

Early Intervention Training Center
for Infants and Toddlers With Visual Impairments

Communication and Emergent Literacy: Early Intervention Issues

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Acknowledgments

The authors wish to extend our special thanks to the families and teachers in the videos on the CDs that accompany this manual for allowing us to share their experiences.

The authors also wish to thank the following colleagues for generously sharing their commercially produced videos:

- AFB Press (Producer), & Chen, D., & Schachter, P.H. (Writers). (1997). *Making the most of early communication: Strategies for supporting communication with infants, toddlers, and preschoolers whose multiple disabilities includes vision and hearing loss* [Video]. (Available from AFB Press, American Foundation for the Blind, 11 Penn Plaza, Suite 3000, New York, NY 10001)
- American Printing House for the Blind. (Producer). (1995). *Discovering the magic of reading: Elizabeth's story* [Video]. (Available from APH, 1839 Frankfort Avenue, P.O. Box 6085, Louisville, KY, 40206-0085)
- Visually Impaired Preschool Services (Producer). (1996). *Video two: Learning about the world: Concept development* [Video]. (Available from Visually Impaired Preschool Services, 1229 Garvin Place, Louisville, KY 40203)
- Visually Impaired Preschool Services (Producer). (1996). *Video eight: Hands-on experience: Tactual learning and skills* [Video]. (Available from Visually Impaired Preschool Services, 1229 Garvin Place, Louisville, KY 40203)

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This project is funded by cooperative agreement H325B000003 from the Office of Special Education Programs, U.S. Department of Education. However, the contents do not necessarily represent the policy of the Department, and you should not assume endorsement by the federal government.

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How to Use These Resources

The *Communication and Emergent Literacy: Early Intervention Issues* module is comprised of the following resources:

- CDs
 - Interactive multimedia CDs for each session
 - Instructor Version
 - Participant Version
 - Video CD for each session
- Document Resources Center on the EIVI Web site

Electronic copies of documents and other elements, including the PowerPoint slides, the video clips that contain video description and captioning, and the transcripts for the video clips are available on the interactive multimedia CDs for instructors and participants.

Video clips in MPEG format that can be inserted into the PowerPoint slides are available on the video CDs. Video summaries and transcripts with video description are also included on the video CD.

The instructor may consider presenting the Major Points during class and then providing independent assignments so that participants can apply the information or learn more about the topic on their own. Participants can then share their completed assignments with others during the subsequent class period. Some activities are best completed during class, however.

The interactive CDs for each of the five sessions are organized in the same format.

- The session begins with a brief Module Overview.
- The Session Content follows, which is divided into the following sections:
 - The Major Points are presented summarized in a series of slides. Highlighted words in the slides are linked to the module Glossary. Interspersed among the slides are QuickTime video clips.
 - Following the Major Points is a list of Recommended Readings along with links to Study Questions. The readings themselves are not provided.
 - Links to Activities follow.
 - Next, the Resources section contains links to PDF documents for the session's complete Major Points, Handouts, and References, as well as a link to updated resources on the EIVI Web site.
 - The interactive Self-Check enables participants to verify their understanding of the material.

Furthermore, on the Instructor Version of the interactive CDs, the Resources section consists of the following material, all available in Word and PDF formats:

On the Participant Version of the interactive CDs, the Resources section consist of the following material, all available in Word and PDF formats:

- Title pages and Module Overview.
- Session Content.
- Readings and Study Questions.
- Activities.
- Handouts.
- PowerPoint slides corresponding to the Major Points.
- List of videos and summaries.
- Video transcripts.
- Glossary.
- Session References.

The *Communication and Emergent Literacy: Early Intervention Issues* module contains five interactive multimedia CDs—one for each of the five sessions. The Instructor versions of the CDs contain all the materials found on the Participant versions, as well as additional materials to be used solely by the instructor. In addition, one video CD is included for each session, containing PowerPoint slides, MPEG video clips, and summaries and transcripts of the videos.

Participant resources include five interactive multimedia CDs, one per session. The Participant versions of the CDs contain the materials useful for participants. The CDs will auto-launch when inserted into a CD-ROM drive. Users will be prompted to view a “Read Me” file that contains important information regarding system and software requirements. There are two file formats for the Read Me file: text and HTML. The text file can be opened using any text editor, such as MS Word, Notepad, etc. The HTML file will open in a browser window. After viewing the Read Me file, the user must close the file application to return to the program and press any key or click on the screen to continue to the Main Menu (Figure 1). The Session Content section of the interactive multimedia CDs, both versions, corresponds to the Major Points and the supporting resources found in the instructor manual. The Instructor Resources section found on the Instructor Versions of the CDs includes electronic copies of the print versions of the Instructor Resources, the Instructional Sequence, the list of Readings and the Answers to the Study Questions, the instructor guidelines for Activities, the PowerPoint presentation, the Quiz, and the Answers to Quiz.

The Participant Resources section of the interactive multimedia CDs, both versions, consists of the materials found in the participant packets, as well as the Major Points, PowerPoint slides, and a list of videos with summaries and transcripts.

In addition, each of the multimedia CDs contains the interactive Self-Check, the videos and video clips, and the video summaries and transcripts not available in the print resources.

Module Overview

Learning to communicate is essential for interacting with others and is integrally related to literacy development. Without communication and literacy, children are severely limited in their ability to engage in the world around them, to become independent, and to interact meaningfully with other people. The purpose of this module, *Communication and Emergent Literacy: Early Intervention Issues*, is to provide the knowledge necessary for teachers of children with visual impairments and orientation and mobility specialists to understand the relationships between communication, language, and literacy and to develop effective skills for facilitating communication and language development and emergent literacy in infants and toddlers with visual impairments.

Visual impairments present unique and significant challenges to the development of communication and literacy. Because effective early intervention involves the implementation of family-centered practices within the context of daily routines and natural learning opportunities, information about family-centered practices and collaboration with other members of the early intervention team is also presented.

Literature from the fields of literacy, visual impairments, early childhood education, early childhood special education, and speech and language pathology has been synthesized in the five sessions of this module. The objectives for each of the five sessions are provided as a framework for understanding the organization of the module.

Session 1: Overview of Communication and Literacy

Session 2: Communication Development and the Impact of Visual Impairments

Session 3: Communication and Language Interventions

Session 4: What Is Emergent Literacy?

Session 5: Interventions to Facilitate Emergent Literacy

The module was designed to acknowledge and respect the variety of learning styles represented by potential participants. Therefore a variety of instructional strategies was used to convey content and build skills. The strategies include the presentation of current theoretical information and research findings, small and large group discussion, teamwork, case analysis and solution development, individual reflection, self-assessment inventories, simulations, and role play. The interactive multimedia CDs were designed to be used by all participants, including those with visual or hearing impairments. For individuals with visual impairments, video clips were video described. For individuals with deafness or who are hard of hearing, video clips were captioned. Brief summaries and transcripts were also developed to convey the content of the videos and video clips.

The module was designed for use in a variety of settings for an instructor conducting a traditional semester-long graduate course, for intensive summer

institutes or weekend distance education courses, for online instruction, and for independent studies via the multimedia CDs.

The module consists of five sessions. The first session has sufficient content for three 3-hour classes. Three other sessions have sufficient content for two 3-hour classes, while one session has approximately 3 hours of content. The entire series of five sessions should provide sufficient content for a 2 semester-hour graduate level course.

Below are suggested lengths of instruction time for each session within the module.

Session Title	Two 3-hour classes	Three 3-hour classes
Session 1, Overview of Communication and Literacy		X
Session 2, Communication Development and the Impact of Visual Impairments	X	
Session 3, Communication and Language Interventions	X	
Session 4, What Is Emergent Literacy?	X	
Session 5, Interventions to Facilitate Emergent Literacy	X	

Accessibility features

The multimedia CDs are designed and developed with the goal of making them accessible to all users. The CDs comply with U.S. government Section 508 accessibility guidelines. Specific accessibility features include audio option, keypress function, video description and captioning, and document format choice.

- Users can read text on screen without a screen reader using text-to-speech functionality.
- The CDs are compatible with the Windows-based screen readers JAWS and Window-Eyes.
- They can be navigated entirely using keyboard commands.
- Videos on the CDs contain open captioning and description.
- Accessible electronic documents are provided in Adobe PDF format.

- The CDs include Acrobat Reader version 5.05, which supports high-contrast viewing and ability for magnification.
- Microsoft Word versions of all PDF documents are available in the Instructor and Participant Resources sections with ability to export to text or save as HTML.
- All documents are designed for accessibility with alternative text describing nontext elements such as images.

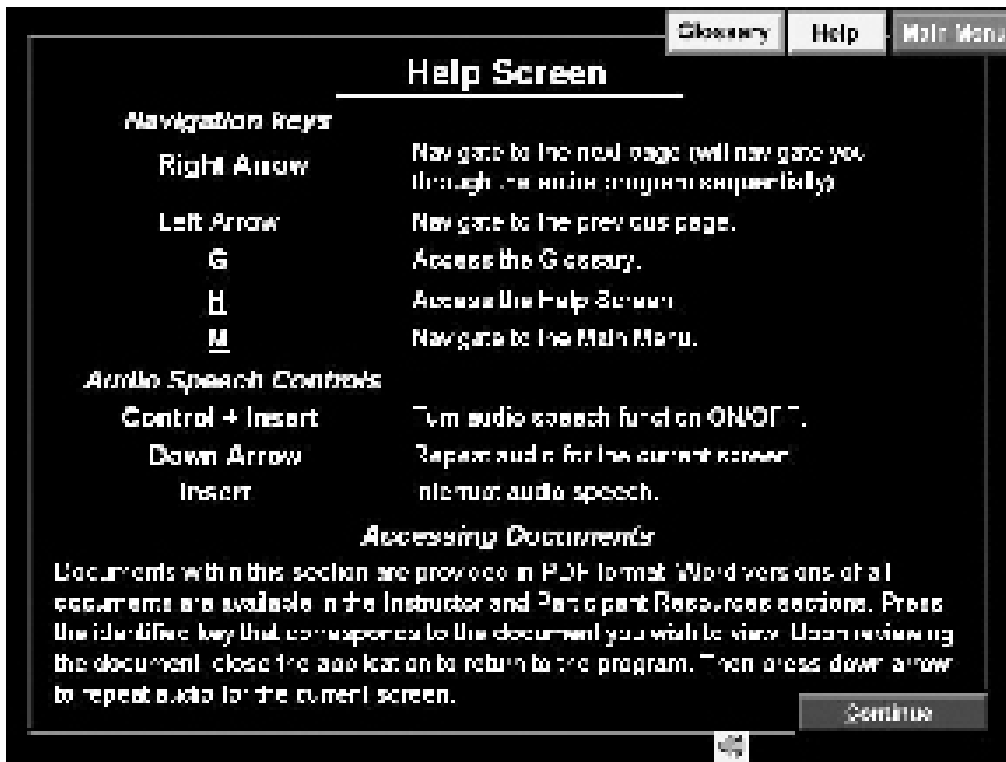


Figure 1. Help Screen

(Figure 1 shows the Help Screen of the multimedia CD. The picture shows a list of navigation keys and audio speech controls. The Help Screen also shows how to access the Word and PDF documents.)

Adobe Portable Document Format (PDF)

Documents within the CD program are provided in PDF format. Install the Adobe Acrobat Reader version 5.0.5 that is provided on the CD and register this version in order to use the following accessibility features.

- Read PDF documents with screen readers
- Use keyboard navigation for actions
 1. Press Alt or F10 to access the Menu bar
- Customize screen contrast
 1. Press Ctrl+K
 2. Tab to Color Scheme
 3. Down Arrow to Use custom scheme
 4. Press Alt+T to change Text Color
 5. Press Alt+B to change Background Color

6. Press Enter
- Zoom function to increase size of page contents
 1. Press Ctrl+ + to zoom in
 2. Press Ctrl+D to zoom out
 - Export document to text for use with assistive technologies such as Braille embossers
 1. Press Alt+F
 2. Press T
 3. Press Enter
 4. Select options in Save As dialog box

Visit <http://www.access.adobe.com> for more information.

Video description and captioning

The video clips with description and captioning can be found in the Session Content section of the CDs (Figure 3). Click the buttons provided on the video screen or press P to play video, press spacebar to stop video, press T to open the transcript document, or press S to view a brief summary of the video.



Figure 2. Video clip with video description and captioning, accessed through an interactive multimedia CD

(Figure 2 is a screen shot of the Session Content section of a Session 1 interactive multimedia CD, opened to the “TVI as Liaison” tab. A still from a video clip shows an ophthalmologist, a TVI, and a mother holding a toddler in an eye care specialist’s office. Captioning runs beneath the video clip. To the right of the video clip are links for accessing the video transcript and summary.)

Video CDs

The video clips found throughout the interactive multimedia CDs are also available on the video CDs for each session in MPEG format, for easy insertion into PowerPoint presentations. Transcripts of each video clip with video description and brief summaries are included on the video CDs as well.

Computer requirements

In order to use the interactive multimedia CDs, certain minimum requirements for hardware and software must be met. The software is included on the multimedia CDs along with instructions for installation.

Hardware

- PC computers should have an operating system of Windows version 98 or higher with a Pentium processor speed of 100MHz.
- System must have at least 16 megabytes of memory (RAM) and a quad-speed (4X) CD-ROM drive.
- Computer monitor should be a 16-bit color monitor with 800x600 resolution (thousands of colors setting).
- Computer should also have a Windows-compatible sound card.

Software

Adobe Acrobat Reader

Adobe Acrobat Reader version 5.0 or above must be installed on the computer and registered in order to view PDF documents.

If Acrobat Reader is not installed on your computer or if accessibility features are desired, install version 5.05, provided on the CDs. This version enables screen readers to read PDF documents and provides an option to customize text and background colors. To install from a CD, select CD drive, then select the Acrobat Reader application file. Follow the instructions that appear on the screen.

Apple QuickTime for Windows

In order for video clips to play properly, QuickTime Player for Windows version 4.0 or higher must be installed on your computer. QuickTime Player version 5.0 is available on the CDs. To install from the CD, select the CD drive, then select the "QuickTime Installer" application file. Follow the instructions that appear on the screen.

Microsoft PowerPoint

Microsoft PowerPoint version 95 or higher is required to view the PowerPoint slides on the CDs.

Microsoft Word

Microsoft Word version 97 or higher is required in order to access Word documents provided on the multimedia CDs. Word versions of all PDF documents are available in the Instructor and Participant Resources sections of the CDs.

Troubleshooting

If problems with the CDs are encountered, you may find it helpful to

- quit all applications before starting the program.
- start by selecting the CD drive, then select the launcher application.
- use a computer with a faster processor.
- use a computer with increased RAM memory.

Ordering additional Participant CDs

Instructors may wish to purchase additional materials for use by participants. Each participant pack consists of 5 participant CDs. To order participant resource packs, visit the EIVI Web site at www.fpg.unc.edu/~edin.

Document Resources Center on the EIVI Web site

The URL address for the Early Intervention Training Center for Infants and Toddlers With Visual Impairments is: www.fpg.unc.edu/~edin. From the home page, select Resources. On the Resources page will be a link for University Partners. This link will direct users to the login screen for the EIVI Web Resources Center. A user name and password are required in order to log on to this database and download resources. You may request a user name and password to the Resources Center by sending an email to EITC@unc.edu.