and toddlers need a lot of repetition when they learn new things. They love to become familiar with objects they come to know. That is why they like repetition.

**Handout/  
Overhead  
5-1-5**

Instructor refers to **Handout/Overhead 5-1-5**.

### **ACTIVITY: Sorting Out**

Review handout with participants. Explain how participants can use these activities to encourage categorization and integration in children. Some are appropriate for use with an open Touchy-Feely box while others are not.

**Say:** Our first hour is ending. We have talked about the importance of auditory perception and sensory integration, and their impact on prelinguistic communication. We have said that listening and input from all senses, occur all during a child's waking hours. This input provides a wealth of useful information. The children need to develop skills in order to respond to input, to organize it, and understand its meaning.

We said that the integration of these sensory skills are believed to be pre-programmed to develop in a somewhat predictable sequence. Although sensory integrative functions appear to happen automatically, a caregiver can help in their acquisition by manipulating the child's environment. In this way, the caregiver helps children to gain information and to learn.

Are there any questions?

5 minutes

(omit if 3-hour presentation)

**END OF HOUR 1: Closing**

## **Module 5**

### **LISTENING AND SENSORY INTEGRATION: What to Do Before Speech and Language Develop**

## **Hour 2**

**Goal: PARTICIPANTS WILL GAIN KNOWLEDGE REGARDING THE INTEGRATION OF LISTENING WITH THE DEVELOPMENT OF THE CHILD'S PERSONALITY AND INTERPERSONAL RELATIONSHIPS.**

### **Objectives - Participants will gain an understanding of:**

- listening as an important attitude when creating an atmosphere for bonding and attachment
- characteristics that might enable the caregiver to become more tuned into the infant's personal style
- strategies which create an auditory environment which contributes to early imitation.

5 minutes  
(omit if 3-hour presentation)

## **GREETING, SIGN IN, DISTRIBUTION OF HANDOUTS**

### **SESSION BEGINS**

10 minutes

## **LECTURE/DISCUSSION: Welcome and Review/Interaction**

*Say:* Welcome to the second hour of Module 5. In the first hour, we recognized that infants begin the process of learning communication before the onset of true speech and language. We learned that language is vital to all learning and that children are prepared to receive, interpret, store, recall or remember, and express the meaning of their individual learning experiences.

During this hour we will learn strategies and activities that will help develop a relationship between the infant and the caregiver.

Research tells us that newborns have distinctive personalities or styles which may be inherited in addition to being shaped by their environment. Their personalities vary from one another, even within the same family. As caregivers we may need to make adjustments in our behavior to accommodate those styles and bring out responses in the infant. We need to create a bond that enables an exchange of closeness and trust. When the infant feels secure, the infant will risk interacting with the environment knowing that those actions and vocalizations will be accepted and reciprocated or returned. This is all part of language stimulation.

Language learning should take place continuously and naturally in daily activities. Once infants find that language allows their wants and needs to be met, they should become more active participants. Language must be meaningful if it is to be useful. It is difficult for infants to



sort out all of the information directed to them when it is meaningless.

To increase meaningful learning, we must begin by verbally labelling children's environments with slow deliberation. Many caregivers are under the misconception that children should be bombarded with auditory input to stimulate language. This is not so. We must be concerned with motivation and intonation as we communicate. We should continuously give input through conversation and singing. We must be careful not to monopolize the conversation. When adults do monopolize the conversation:

- the caregiver initiates
- the caregiver directs
- the caregiver, not the child, speaks!

We must understand the importance of creating a child-oriented or child-directed style, where the goal is interaction through the child's interest and developmental level. We want the child to respond and communicate. As adults, we must remember to listen, watch, and respond to the child.

Let's look at this another way. Caregivers need to be concerned with creating a harmonious learning environment where the infant wants to participate. This has been illustrated by Dr. Gerald Mahoney who conducted several research studies on the interactions of caregivers and infants in free play. Results showed a strong relationship between the quality of the child's ability to communicate and the caregiver's communication style. Children with the highest language-age scores, who communicated most frequently, and were the "best talkers" had caregivers who were very responsive to their attempts.

Conversations have a format where one person alternately speaks and pauses and then gives the other person a turn to participate. This important strategy is called turn-taking. Turn-taking can be taught to the infant by the caregiver during their communicative interaction.

Please note that a turn is not just verbal. It can be a gesture, an eye blink, or anything which indicates a response. Turn-taking produces a balance between the infant and caregiver. It allows an equal number of interactions between the pair. It increases responses and decreases directiveness or control of the interaction by the caregiver. This encourages the caregiver to act as a mediator and not monopolize the attempts to communicate.

Suppose, while you are attempting to interact with a child, you find that neither of you appear to relate well to the other. What might you consider as reasons for this lack of rapport?

Allow time for responses which should vary. Expected responses include:

- infant or caregiver was tired
- caregiver was nervous about interaction
- activity was too difficult.

*Say:* I would like you to consider the following information as an additional possibility. Infants, like adults, are unique. Although they are influenced by their environment, many studies indicate that infants demonstrate certain behavioral styles, or personalities or temperaments, from the very beginning. It is possible that the caregiver's style and the infant's are not exactly compatible. It is also possible that the caregiver can be more tolerant of the infant's style if the characteristics of the infant are understood.

Let's discuss the categories of characteristics an infant may have. Be aware that a baby may have a mixture of characteristics in each category. Try to identify the behaviors which most closely coincide with the category being defined. These points of reference may help caregivers accommodate infants by adjusting their approach or attitude when a clash of personality seems apparent.

Temperament can be classified into three basic styles.

Instructor leads discussion to include the following:

- Easy temperament includes the infant being regular in habits, positive in moods, mild in reactions to discomforts, and accepting of new experiences. The caregiver doesn't need to accommodate much because the infant makes fewer demands than infants in other temperament categories.
- Cautious temperament includes the infant who is thought of as shy, needs time to adjust to new experiences, has a fairly low activity level, tends to withdraw when exposed to new stimuli, is slow to adapt, and who often displays negative moods. The caregiver should be calm and tolerant. The caregiver accommodates somewhat although the infant is also fairly accommodating.
- Difficult temperament includes the infant who is unusually demonstrative, reacts negatively to minor changes or new experiences, has low or very high activity level, may be irregular in feeding and sleeping, is slow to accept new foods, takes a long time to adjust to new routines, and who tends to cry a lot. The caregiver must demonstrate considerable tolerance and patience. The caregiver must be flexible when responding to needs in order to keep stress levels to a minimum for both the caregiver and the infant. The caregiver should adjust the pace so infant will not be overwhelmed.

Instructor asks participants to suggest some behaviors to encourage communication and to develop bonding. Stress that good bonding between child and caregiver increases the likelihood of appropriate interaction. Allow time for participants to respond and discuss. Instructor writes responses on flipchart or chalkboard. Expected responses include:

- eye contact

- face-to-face play
- interaction through facial expressions
- vocalization - cooing, babbling
- reaching
- head turn
- soothing through touching, rocking, swaddling.

*Say:* Let's ask this question again. Suppose the infant does not respond to your attempts to engage in communication. What should caregivers do?

Expected responses:

- Try to discover the infant's style.
- Try to change your approach as a result.
- Try and encourage eye contact, face-to-face play, and other shared interactions.

15 minutes

### **ACTIVITY - Creating Positive Responsive Interactions**

*Say:* We are going to create two infant/caregiver interaction situations. We need two pairs of participants for each situation. Please write down your observations as we will discuss them at the conclusion of both role playing episodes.

Instructor may introduce and use **Handout/Overhead 5-2-1**.

*Say:* Please refer to Handout 5-2-1 entitled "Caregiver Behavior Rating Guide." Take five minutes to read each category and familiarize yourselves with the types of behaviors for which we will be looking when we take part in the next activity.

Instructor may choose, instead, to review this handout aloud with participants, or to introduce it after the activity.

*Say:* This might be a good tool to use when helping us to develop good interaction skills. We are

<p><b>Handout/ Overhead 5-2-1</b></p>
---

going to use it now as a guide to look at the behaviors we will observe.

Instructor briefly explains the following two scenes to the participants, one scene at a time. For each scene, the instructor asks one participant to play a toddler and the other to play a caregiver. Following the explanation the participants act out the scene.

#### Scene I

The caregiver gets rattles or other sound producing toys, soft sculpture toys, books, and any other objects to attract a child's attention, and places them next to the toddler. The caregiver smiles, looks at, and handles several of the objects before sharing with the child. The caregiver slowly shares an object with the child. The caregiver waits for one of the previously discussed behaviors (head turn, reaching out) to indicate an interaction before taking another turn.

Scene I is to be acted in an evenly paced manner with no rush or pressure. The child may take several minutes before becoming aware of the caregiver's intentions. The caregiver has no problem with that and attempts to pace the interaction taking as much time as the situation will allow. The interaction continues until the child is disinterested or disengaged.

#### Scene II

In scene II, the caregiver appears ready for combat, carrying all the objects at one time. The caregiver holds up one object after another trying to engage the toddler. The caregiver bombards the toddler with descriptions of every object in order to get the child's attention. The caregiver holds up objects continuously asking the child if the child wants to watch, listen, or play with the object. The caregiver does not give the child a chance to respond until overload is apparent by both participants. Toddler crawls away and caregiver crawls after the toddler continuing to talk the whole time. Child cries from frustration or turns head or body away showing disinterest or disengagement.

Instructor asks the following and records responses on flipchart or chalkboard:

- Ask:
- What did you observe in Scene I?
  - What role did the caregiver play?
  - Did the caregiver seem comfortable interacting? How could you tell?

- What role did the child play?
- Did the child have enough turns or chances to interact?
- Did both participants seem to interpret what the other was trying to communicate? Why, or why not?

Repeat questions for Scene II.

Expected responses follow.

#### Scene I

- The caregiver had many objects to share with the child and seemed interested in beginning the session.
- The caregiver played the role of a responsive and patient participant.
- Yes. Answers will vary.
- The child played the role of a responsive and interested participant.
- Yes. Name observable interactions, such as eye contact.
- Yes. Answers will vary.

#### Scene II

- The caregiver had many objects to share with the toddler but didn't seem to know what to do with them.
- The caregiver played the role of a dominating or directive participant.
- No. Answers will vary.
- The child played the role of a frustrated and disinterested participant.
- No. There were no mutually satisfying observable interactions. Things were too one-sided and, as a result, communication was not interactive.
- No. Answers will vary.

*Say:* Sometimes, successful interaction depends on how compatible the caregiver's behavior is with the child.

*Ask:* Which scene shows the most potential for good communicative interactions between a caregiver and child?

**Answer: Scene I**

**Instructor leads discussion as to why. Answers will vary.**

*Say:* The behaviors we were concerned with in this session today were eye contact, facial expression, gesturing, and vocalizations. They are non-linguistic signals that help us bridge the gap between what the child can communicate and how the caregiver interprets those communications. Interpretation is extremely important. It provides the infant or toddler with a script which encourages the infant's or toddler's desire to communicate.

In the next activity, we will be concerned with establishing a harmonious auditory environment since we already know how to establish rapport. Both of these activities should enable you, as caregivers, to feel comfortable when providing a basic foundation for language development with children who have not developed the ability to speak.

10 minutes

**ACTIVITY: Creating an Auditory Environment**

*Say:* The goal in creating a harmonious auditory environment is to help the child develop an auditory feedback system. This is a system that creates step by step instructions or patterns to be followed for the new sounds coming in, so the child can make sounds come out.

**Instructor may write key words (parts) of the auditory system on a flipchart or chalkboard.**

*Say:* This system involves hearing the sound, listening to it, remembering it (auditory memory), finding a place for it in order (auditory sequencing), and monitoring it. The result is that the child hears and understands what is being said. This level of listening is

called reflexive, or the physiological level for awareness of sound.

The child is encouraged to listen and maybe vocalize responses heard. This is done through the caregivers use of intonation and inflectional patterning. In other words, what you say is not as important as how you say it.

This point is illustrated in a movie titled "Three Men and a Baby." In the movie an actor held a baby on his lap and read from a newspaper material which was way above the baby's level of understanding. It sounded so pleasing, that the baby relaxed and enjoyed it as if it were a children's story. To further demonstrate this point, we would like to have two participants re-enact that same scene, but encourage different behaviors.

Instructor tells participants how to read. Instructor plays out role as infant. Instructor gives current event article from newspaper which would ordinarily be totally inappropriate reading material to use with an infant.

#### Scene I

Give current event article to participant. Ask participant to use pleasing inflection and intonation, when reading normally. Instructor, as infant, is alert but does not engage as participant who is interacting. Infant smiles and makes pleasurable sounds without looking at caregiver.

#### Scene II

Caregiver reads same current event article using facial expression, pauses, and vocal inflections when asking questions. Caregiver allows infant to show interaction behaviors such as smiling, cooing, pointing, or gesturing. These behaviors acknowledge the child as an active participant.

Instructor asks participants to evaluate the activity.

Allow time for discussion by writing the following on a flipchart or chalkboard, or using **Handout/Overhead 5-2-2**.

**Ask:** Did the following behaviors take place in Scene I? You may wish to take notes on handout 5-2-2.

**Handout/  
Overhead  
5-2-2**



- Awareness. Was child aware of tones or sounds?
- Attending. Child was aware, but did the child respond to sound?
- Orienting. Child was aware, but did that come from sound or prompting from caregiver?
- Associating. Child heard sound, but did it have meaning?
- Feedback. Child recognized sound, but did the child respond by monitoring own voice?

Repeat questions for Scene II. Answers will be different than they were for Scene I because caregiver allowed the child time to interact. The child may not have understood anymore in Scene II than in Scene I, but the child felt a part of the interaction because of the way the caregiver waited, prompted, and responded to the child's attempts to interact. This enhanced the child's self esteem and confidence in interacting.

15 minutes

**LECTURE/DISCUSSION: Identify Strategies for Language Stimulation**

*Say:* During this past hour of our module we have tried to stress the importance of establishing a bond with the child. We have shown how interaction plays a dominant role in self esteem and the courage to continue taking risks as a communicator. We have discussed the value of integrating the child's hearing environment by teaching listening skills so they can be processed as learned behaviors. We know infants listen so they can start "organizing" and preparing the information heard for future use.

*Ask:* Given all of this knowledge, how do we, as caregivers, plan a harmonious auditory or sound environment?

Instructor listens to responses and summarizes.

*Say:* As caregivers, we must provide meaningful experiences when trying to stimulate language. It is important that we match the interest level

of the child to the child's capability or current level of development. We must look for indicators which cue us about the child's desire to participate. We must try to match the child's behavior style. It helps us to know whether to slow down or speed up our pace in order to accommodate the child's needs and wants. We must remember, at all times, that we are there to help children determine their learning styles and not to reinforce ours.

*Say:* We, as caregivers, can increase and improve the process of acquiring language development. We can have a positive effect or impact on the child's feeling of confidence. We can improve prelinguistic and linguistic competence by guiding the child through strategies which will encourage and support the child's entire being.

Realize that the art of teaching children to speak is not dependent upon extensive training. You will be ahead of most caregivers, with or without formal training in speech and language, if you remember that it is difficult to stimulate language naturally if you only show flashcards or continuously use activities written in books. You have to watch the child. You have to know the child. Try to understand why there is a conscious choice on the part of the child to be an active or an inactive participant. Let's discuss a plan for implementation.

Instructor leads discussion using **Handout/Overhead 5-2-3 and 5-2-4**. Use as much time as necessary to review these handouts with participants.

*Say:* In summary, we have identified the importance of creating a positive atmosphere when attempting to stimulate language skills. We have demonstrated good strategies to use when interacting with children. We have stressed the importance of being a participant when

**Handout/  
Overhead  
5-2-3 &  
5-2-4**

interacting with infants and not trying to dominate or monopolize the energy flow.

We must continue to ask what we can do, as caregivers, to increase development and improve the process for acquiring language development.

Our second hour is ending. We have talked about strategies and activities that can improve the development of communication skills. Are there any questions?

5 minutes

**END OF HOUR 2 : Closing**

**Module 5**  
**LISTENING AND SENSORY INTEGRATION:**  
**What to Do Before Speech and Language Develop**

**Hour 3**

**Goal: PARTICIPANTS WILL GAIN KNOWLEDGE REGARDING THE CONDITIONS WHICH HELP US PERCEIVE OR RELATE TO SITUATIONS IN ORDER TO LEARN TO EXPRESS WHAT WE MEAN.**

**Objectives - *Participants will gain an understanding of:***

- subskills and categories of language development
- strategies for developing an appropriate language environment for infants and toddlers.

5 minutes  
(omit if 3-hour presentation)

## GREETING, SIGN-IN, DISTRIBUTION OF HANDOUTS

### SESSION BEGINS

10 minutes

### LECTURE/DISCUSSION: Welcome and Review/Language

*Say:* Welcome to the final hour of Module 5. It has been an enjoyable experience sharing previous portions of this module with you.

In the past hours we traced sound as information which is received through our ears then through the steps necessary to internalize it. We acknowledged a layout or sequence to follow when internalizing sound which is believed to be pre-programmed before birth. We responded to that sequence as infants and toddlers through role-playing.

In this hour we are going to learn how to apply information from the other two hours. I would like you to sit back, relax, and listen to my voice. Do not concentrate on the fact that I am acting in a teacher role. Just listen and let my message flow into your head in a calm and appreciative manner.

*Read:* Infants and toddlers are people who are just beginning to experience life as we know it. They are dependent upon us to proceed in a learning capacity and want to share in our world of communication. Children listen to sounds out of interest. They want to know what sounds are and what they mean. Children imitate sounds because, tactually, they feel good in their mouth and are pleasurable to their ears. We are all filled with joy when they expand these sounds into identifiable words which we, as caregivers, understand.

*Ask:* Did you hear the term I used when describing us?

*Say:* Caregivers. We are people who possess the power to give through caring. Caring is the main reason for communication. We care to share.

We are here because we care about the children we work with and those yet to come. We must teach our children to care about communicating their feelings, so they can be heard. All human beings deserve that chance.

The message for this hour is to create the most caring environment that we can. We must try to do everything within our power to keep communication on a desirous level for us and for the children so that everyone, regardless of their background or diagnosed exceptionality, has the power to be heard.

*Say:* Language should be viewed as a continuous linking of processes and abilities.

Instructor refers to **Handout/Overhead 5-3-1**.

*Say:* The first link to emerge is the link of sensory awareness. In this link, the child's senses are alerted that something is creating a change at that moment. This link becomes the basis for inner or internalized language when we associate experiences based on sensory awareness.

This awareness is observed in very young babies who appear to be attuned to people. Research shows that babies prefer human voices to tonal sounds, and faces that talk over faces that are silent. Often infants are stimulated to respond with facial expressions and imitations which match the rhythm and melodies heard in conversation. Research shows that infants are able to follow turn-taking or conversation exchanges due to the tempo and rhythm of what is being said.

The second emerging link develops through the ability to listen. Notice that I said listen and not hear.

**Handout/  
Overhead  
5-3-1**

**Ask:** Is there a difference between hearing and listening?

**Expected response:** Yes

**Say:** Hearing is the awareness of sound or what is heard. Listening is the ability to perceive and understand what is heard. It is often stated that we hear with our ears but listen with our minds.

Listening has three parts, attention, concentration, and comprehension.

Instructor may wish to elaborate on these three terms. Attending has to do with focusing on the sound. Concentration has to do with filtering out other distractions, and comprehension has to do with identifying and understanding.

**Say:** Each of these three parts of listening needs to be strengthened before it can develop into a core for receptive language. Receptive language is language which is understood or received. The receptive language link is intricately involved with the infant's reactions and awareness. A baby can affect that awareness by its moods and activity levels.

The third link emerges as the infant identifies specific sounds, gestures, or words which express ideas or feelings, and wants to respond to them. This process becomes the core for expressive language.

Infants can express themselves through vocalizations by varying the volume or by changing the pitch patterns through a series of sounds. This gives caregivers additional cues for interpreting the infant's feelings. These communication efforts are possible because infants appear more able to process the melody than the word.

The next link forms from the child's ability to interpret acquired symbols and words, and use

them in a proper way. When those symbols and words are understood in their written form, we call the skill reading.

The last link to emerge is also a form of expression. It is the ability to comprehend symbols and blend them together with the child's feelings or perceptions in written form. When the child combines these abilities with the fine motor skills reproducing them on paper, we call the skill writing.

By the time a child approaches five years of age the child should have developed some experience in all five links of this language bracelet.

Although one of the other MITCH modules (Module 2) explores the subskills of language more thoroughly, I wanted to include a brief discussion regarding the key concepts of specific types of language and the approximate ages they should develop.

**Handout/  
Overhead  
5-3-2 &  
5-3-3**

**Instructor refers to Handout/Overheads 5-3-2 and 5-3-3.**

*Say:* Although these will be very technical terms they are very important. They can help us appreciate speech and language development as more than just imitation of sounds. They are also terms which help us understand that there are several areas we can work on when creating a language plan for children.

**Instructor discusses language subskills using handouts as reference points.**

*Say:* In summary, there is a very important reason for giving you this detailed information. Infancy is the most rapidly changing and externally disorganized portion of human life. That is why it is so important that we all understand how many steps are involved in effective communication. It does not begin with memorizing the alphabet and repeating it back to the



caregiver! It is a continuous flow of steps, processes, and abilities.

The major reason we must understand the need for using coordinated plans for infants is to create a system that helps them organize. This saves valuable time and is the primary reason we stress the importance of early intervention, or teaching children at the earliest possible time.

35 minutes

### **ACTIVITY: Case Studies**

*Say:* We are going to divide into two groups.

Instructor designates each group.

*Say:* Each group will be assigned a case study describing a child.

Instructor refers to **Handout/Overhead 5-3-4** and assigns one case study to group 1 and the other to group 2.

*Say:* Each group will be given 10 minutes to write responses. Use this activity to learn how to develop a profile about a child. It was designed so you could use the information presented in this module and combine it with the skills you have acquired from experience. Please use any of the other handouts for additional information.

Instructor refers to and reviews **Handout/Overhead 5-3-5**.

*Say:* Use the handout entitled "Observation/Categorizing" as a guideline for your responses. We will spend approximately 12 minutes listening to and discussing your responses.

Instructor encourages participants to take notes on both case studies as they are discussed. The notes may be used later as examples by participants. Instructor leads discussions for each case study to include the following.

#### **Case Study I**

##### **Category 1 - Child's background:**

- normal physical/mental development

**Handout/  
Overhead  
5-3-4**

**Handout/  
Overhead  
5-3-5**

- two and a half years old
- history of bad colds/stuffy, runny nose
- normal hearing
- "lazy"
- difficulty following classroom instructions
- difficulty comprehending ideas
- watches others for work cues
- loves to sing/imitate songs/uses sound patterns
- doesn't interact well
- unintelligible speech
- third of five children
- parents work.

Category 2 - Effect:

- poor speech/language skills
- poor comprehension resulting in poor learning.

Category 3 - Listening skills child should have mastered:

- responding
- organizing
- understanding meaning.

Category 4 - Speech/language skills child should have mastered:

- follows simple commands/one and two-step commands
- uses all vowel sounds correctly
- intelligible speech
- recognizes names and pictures of common objects
- some articulation errors are still present
- uses "s" and "es" as plurals; uses past tense and some possessives
- 500 word vocabulary.

Category 5 - Strategies and activities for a language plan:

- use prosody or patterning as a method to reach and engage child
- alternate singing words or lines of a song with child
- play question/answer games
- play games which require remembering to do things in sequence, adding new items. (Touch the desk; then touch desk and sink; then touch the desk, sink, and door.)
- play "what comes next..." games where teacher says an obvious statement like, "The puppy jumped into the lake. He got \_\_\_\_" (wet).
- teacher asks, "What is this?," to common pictures in book.

**Category 6 - Important personnel:**

- older siblings
- classmates
- classroom aides/teacher
- parents.

**Case Study II**

**Category 1 - Child's background:**

- age 18 months
- parents work
- Spanish speaking grandmother is caregiver at her own home
- appears confused when asked to respond verbally
- mimics and imitates speech and facial expressions
- withdraws and becomes inattentive when expected to respond verbally
- likes to turn pages of books
- youngest of two children/sibling is age 10.

**Category 2 - Effect:**

- poor expression of English/Spanish
- confusion between languages.

**Category 3 - Listening skills child should have mastered:**

- responding
- organizing
- understanding some meanings.

**Category 4 - Speech/language skills child should have mastered:**

- uses jargon
- uses most vowels and some consonants
- telegraphic speech
- uses some personal pronouns
- 10 to 20 word vocabulary.

**Category 5 - Strategies and activities for a language plan:**

- Child should speak Spanish with grandmother all the time but English with parents all the time. Thus, child will come to separate languages (English from Spanish) as they are separated from people (parents from grandmother). Later, the child will be able to use Spanish with parents also.
- Have child look at books and turn pages while story is read in English or Spanish (see above). Identify objects in picture.
- Do one-word naming of common objects (cup, juice) in English and in Spanish (see above).
- Encourage child to repeat words as a request.
- Use much facial expression when talking with the child. Encourage mimicking words and expressions.

**Category 6 - Important personnel:**

- grandmother
- 10-year-old sibling
- parents
- teachers/aides

5 minutes

**Summary**

*Say:* Our third hour is ending. We have discussed many areas regarding listening and language

development and the important part each plays in communication. You have been wonderful participants and I have thoroughly enjoyed our communication exchanges. Before I ask for questions I want to remind you of the most important messages in this module:

- Infancy is the most rapidly changing and externally disorganized time of human life.
- The infant learns through all of the five senses.
- The infant learns to communicate long before the onset or beginning of true speech and language.
- This period of early communication is called prelinguistic communication.
- Prelinguistic communication is crucial to children's development in several areas including language, cognition or learning, and social skills.
- Children need to develop skills to respond to stimuli, organize stimuli, and understand its meaning.
- A caregiver can help children acquire these skills by sharing or taking turns exchanging information with the child.
- Communication is developed because the child wants the power to be heard.

*Say:* Thank you for giving me the power to be heard. I would like to share the same experience with you. Are there any questions?

5 minutes

### **Explanation of Six-Week Follow-Up Activity**

Give participants the phone number at which you can be reached should there be any questions regarding the follow-up activity.

**END OF HOUR 3: Closing**

## Resource List

- Brazelton, T. B. (1969). Infants and mothers. New York: Delta/Semour Lawrence.
- Brazelton, T. B. (1987). What every baby knows. New York: Ballantine Books.
- Cook, R. E., Tessier, A., & Armbruster, V. B. (1987). Adapting early childhood curricula for children with special needs. Columbus, OH: Merrill Publishing.
- Erber, N. (1982). Auditory training. Washington, DC: Alexander Graham Bell.
- Fisher, J. (1988). From baby to toddler. Sommerville, NJ: Johnson and Johnson/Perrigee Book.
- Mahoney, G. (1984). Transactional intervention program. CN: Pediatric Research and Training Center.
- Schickedanz, J. A. (1982). Toward understanding children. Boston, MA: Little, Brown, and Co.
- Schwartz, S., & Heller-Miller, J. (1988). The language of toys: Teaching communication skills to special needs children. Kensington, MD: Woodbine House, 281 pages. \$12.95 (soft cover).
- Segner, L. (1979). Ways to help babies grow and learn activities for infant education. Denver, CO: World Press.
- Semel, E. (1970). Sound order sense - A developmental program in auditory perception. Chicago: Follet Educational Corporation.

## References

- Armbruster, V. B., & Klein, M. D. (1987). Nurturing communication skills. In Cook, R. E., Tessier, A., & Armbruster, V. B. (Eds.), Adapting early childhood curricula for children with special needs (pp. 197-234). Columbus, OH: Merrill Publishing.
- Brazelton, T. B. (1969). Infants and mothers. New York: Delta/Semour Lawrence.
- Brazelton, T. B. (1987). What every baby knows. New York: Ballantine Books.
- Cook, R. E., Tessier, A., & Armbruster, V. B. (1987). Adapting early childhood curricula for children with special needs. Columbus, OH: Merrill Publishing.
- Erber, N. (1982). Auditory training. Washington, DC: Alexander Graham Bell.
- Fisher, J. (1988). From baby to toddler. Sommerville, NJ: Johnson and Johnson/Perrigee Book.
- Keith, R. W. (1981). Central auditory and language disorders in children. San Diego, CA: College Hill Press.
- Kirk, U. (1983). Neuropsychology of language, reading and spelling. New York: Academic Press.
- Love, R. (1986). Neurology for the speech-language pathologist. Stoneham, ME: Butterworth.
- Mahoney, G. (1984). Transactional intervention program. CN: Pediatric Research and Training Center.
- Schickedanz, J. A. (1982). Toward understanding children. Boston, MA: Little, Brown and Co.
- Segalowitz, S. (1983). Language functions and brain organization. New York: Academic Press.
- Segner, L. (1979). Ways to help babies grow and learn: Activities for infant education. Denver, CO: World Press.
- Semel, E. (1970). Sound order sense - A developmental program in auditory perception. Chicago: Follet Educational Corporation.

# Appendix A

## Reproducible Forms for Three-Hour Module

---

### Form

- Instructor's Time Table and Notes (2 pages)
- Advertising Flier
- List of Participants
- Follow-Up Mailer (2 pages)

### Copies to make

- 1 per instructor
- As needed
- Varies - usually 6 to 8
- One per participant

### Note:

Reproduce mailer as one two-sided page by photocopying the second page on the reverse side of the first. This mailer may be reproduced on agency letterhead.

- Certificate of Completion (1 page)
- 1 per participant



# Instructor's Time Table and Notes

MITCH Module Title: \_\_\_\_\_

Training Location \_\_\_\_\_

Date \_\_\_\_\_

Instructor \_\_\_\_\_

## Preparation

Date	Task	Completed
_____	Review module	_____
_____	Preview videotape* and audiotape	_____
_____	Arrange for guest speaker*	_____
_____	Set date	_____
_____	Arrange for room	_____
_____	Arrange for A-V equipment*	_____
_____	Advertise	_____
_____	Photocopy all handouts	_____
_____	Prepare any overheads	_____
_____	Collect additional materials	_____

**Notes for Training**

**Hour 1:**

**Hour 2:**

\* if applicable

**Trainer's Time Table and Notes, continued**  
**Hour 3:**

**Six-Week  
Follow-Up Activity**

<b>Date</b>	<b>Task</b>	<b>Completed</b>
_____	Copy letters	_____
_____	Send letters	_____
_____	Collect activity	_____
_____	Review activity	_____
_____	Copy certificate	_____
_____	Prepare certificate	_____
_____	Deliver certificate	_____
_____	Record trainees who have completed module	_____
_____	Maintain List of Participants on file	_____

**Notes:**

Coming . . . MITCH Module 5

LISTENING AND  
SENSORY  
INTEGRATION:

What to Do Before  
Speech and Language  
Develop

TRAINING  
FOR  
CAREGIVERS  
OF  
INFANTS  
AND  
TODDLERS



Date ..... Time .....

Location .....

Training Agency .....

For information and/or registration, call .....

.....  
.....

# LIST OF PARTICIPANTS

## SIGN IN SHEET MITCH Module # \_\_\_\_\_

MITCH module title \_\_\_\_\_

Training date \_\_\_\_\_

Training location \_\_\_\_\_

Instructor \_\_\_\_\_

**Please PRINT your name, social security number, home mailing address, phone and place of work.**

Hours Attended			
1st	2nd	3rd	*FA

Full Name \_\_\_\_\_ Social Security \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Place of Work \_\_\_\_\_

Work Address \_\_\_\_\_ Zip \_\_\_\_\_

Full Name \_\_\_\_\_ Social Security \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Place of Work \_\_\_\_\_

Work Address \_\_\_\_\_ Zip \_\_\_\_\_

Full Name \_\_\_\_\_ Social Security \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Place of Work \_\_\_\_\_

Work Address \_\_\_\_\_ Zip \_\_\_\_\_

Full Name \_\_\_\_\_ Social Security \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Place of Work \_\_\_\_\_

Work Address \_\_\_\_\_ Zip \_\_\_\_\_

**\* Follow-Up Activity completed**

*Dear*

*This is to remind you that the Six-Week Follow-Up Activity for MITCH Training Module # \_\_\_\_\_*

*Title: \_\_\_\_\_*

*is due \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_.*

*Please submit your Follow-Up Activity to:*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*If you have any questions, please call:*

\_\_\_\_\_ telephone \_\_\_\_\_.

*Sincerely,*

*Staple*

Fold #2

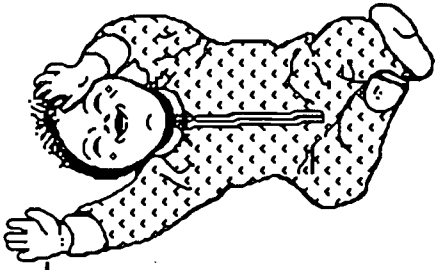
---

From: MITCH Module Training

To:

Fold #1

---



# Certificate of Completion

## MITCH

Model of Interdisciplinary Training for Children with Handicaps

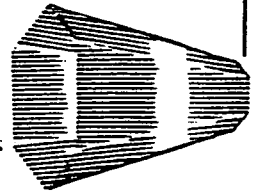
\_\_\_\_\_ has completed all requirements for MITCH Module 5, entitled:

**LISTENING AND SENSORY INTEGRATION:  
WHAT TO DO BEFORE SPEECH AND LANGUAGE DEVELOP**

\_\_\_\_\_  
Instructor

\_\_\_\_\_  
Training Agency

\_\_\_\_\_  
Date



## Appendix B

### Reproducible Copies of Handouts/Overheads/Booklets

---

**Note:**

Each handout is numbered in a three-digit code such as: Handout 3-1-4. The first digit (3 in example) refers to the module number. The second digit (1 in example) refers to the hour of the Module, while the last number (4 in example) refers to the number of the handout itself. Consequently, the example number above denotes the fourth handout to be used during the first hour of Module 3.



## Definitions of Terms

**Acuity:** degree to which one is able to hear sounds and see images.

**Assessment:** either a test or observation that determines a child's strengths or weaknesses in a particular area of development.

**Association:** the process of relating one concept to another.

**Auditory Association:** the ability to draw relationships or make associations from what is heard, what is seen or can be said.

**Auditory Discrimination:** the ability to distinguish one sound from another.

**Auditory Figure Ground:** the ability to differentiate between and among various sounds and to hear likenesses and differences.

**Auditory Memory:** the ability to recognize and recall stimuli presented orally.

**Auditory Perceptual Processing:** the ability to respond to and organize stimuli; and to understand their meaning.

**Cognition:** learning, or the analytical, logical acts of mental behavior that result in the act of knowing.

**Expressive Language** the ability to send a communication (orally) according to a system of rules that is understood by others who know the rules.

**Feedback:** the receipt of knowledge of results (the effect) of one's own behavior.

**Language:** a code where ideas are represented through a system of signals for communication, agreed upon by a given group.

**Multisensory Learning;** a technique to facilitate learning that employs a combination of sense modalities at the same time.

**Observable Behavior:** behavior that can be seen, heard, or felt.

**Perception:** the process of interpreting what is received by the five senses.

**Phonology:** the sound patterns of language that convey meaning.

Module	Hour	Handout
5	1	1

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Definitions of Terms (con't.)

**Pragmatics:** functions of language, or learning how to use language in appropriate ways in different situations, like turn-taking and not interrupting.

**Prelinguistic Communication:** communication learned before the onset of conventional speech and language. These communications are not really intentional although they are easily responded to by caregivers. Often referred to as perlocutionary behaviors.

**Precommunicative Functions:** types of intentional behaviors referred to as illocutionary. Generally used prior to the acquisition of the first words.

**Profile:** a description of characteristics which are known to create a forecast of probable course.

**Receptive Language:** the ability to understand the intent and meaning of someone's effort to communicate.

**Screening:** the process of sorting out from a total group to determine a need for further testing or to determine if a problem really does exist.

**Semantics:** the meaning of words.

**Sensory Input:** awareness and identification of environmental information through the senses of hearing, sight, smell, touch, and taste.

**Sensory Integration:** the process of blending sensory input and coordinating it with the knowledge or information already known.

**Sorting:** discrimination and separation according to differences.

**Speech:** a method or vehicle to convey language, characterized by correct production (articulation) of speech sounds and the maintenance of appropriate rhythm and voice production.

**Stimuli:** information that can be received by the senses.

**Syntax:** the rules that organize sentence structure.

Module	Hour	Handout
5	1	1 (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Prelinguistic Communication

## Behavior

## Occurs

Perlocutionary or Unintentional Communication: First few months of life  
crying, smiling, cooing,  
looking, or gazing, reaching.

Often these behaviors are not intentional, but are understood and have meaning to the caregiver. They are responded to or interpreted by the caregiver as if they were intentional, making the infant a more active participant. Eventually these behaviors become voluntary communicative acts.

Illocutionary or intentional communication  
sometimes described by categories of function:

Around nine to ten months

### EXAMPLE:

- "You and me" (Interactional) Infant attempts to elicit attention and interaction.
- "I want" (Instrumental) Infant uses communicative behavior to obtain wants.
- "Do as I tell you" (Regulatory) Infant attempts to control behavior of others.
- "Here I come" (Personal) Infant expresses emotion to accompany own action.
- "Tell me why" (Heuristic) Infant obtains additional information as communicative skill.
- "Let's pretend" (Imaginative) Infant uses communication to change or participate in situation by creating own game.

Wakes from nap and cries from crib to get attention.

Gazes at bottle - gestures to indicate desire.

Vocalizes or reaches to be picked up; rocks to be pushed in stroller.

Drops something, says "uh oh"!

Use of vocalization with question-like intonation, or raised eyebrows, so additional information is solicited.

Plays peek-a-boo as if either participant is really hiding

Adapted from Armbruster & Klein (1987)

Module	Hour	Handout
5	1	2

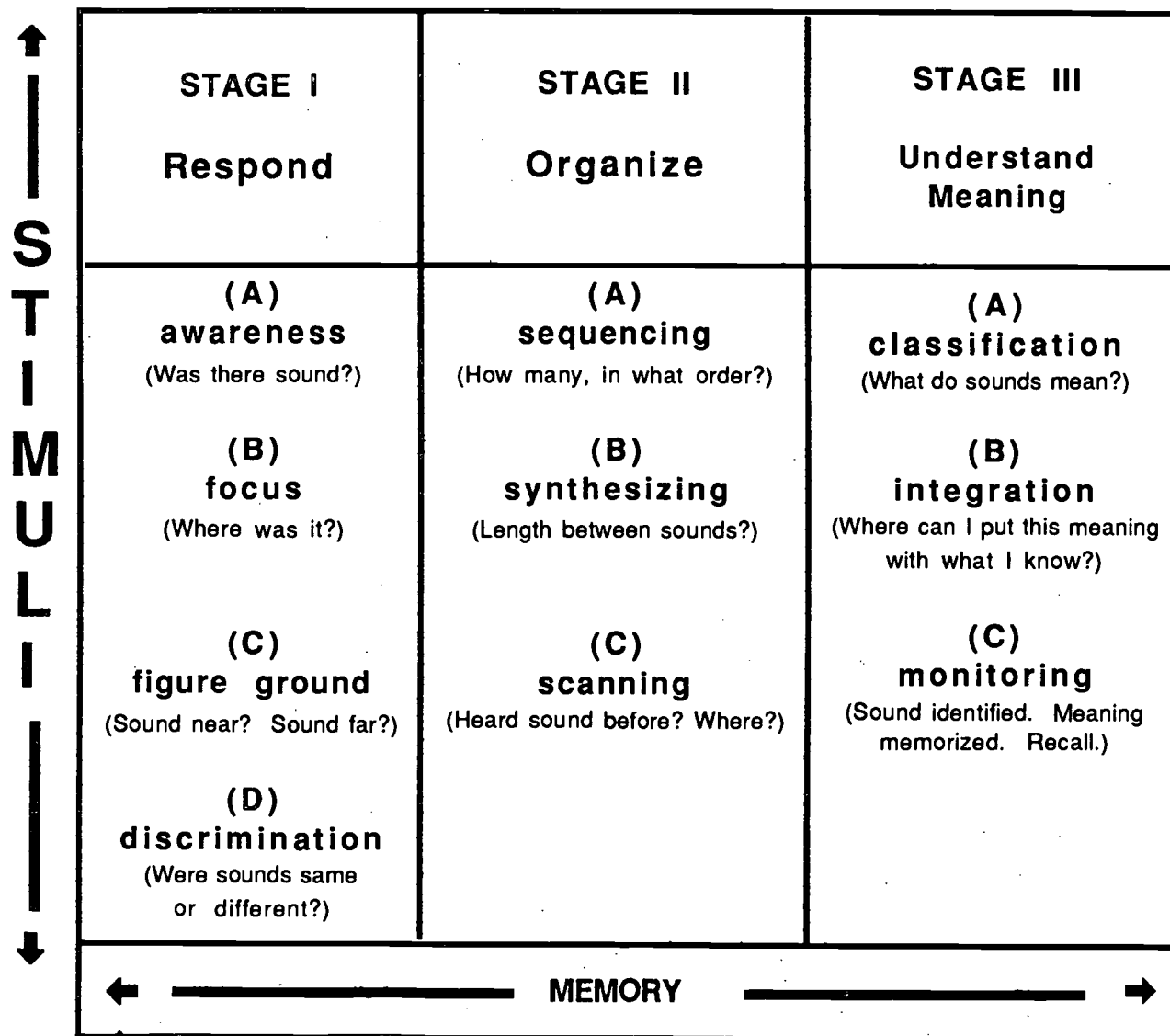
Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Auditory Perceptual Processing

## CATEGORIES FOR LISTENING



Stimuli = Sensory Input

Adapted from Semel, E. (1970).

Module	Hour	Handout
5	1	3

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students.



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Blueprint for Sensory Integration

Children's awareness of experiences in their environment comes before their reaction to them.

Sensory Motor Development		Perception	Cognition
Level I	Level II	Level III	Level IV
Alerting the body through five senses.	Filtering input to provide a frame of reference.	Creation of an action plan.	Integration of input and action plan.
Touch	How our body identifies information about the experience.	How our body assesses the information.	How our body applies information through learning and mental activity.
Balance (Inner Ear)	How our body responds to the experience.	How our body interacts with the information.	How our body applies information through daily physical activities.
Balance (Posture)	Where our body refers information that is experienced.	How our body adjusts to the information.	Ability to use information due to the integration of all the input that was processed.
Smell			
Taste			
Sight			
Hearing			

Reprinted with permission from S. R. Berkowitz (1989).

Module	Hour	Handout
5	1	4

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Activities - *Sorting Out*

## Things That We Hear:

- Accumulate as many rattles or teacher-made materials to sound like rattles as possible (beans in a small container, etc.) Shake these to identify locations.
- Tape voices of people in children's world so they can become accustomed to them. Read stories or sing daytime/bedtime songs to track tone patterns.
- Tape sounds of favorite toys such as crib toys, horns, bells, music boxes, and push-pull toys to associate sound and object.

## Things We See:

- Accumulate many different types of mirrors so the infant can "look at the boy" and caregiver. Say, "Who do you see?" Encourages association of infant and caregiver as well.
- Look through infant's books to associate objects visually.
- Talk to the infant with puppets and encourage infant to attend to the puppet's mouth.

## Things That Are Soft:

- Cut out vibrant scraps of material, stuff with cotton and sew into squares to identify soft objects.
- Put many small stuffed animals in mesh bag and pull out one at a time saying "Soft."
- Talk about soft when infant lies on different fabrics, such as blankets, towels, and cloth diapers. Emphasize that they are all soft.

Module	Hour	Handout
5	1	5

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Activities - *Sorting Out* (con't.)

### Things That Smell:

- Fill individual plastic zip bags with objects with which infant is familiar. Open them and allow infant to smell contents.
- Place a cotton ball soaked with favorite colognes into plastic bottles. Open to smell.
- Fill plastic zip bags with fruit-scented pot-pourri. Open and encourage infant to use sense of smell.

### Things We Touch:

- Cut out many different sizes of hands from fabric. Have child place own hand on cut-outs.
- Wad up different kinds and textures of paper. Describe how they feel.
- Pour sticky substances (e.g., honey) on aluminum foil for infant to touch.

### Games We Play:

- Play pat-a-cake, peek-a-boo, drop item - "uh, oh!"
- "Where did it go?" Use blanket or cloth diaper to hide objects.
- Use any favorite play toys to encourage interaction.

### People In Infant's World:

Take snapshots of people who interact with the infant on a regular basis.

- Identify - "This is . . ."
- Describe.
- Make up a story.

Talk to the infant through each activity using melodious inflections and intonations in your voice. The same format can be used weekly. Change the activities to correspond to the appropriate developmental level of the child.

Reprinted with permission from S. R. Berkowitz (1989).

Module	Hour	Handout
5	1	5 (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Caregiver Behavior Rating Guide

**Enjoyment:** This item assesses the caregiver's enjoyment of interacting with the child. Enjoyment is experienced and expressed in response to the child's spontaneous expressions or reactions and behavior when interacting with the caregiver. There is enjoyment in response to the child rather than the activity the child is pursuing.

1. Enjoyment is absent. Caregiver may appear rejecting of the child as a person.
2. Enjoyment is seldom manifested. Caregiver may be characterized by a certain stiffness. Caregiver does not seem to enjoy the child per se.
3. Pervasive enjoyment, but low intensity. Occasionally manifests delight in child.
4. Enjoyment is the highlight of the interaction. Enjoyment occurs in the context of a warm, relaxed atmosphere. Caregiver manifests delight fairly frequently.
5. High enjoyment. Caregiver is noted for the buoyancy and display of joy, pleasure, delighted surprise at the child's unexpected mastery.

**Sensitivity to Child's Interest:** This item examines the extent to which the caregiver seems aware of and understands the child's activity or play interests. This item is assessed by the caregiver's engaging in the child's choice of activity, caregiver's verbal comments in reference to child's interest and caregiver's visual monitoring of child's behavior or activity. Caregiver may be sensitive, but not responsive, such as in situations where the caregiver can describe the child's interests but does not follow or support them.

1. Highly insensitive. Caregiver appears to ignore child's show of interest. Caregiver rarely comments on or watches child's behavior and does not engage in child's choice of activity.
2. Low sensitivity. Caregiver occasionally shows interest in the child's behavior or activity. Caregiver may suddenly notice where child is looking or what child is touching but does not continue to monitor child's behavior or engage in activity.
3. Moderately sensitive. Caregiver seems to be aware of the child's interests; consistently monitors child's behavior, but ignores more subtle and hard-to-detect communications from the child.
4. High sensitivity. Caregiver seems to be aware of the child's interests; consistently monitors the child's behavior, but is inconsistent in detecting more subtle and hard-to-detect communications from the child.
5. Very high sensitivity. Caregiver seems to be aware of the child's interests; consistently monitors the child's behavior and follows interest indicated by subtle and hard-to-detect communications from the child.

Module	Hour	Handout
5	2	1

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps



# Caregiver Behavior Rating Guide (P. 2, con't.)

**Effectiveness:** This item refers to the caregiver's ability to engage the child in the play interaction. It determines the extent to which the caregiver is able to gain the child's attention, cooperation and participation in the overall situation or specific activities which are presented.

1. Caregiver is very ineffective in keeping the child engaged in the interaction. The caregiver makes attempts to elicit the child's cooperation, but almost invariably fails. Most of the attempts are characterized by poor timing, lack of clarity or firmness, and half-heartedness. Caregiver may give the appearance of helplessness where the child is concerned.
2. Caregiver mostly ineffective in keeping the child engaged in the interaction. In a few instances only, the caregiver is able to gain the child's cooperation, but is most often unsuccessful.
3. Caregiver is moderately successful in keeping the child engaged in the interaction. Caregiver succeeds approximately half of the time in eliciting the child's cooperation.
4. Caregiver keeps the child engaged throughout most of the interaction. For the most part, caregiver is successful in eliciting the child's cooperation.
5. Caregiver is able to keep the child engaged willingly throughout the entire interaction. The caregiver will be characterized by clarity of intent, good timing, respect for the child's needs in shifting gears, flexibility to insure understanding, and firmness of the child's expectation.

**Pace:** This item examines the caregiver's rate of behavior. The caregiver's pace is assessed apart from the child's. It is not rated by assessing the extent to which it matches the child's pace, but as it appears separately from the child.

1. Very slow. This caregiver is almost inactive. Pace is very slow with long periods of inactivity.
2. Slow. This caregiver's tempo is slower than average, and there may be some periods of inactivity.
3. Average pace. This caregiver is neither strikingly slow nor fast. Tempo appears average compared with other caregivers.
4. Fast. This caregiver's pace is faster than average.
5. Very fast. Caregiver's rapid-fire behavior does not allow the child time to react.

Module	Hour	Handout
5	2	1 (con't.)

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Caregiver Behavior Rating Guide (P. 3, con't.)

**Responsiveness:** This item rates the appropriateness of the caregiver's responses to the child's behaviors such as facial expression, vocalizations, gestures, signs of discomfort, body language, demands, and intentions.

1. Highly unresponsive. There is a chronic failure to react to the child's behaviors. The extremely unresponsive caregiver seems geared almost exclusively to own wishes, moods, and activities. Caregiver's interventions and initiation of interaction are prompted or shaped largely by signals within self.
2. Unresponsive. Caregiver's responses are inconsistent and may be inappropriate or slow.
3. Consistently responsive. Caregiver responds consistently to the child's behavior but may at times be slow or inappropriate.
4. Responsive. Caregiver responds to the child's behavior appropriately and promptly throughout the interaction.
5. Highly responsive. This caregiver responds promptly and appropriately to even subtle and hard-to-detect behavior of the child.

**Achievement Orientation:** This item is concerned with the caregiver's encouragement of sensorimotor and cognitive achievement. It assesses the amount of stimulation by the caregiver, which is overtly oriented toward promoting the child's developmental progress. It assesses the extent to which the caregiver fosters sensorimotor and cognitive development, whether through play, instruction, training, or sensory stimulation. It includes the energy which the caregiver exerts in striving to encourage the child's development.

1. Very little encouragement. Caregiver makes no attempt or effort to get the child to learn.
2. Little encouragement. Caregiver makes a few mild attempts at fostering sensorimotor development in the child but the interaction is more oriented to play for the sake of playing, rather than teaching.
3. Moderate encouragement. Caregiver continually encourages sensorimotor development of the child either through play or training but does not pressure the child to achieve.
4. Considerable encouragement. Caregiver exerts some pressure on the child toward sensorimotor achievement, whether as unilateral pressure or in a pleasurable interactional way; whether wittingly or unwittingly.
5. Very high encouragement. Caregiver constantly stimulates the child toward sensorimotor development, whether through play or obvious training. It is obvious to the observer that it is very important to the caregiver that the child achieve certain skills.

Module	Hour	Handout
5	2	1 (con't.)

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Caregiver Behavior Rating Guide (P. 4, con't.)

**Acceptance:** This item assesses the extent to which the caregiver approves of the child and the child's behavior. Acceptance is measured by the intensity of positive affect expressed toward the child and the frequency of approval expressed either verbally or nonverbally.

1. Rejecting. This caregiver rarely shows positive emotion. Caregiver is continually disapproving of the child and the child's behavior.
2. Low acceptance. This caregiver shows little positive affect toward the child. Caregiver may show some disapproval of the child and the child's behavior but mostly remains neutral.
3. Accepting. This caregiver indicates general acceptance of the child; caregiver approves of the child and the child's behavior in situations where approval would normally be appropriate.
4. Very Accepting. Emphasis is on approval. This caregiver shows higher than average positive affect and is generous with approval.
5. High acceptance. This caregiver is effusive with approval and admiration of the child. Caregiver approves and praises even ordinary behavior. Intense positive affect is displayed throughout the interaction.

**Directiveness:** This item measures the frequency and intensity of the caregiver's requests, commands, hints, or other attempts to direct the child's immediate behavior.

1. Caregiver allows child to initiate or continue activities of child's own choosing without interfering. Caregiver consistently avoids volunteering suggestions, and tends to withhold them when they are requested or when they are the obvious reaction to the immediate situation. Caregiver attitude may be "do it your own way."
2. Caregiver occasionally makes suggestions. This caregiver rarely tells the child what to do. Caregiver may respond with advice and criticism when help is requested, but in general refrains from initiating such interaction. On the whole, this caregiver is cooperative and non-interfering.
3. The caregiver's tendency to make suggestions and direct the child is about equal to the tendency to allow the child self-direction. The caregiver may try to influence the child's choice of activity but allows independence in the execution of play, or the caregiver may let the child make own choice but be ready with suggestions for effective implementation.
4. Directive. Caregiver occasionally withholds suggestions, but more often indicates what to next or how to do it. Caregiver produces a steady stream of suggestive remarks and may initiate a new activity when there has been no previous sign of inertia and/or resistance shown by the child.
5. Very directive. Caregiver continually attempts to direct the minute details of the child's "free" play. This caregiver is conspicuous for the extreme frequency of interruption of the child's activity-in-progress, so that the caregiver seems "at" the child most of the time - instructing, training, eliciting, directing, controlling.

Adapted from Mahoney, G. (1984)

Module	Hour	Handout
5	2	1 (con't.)

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# WATCH FOR

**AWARENESS**

**ATTENDING**

**ORIENTING**

**ASSOCIATING**

**FEEDBACK**

Module	Hour	Handout
5	2	2

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# A Strategy for Language Stimulation

What can we, as caregivers, do to increase and improve the process for acquiring language development?

**Observe the child.** Get to know the child as an individual. Watch how wants are communicated. Watch interactions with other children. Does the child appear to point and gesture a lot, or to use sounds and words?

**Describe the child's most consistent way of communicating.** Include observations from other caregivers, if possible. When the child appears to speak sounds, words, phrases, are they easy to understand?

**Make a plan.** Set up the skills you think are necessary before you can achieve the actual goal. What would you like to integrate with what you have currently observed?

**Identify a set of skills occurring at the next level of development.** Do this to form a border or framework to work within.

**Use a variety of materials and activities.** Do this to elicit or get desired responses, functions and behaviors.

**Encourage.** Do not bombard the infant with your methods for taking in information. Give the child the opportunity to interact with you:

- Repeat the same behavior over and over if it gives pleasure, fulfills the need, or is necessary for memory.
- Allow time to explore the task so the objective is thoroughly understood. Let an object be touched, mouthed and tasted, looked at, or heard for as long as the child feels it's necessary.
- Allow the child to control or initiate the "structure" of the activity by following the child's lead. Try not to direct unless you observe idleness or confusion.
- Interact by exchanging information back and forth.

Remember to encourage children to do what they can. Keep your actions complementary so they add to those being displayed by the child. We are not trying to make children simply perform activities. We want children to experience and enjoy them, so they will want to communicate and share them.

Module	Hour	Handout
5	2	3

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



MITCH: Model of Interdisciplinary Training for Children with Handicaps

## A Strategy for Language Stimulation (con't.)

Example: You have observed a 2-1/2 year old in your preschool class who is running all around the room making loud noises and banging toys and books loudly. It is difficult to get the child to sit quietly and pay attention, to even start working on words. What can you do?

**Objective 1: Condition the child to sitting in order to help build the child's attention span.**

**Idea:** Get a small stool, chair or table. Cut out a left hand and right hand, and tape or glue on top. Sit child down and ask child to place hands on the ones on the stool. Say nursery rhymes or songs during this time that are short and fun to listen to. Reward the child each time the child keeps hands on the cut-out hands throughout the rhyme. **Limit time to three minutes, or less, to start and gradually increase.**

A sample nursery rhyme is: ROW, ROW, ROW YOUR BOAT, GENTLY DOWN THE STREAM; MERRILY, MERRILY, MERRILY, MERRILY, LIFE IS BUT A DREAM.

If the hands come off the stool tell the child you are unhappy. Create a chart with stickers, give extra time in freeplay, or allow the child to skip a chore which other children must do, when the child plays the game correctly. This might encourage others to want to play. You can even use this as a center with many children. Keep particularly inattentive children separate until they are ready to join the "HAND TABLE." Remember, the focus on hands keeps the child occupied with a purpose while the child builds the ability to sit.

**Objective 2: Condition child to communication exchanges (turn taking) so the child is not making random noises.**

**Idea:** When the child is sitting, take turns singing parts. If the child can't repeat words, try for the melody (LA LA LA LA LA) in place of each word. Create sound patterning until the child is ready to use words. Alternate saying or singing words and lines with the child. Eventually you can ask questions about the rhyme. Keep prodding until you get a verbal response close to the one you are requesting.

**Advantages of these exchanges are:**

- increasing amount of time vocalizing
- using voice in varying the pitches
- bonding with caregiver which may result in child being more responsive to requests
- associating sitting as a fun activity
- associating talking as a pleasant experience
- achieving social success when joining children at the table for group interaction.

**CONGRATULATIONS!**

**YOU HAVE CREATED A STIMULATING LANGUAGE ACTIVITY**

Reprinted with permission from S. R. Berkowitz (1989).

Module	Hour	Handout
5	2	3 (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Auditory and Language Activities for Infants and Toddlers

- **Put noisy things inside zip-top plastic bags and sew shut:**
  - small spools of thread
  - uncooked beans from soup
  - small pieces of pasta
  - uncooked rice.

Take turns shaking the containers. (Do only under close adult supervision to avoid having a bag open accidentally. Child should not have a chance to put items in mouth.)

- **Get a box and cut out two circles on the side (touchy-feely box).** Put small farm animal models inside, and pull them out one at a time. Ask the child what sound the animal makes (cows -moo,moo, duck - quack quack, etc.). Make sounds for the infant. Encourage the infant to make sounds with you.
- **Sing Old Mac Donald Had a Farm.** Encourage the child to say the nonsense syllables **ee-yi-ee-yi-yo**. Hold up the appropriate animal as it is named when the singing progresses. When old enough, have children stand when they name the animal.
- **Buy animal potholders from the kitchen department of retail stores.** Use as puppets to encourage language. (These are usually less expensive than real puppets.) Or, make puppets from paper bags or old socks.
- **Get a large cardboard box.** Make a house. Paint windows, and cut out the door and bend it back. Let the children practice open and close with the door. Use other forms of prepositional phrasing: out, in; up, down; etc.

Module	Hour	Handout
5	2	4

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps



## Auditory and Language Activities for Infants and Toddlers (con't.)

- **Dance to increase awareness of rhythm and beat.** Play music (tape, records). Pick up the child and sway to the music. Dance cheek to cheek so that the child can associate comfort and fun with what is heard. Change direction when music pattern changes.
- **Tape record sounds common to the house.** The child will become aware of their presence and can begin to associate meaning to non-linguistic sounds. Ask the children to identify the sounds. Supply answers until children can.
- **Use rattan plate holders or heavy white paper plates as dividers.** Stack them with colored paper in between. When child lifts the plate holder say the name of the color that is uncovered. This procedure can be used for many activities, including counting and naming objects. Or, show object and ask child to name what it is after it is covered up.
- **Make family mobiles.** Glue pictures of family members in the middle of small tin pot pie pans. Hang them with brightly colored yarn from a hanger. Ask child to name people.
- **Create a milestone album.** This can be like the commercial calendars. Create stickers or pictures of "1st time" achievements.



Smiles At



Laughs At



Plays Pat-A-Cake



Plays Peek-A-Boo

Reprinted with permission from Steffi R. Berkowitz, (1989).

Module	Hour	Handout
5	2	4(R) (con't.)

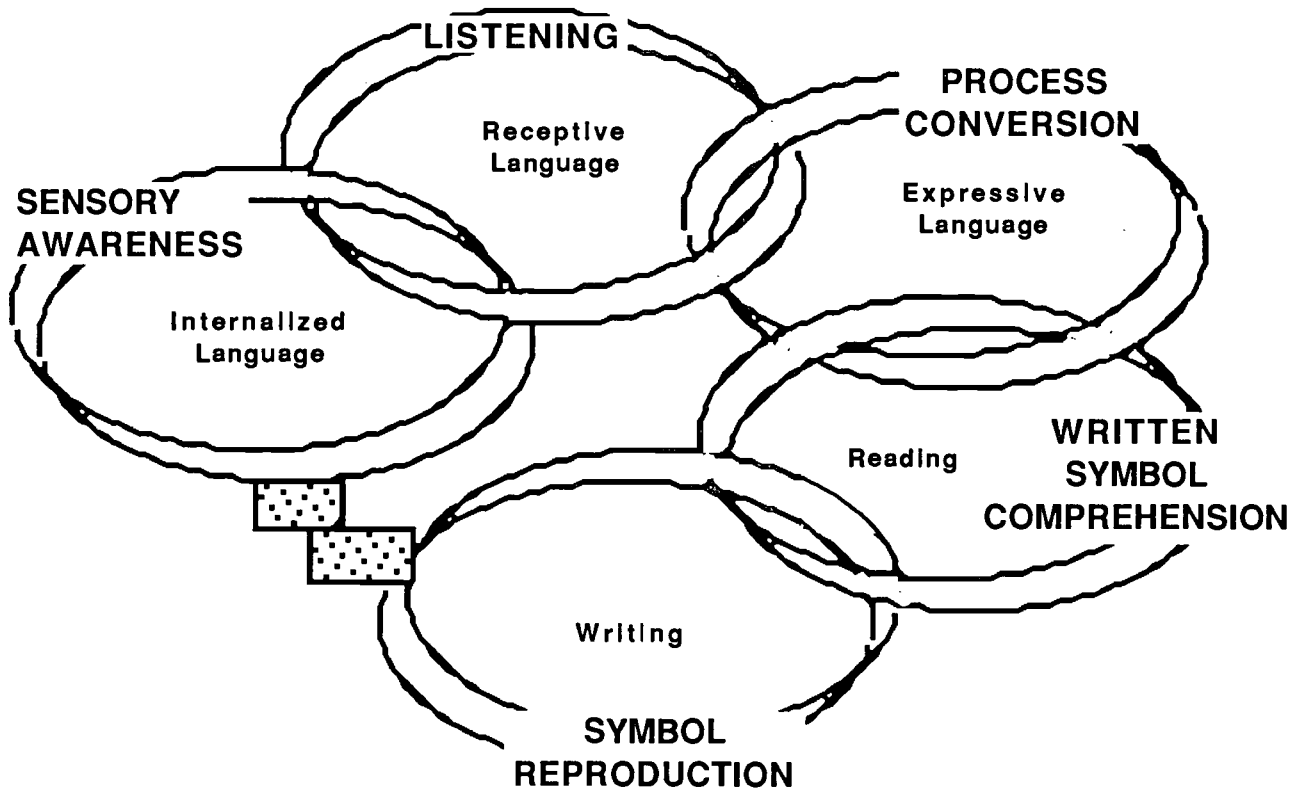
Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students

\*MITCH: Model of Interdisciplinary Training for Children with Handicaps





# Interrelated Language Links for Communication



Module	Hour	Handout
5	3	1

Florida Department of Education  
 Division of Public Schools  
 Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## Language Subskills and Definitions

### Phonology

The change in pitch and rhythm helps the child discover meaning.

### Pragmatics

Young children must learn functional or day-to-day language. Language must be meaningful if it is to be remembered.

### Prosody

Babies imitate song patterns similar to ones uttered by caregivers.

### Semantics

Meaning of words which make things clear. Young children learn when objects are named and described.

### Syntax

Rules that organize words, also referred to as grammar. Young children must learn to arrange their word order to have meaning.

Module	Hour	Handout
5	3	2

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Language Subskills and Definitions\*

Ages In Months (Approx.)	Functional Language	Sound Patterns	Grammar Morphology-syntax	Meaning
1	Gazing, crying, "comfort sounds"	Begins to play with pitch change		
3	Laughs, smiles when played with; looks at speaker, sometimes responds to a speaker by vocalizing	Uses voice for two or more syllables		
6	Babbles, using repetitive voicing of sounds. Smiles at a speaker. Begins turn taking, stops when someone speaks	Babbles four or more syllables at one time; plays at making noises; labial (/p/, /b/, /m/) consonants emerge; vowels		
8	Plays "peek-a-boo" and "pat-a-cake"; listens to adult conversations; turns toward speaker; understands gesture	Uses several pitch changes (intonation) creating patterns for questions and commands; "baby talk" includes use of vowels and consonants (five or more of each)	Jargon - "baby talk" (No real words, but vocalizing sounds as if it is a sentence or question)	Recognizes names of some common objects
10	Follows simple commands; enjoys clapping to music; begins to send message by pointing	Imitates jargon, with pitch and rhythm		Says "first" words; tries to imitate sounds
12	Responds to manner and attitude of speaker (for example, joy, anger, or hurry)	Consonant-vowel and consonant-vowel-consonant jargon	Uses "holophrastic speech" where one word stands for a whole sentence expressed by tone ("No!" "No." "No?")	Uses two or more words; learns new words every few days
12-18	Follows one- and two-step directions	Imitates noises and speech sounds	Some begin to use two-word sentences	Recognizes and points to many familiar objects; learns new words almost daily

Module	Hour	Handout
5	3	3

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

# Language Subskills and Definitions

Ages in Months (Approx.)	Functional Language	Sound Patterns	Grammar Morphology-syntax	Meaning
18-24	Jargon and some echoing of words spoken by others; uses speech to get attention; "asks" for help	Uses /p/, /b/, /m/, /h/, /t/ and vowels	Two- to three-word sentences; begins to use personal pronouns	Says 10 to 20 words at 18 months but some say as many as 200 words by 24 months; understands many more
24-36	<p>At 2, speech is not used for social control, but at 2-1/2, demands and attempts control</p> <p>By 3, language is accurate, reflecting appropriate words for what is meant or desired; 70% of speech is understood, although pronunciation errors are still common. Short sentences (3-4 words) are common. All vowels are correct, but /r/, /s/, /ch/, /j/, /v/, /l/, /x/ are often incorrectly spoken. Vocabulary ranges to as many as 1,000 words.</p>	Many begin to use additional consonants; add /f/, /k/, /d/, /w/, /g/; vowels 90% intelligible	By 2-1/2 notice appearance of -ing (present progressive), -s and -es (plurals), -ed (past tense), a, an, the (articles) m and 's (possessives)	Recognizes names and pictures of most common objects; understands 500 words

Module	Hour	Handout
5	3	3(R) (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students

\*MITCH: Model of Interdisciplinary Training for Children with Handicaps



# Language Subskills and Definitions

Ages in Months (Approx.)	Functional Language	Sound Patterns	Grammar Morphology-syntax	Meaning
36-48	Tells name; "explains" what happened; asks questions, keeps on topic; some role playing; ability to think about language and comment on it; "hints" at things through smiles and gestures as well as words	All vowels correct; although many children say most consonants accurately, speech errors on the following are still within "normal range": /l/, /r/, /s/, /z/, /sh/, /ch/, /j/, /th/; pitch and rhythm changes similar to adults, but this age enjoys extremes, yells and whispers	Expands noun phrases with time, tense, gender, and number; conjugates "to be" correctly; uses pronouns, adjectives, and plurals; near age 4, begins using longer and more compound sentences; begins to use "and," "because," "when," and "then"	Vocabulary grows rapidly; actively seeks to learn new words; likes to "experiment" and makes many charming errors; knows between 900 and 1,000 words
48-60	Seeks information constantly; "why" is a favorite; becomes aware of behavior listeners attend to; begins to grasp importance and meaning of what is heard	Begins to use stress and pitch changes purposefully; articulation errors still common, but not as often.	Uses comparatives (big, biggest); uses all sentence types, approximates that of adult	Size of vocabulary varies widely with experiences; many know 2,000 or more words

\*Adapted from Cook, Tessier, and Armbruster (1987).

Module	Hour	Handout
5	3	3 (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## CASE STUDY I

When he entered his second year of pre-school, Freddie appeared to have normal physical and mental development for his age. He is 2-1/2 years old.

His mother said he had several bad colds each year that left him with a stuffy nose. Teachers from his first year said his nose seemed to run most of the time. His ears were tested because he didn't seem to listen or hear what was said to him many times during the day. His hearing was within normal limits.

Teachers also commented that he appeared to be "lazy". It was noted that he had difficulty following classroom instructions and understanding ideas presented to him. Many times he would watch other children to see what they were doing before starting his work.

Freddie loves to sing with the children but doesn't interact much with them during play times. Teachers commented that he could imitate the tunes of songs but they had difficulty understanding him when he sang or spoke. Many of his words were unintelligible or not clear. Teachers knew he was trying to communicate because he had a sound pattern in his sentences that would rise and fall but the words made little sense.

Freddie is the third child born in a family of five where both parents work.

Module	Hour	Handout
5	3	4

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## CASE STUDY II

Jenny is an eighteen month old infant who is in day care for the first time. Jenny's parents both work long hours so she stayed with a grandmother during the day who only spoke Spanish. Jenny's parents felt this was good because they spoke both English and Spanish and wanted Jenny to be exposed to both languages.

Jenny's parents are concerned because their child often appears to be confused when asked to respond to questions. They feel she understands much of what is said to her in either language. She is a skillfull imitator and often mimics people on the television. She will raise her eyebrows and imitate facial expressions. She can become withdrawn or inattentive when more is expected of her during her turn to respond. Instead of responding she will often stand up and walk away or turn around and play with toys that are available.

Parents observe she appears disinterested when they are reading to her but likes to turn the pages in the book.

Jenny is the second child born to her parents. Her brother is 10 years old.

Module	Hour	Handout
5	3	4 (con't.)

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps

## OBSERVATION/CATEGORIZING

**CATEGORY 1** - What do we know about the child's social or family situation (age, how many in family, both parents work, etc.)?

**CATEGORY 2** - How does this affect follow-up on learning skills and behaviors?

**CATEGORY 3** - What listening skills should the child have mastered at this age? (Refer to handout 5-1-2.)

**CATEGORY 4** - What speech and/or language skills should the child have mastered at this age? (Refer to handout 5-3-3.)

**CATEGORY 5** - What strategies or activities would you suggest for a beginning language plan? (Refer to baby styles/temperament and handouts 5-1-5, 5-2-1, 5-2-3, and 5-2-4.)

**CATEGORY 6** - Who are the essential or most important members of your case management (support personnel) team?

Module	Hour	Handout
5	3	5

Florida Department of Education  
Division of Public Schools  
Bureau of Education for Exceptional Students



\*MITCH: Model of Interdisciplinary Training for Children with Handicaps



# Appendix C

## Reproducible Forms for the Six-Week Follow-Up Activity

---

# Six-Week Follow-Up Activity

## MITCH Module 5 LISTENING AND SENSORY INTEGRATION: What to do Before Speech and Language Develop

These completed forms should be sent to:

Name \_\_\_\_\_  
Address \_\_\_\_\_

These forms are due at the above address by \_\_\_\_\_  
date

### **Directions**

*Choose a child on which to do a case study just like the one that was completed during the third hour of this module. Please use the attached form to assist you. Use additional paper if necessary. Remember not to use real names in order to maintain confidentiality.*

**Case Study**

Name \_\_\_\_\_

Date \_\_\_\_\_

**Module 5**

Child's Name \_\_\_\_\_ Age \_\_\_\_\_

**Category 1 - Home**

Please describe any unusual intellectual, medical or other conditions.

---

---

*Child lives with the following (please check appropriate boxes and fill in the blanks.*

- |  |                        |                  |
|--|------------------------|------------------|
| <input type="checkbox"/> Mother                | Works full-time? _____ | Part-time? _____ |
| <input type="checkbox"/> Father                | Works full-time? _____ | Part-time? _____ |
| <input type="checkbox"/> Brothers              | How many older? _____  | Younger? _____   |
| <input type="checkbox"/> Sisters               | How many older? _____  | Younger? _____   |
| <input type="checkbox"/> Others: (please list) |                        |                  |

---

---

**Category 2 - Follow-Up**

*How does this affect follow-up on learning skills and behaviors? Explain.*

---

---

---

**Category 3 - Listening Skills**

*What should the child have mastered at this age in listening skills? Describe. (Refer to handout 5-1-2.)*

---

---

---

**Category 4 - Speech/Language Skills**

*What should the child have mastered at this age in speech and/or language skills? Describe. (Refer to handout 5-3-3.)*

---

---

---

**Category 5 - Language Plan**

*What strategies or activities would you suggest for a beginning language plan? (Refer to baby styles/temperament, and handouts 5-1-5, 5-2-1, 5-2-3, and 5-2-4.)*

---

---

---

**Category 6 - Case Management Team**

*Who are the essential or most important members of your case management (support personnel) team?*

---

---

---



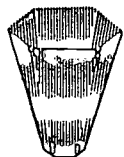
*Listening and Sensory Integration:  
What to Do Before Speech and Language Develop*

For ease of use, instructor is encouraged to remove the staple on this booklet and place the module into a three-ring binder.

Trim the binder identifier to an appropriate size, and affix to the spine of the binder.

BINDER IDENTIFIER





State of Florida  
Department of Education  
Tallahassee, Florida  
Betty Castor, Commissioner  
Affirmative action/equal opportunity employer



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)

EC 302316



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: MITCH- Model of Interdisciplinary Training for Children with Handicaps A Series for Caregivers of Infants and Toddlers - Modules 1-13	
Author(s): Florida Department of Education, Bureau of Education for Exceptional Students	
Corporate Source: Clearinghouse/Information Center Bureau of Education for Exceptional Students Florida Department of Education	Publication Date: 1990-1992

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following options and sign the release below.



Sample sticker to be affixed to document

Sample sticker to be affixed to document



### Check here

Permitting microfiche (4"x 6" film), paper copy, electronic, and optical media reproduction

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY \_\_\_\_\_  
Sample \_\_\_\_\_  
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 1

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY \_\_\_\_\_  
Sample \_\_\_\_\_  
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Level 2

### or here

Permitting reproduction in other than paper copy.

## Sign Here, Please

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: <i>Arlene M. Duncan</i>	Position: <i>Program Specialist Supervisor</i>
Printed Name: <i>Arlene M. Duncan</i>	Organization: <i>Florida Department of Education</i>
Address: <i>Clearinghouse/Information Center Bureau of Education for Ex. Students Florida Education Center, Suite 622 325 W. Gaines St. Tallahassee, FL 32399-0400</i>	Telephone Number: <i>(904) 488-1879</i>
	Date: <i>6/18/93</i>