DOCUMENT RESUME

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IDENTIFIERS	Academic Accommodations (Disabilities); Dynamic Assessment; Facilitated Communication

ABSTRACT

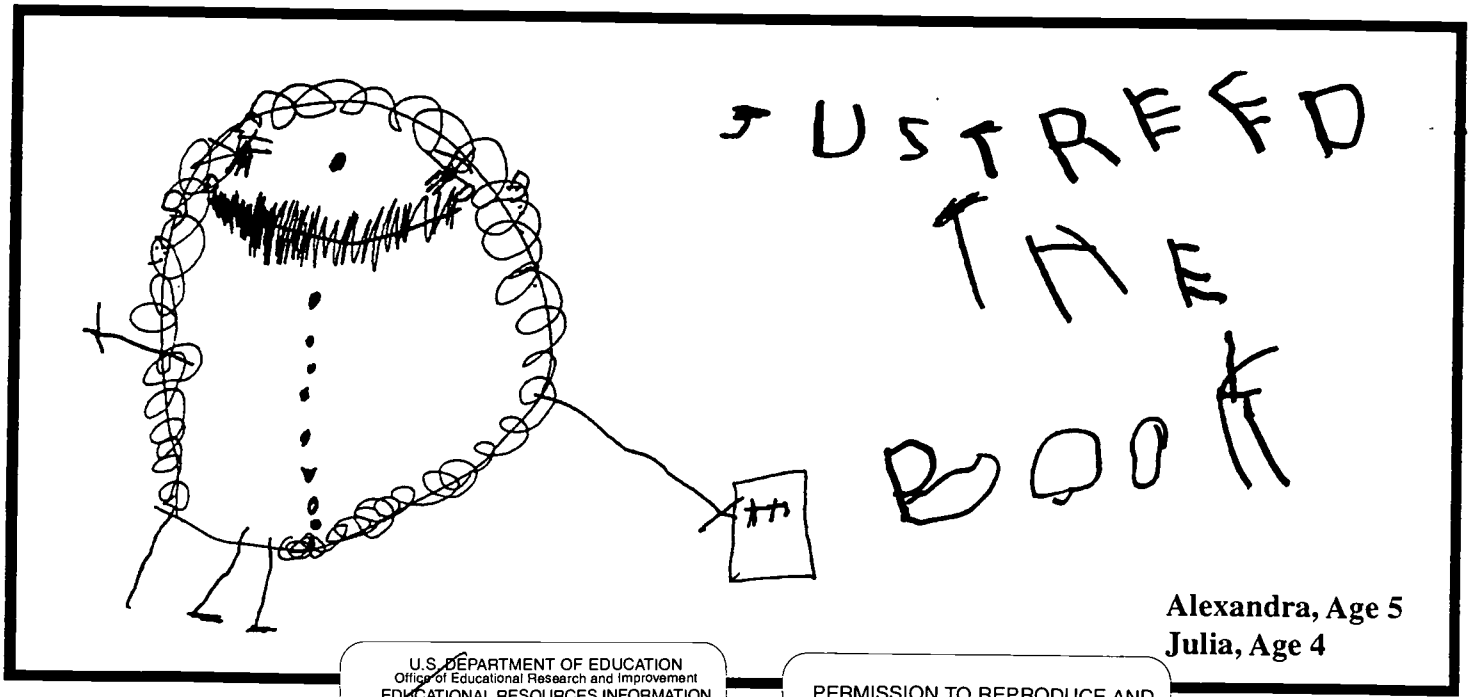
Shortened versions of papers from a symposium on literacy and disabilities are provided. Paper topics include: (1) a literacy bill of rights; (2) balanced instruction for diverse learners; (3) historical trends in vocabulary selection; (4) inclusive/collaborative service delivery for language/learning disabled school-age children; (5) literacy, technology, and the educational team of a student with cerebral palsy; (6) classic poetry activities for young people with emergent literacy and language intervention needs; (7) early literacy and communication in a child with Rett Syndrome; (8) listening comprehension evaluation in reading diagnosis; (9) literacy in adults with intellectual disabilities; (10) emergent literacy in preschoolers with hearing loss; (11) implementing a multilevel, multimethod literacy program for students with mild to moderate mental retardation; (12) using cultural arts and technology in developing strong, lifelong literacy skills; (13) using reading recovery for elementary school-aged children with multiple disabilities and hearing impairments; (14) facilitating poetry writing for students with special needs; (15) making special education regular and regular education special by joining the two philosophies; (16) how the experiences of people with disabilities may lead to an emancipatory literacy; (17) dynamic assessment and instructional modifications for students with seizure disorders; (18) early identification and evaluation of attentional and motor-perceptual deficits as markers of learning disabilities; (19) developing language through social interaction and literacy enjoyment; (20) using poetry to support emergent literacy; (21) a summer institute for augmented speakers; (22) literacy instructional techniques used for a student with multiple disabilities; (23) strategies for addressing difficulties in the physical aspects of written expression; (24) pragmatical approaches to major obstacles in teaching reading; (25) a personal narrative from a student with hearing impairment and attention deficit hyperactivity disorder; (26) validity in facilitated communication; (27) methods for improving the literacy of adolescents with learning, emotional, and behavioral disabilities; (28) designing computer generated/multi-sensory materials for

teaching reading and writing through word families; and (29) using augmentative and alternative communication during storybook interactions. Most papers contain references. Includes a publications list for the Center for Literacy and Disability Studies. (CR)

The Center for Literacy and Disability Studies and
The Division of Speech Pathology and Audiology, Department of Surgery,
Duke University Medical Center

Present:

The 6th Symposium on Literacy and Disabilities



Alexandra, Age 5
Julia, Age 4

January 23 & 24, 1997 Durham, North Carolina

Duke University Medical Center

DEPARTMENT OF SURGERY
DIVISION OF SPEECH PATHOLOGY AND AUDIOLOGY
DURHAM, NORTH CAROLINA 27710

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January 23, 1997

Dear 1997 Symposium Participant:

Welcome to the 6th Symposium on Literacy and Developmental Disabilities! As ever, you represent an important part of a remarkably diverse, committed, and talented group of speakers, vendors, and participants. You come from more than 30 states and foreign countries (Australia and Sweden among others). Your interests range from population-specific issues (Rett syndrome, learning disabilities, hearing impairments, and more) to technology concerns (implementation, applications, AAC-computer interactions) to instructional concerns (Reading Recovery, balanced instruction, inclusive education) to assessment concerns (listening comprehension, facilitated communication validation).

While it is impossible to recognize all of the outstanding presentations on the program in this brief note, I do want to highlight two. For the first (and second) time ever at this conference, two children are making presentations. Andrew Sheehan, a teenager who uses voice-input technology to compose text, wrote a superb proposal and will provide his insights on literacy, learning, and education. Kasey Hodges, a five-year-old who uses an AAC device to communicate, and her mother, Angie, will talk about interactive communication and early literacy learning.

Robert Fulghum wrote in It Was on Fire When I Lay Down on It:

> I do not want to talk about what you *understand* about the world.
> I want to know what you will *do* about it.
> I do not want to know what you *hope*.
> I want to know what you will *work for*.
> I do not want your *sympathy* for the needs of humanity.
> I want your *muscle*.
> As the wagon driver said when he came to a long, hard hill:
> "Them that's going with us, get out and push.
> *Them that ain't, get out of the way.*"

For the next two days, "them that ain't" have gotten out of the way and the rest of us are going to exchange insights about what we've been doing in classrooms, clinics, homes, and communities to promote literacy learning, what we've found helpful, what we're puzzling over, and a variety of other topics that we hope will assist all of us in pushing ever closer to more equitable, efficient, and effective literacy instruction for all students.

Again, welcome. Have a productive and enjoyable meeting.

Best wishes,

David A. Koppenhaver
Director, CLDS

Duke University Medical Center

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Sixth Symposium on Literacy and Disabilities
Durham, NC
January 23-24, 1997

PROGRAM CHANGES

Words+ Company is a late addition to the exhibition hall. Please visit their booth in the exhibit hall to see their latest products.

Words+
40015 Sierra Hwy, Bldg B-145
Palmdale, CA 93550
(800) 869-8521

Thursday, Jan. 23

4:00 pm, room change. Andrew Sheehan and Elizabeth Huber are switching rooms. Andrew Sheehan presents in Room 104. Elizabeth Huber will present in 103.

7:30 - 9:00 pm, 9th floor lounge. An informal poetry reading session will be led by Nick Hogan and Lois Wolf. You are invited to read, listen, and talk with others sharing a passion for poetry.

Friday, Jan. 24

1:30 pm, Room 105, session change. Words+ replaces Mayer Johnson in the vendor presentation.

4:00 pm, Rooms 106 and 108, room change. Melody Harrison and Cynthia Sheehan are changing rooms. Melody Harrison will present in Room 108. Cynthia Sheehan presents in Room 106.

4:00 pm, Room 103, session change. Alice Wershing will be presenting a double session from 4:00 until 5:30 pm in Room 103.

4:45 pm, Room 103 and 108, room change. Kim Voss will be presenting in room 108, not 103.

4:45 pm, Room 107, program addition. Judy Montgomery, Ph.D., CCC/SLP, will lead a session entitled, "Living with Our Literacy Questions." Participants will discuss their ideas, experiences, and burning questions about teaching literacy to school-aged students with significant learning challenges. Participants will formulate questions for teacher/practitioners to address as they encourage new readers.

Judy Montgomery
Chapman University, Special Education
333 N. Glassell St.
Orange, CA 92666

4:45 pm, Room 108, cancellation. Michael Weiss will not be presenting.

The 6th Annual Summer Seminar on Literacy and Augmentative and Alternative Communication

Duke University Medical Center
June 30 - July 11, 1997

The Center for Literacy and Disability Studies, now located at Duke University in the Division of Speech Pathology and Audiology, is pleased to announce the Sixth Summer Seminar on Literacy and Augmentative and Alternative Communication (AAC), to be offered during the summer of 1997. This two-week intensive course will be held June 30 - July 11, 1997. The seminar is appropriate for all persons interested in enhancing the literacy learning and use of children, adolescents, and adults with severe speech impairments. Previous participants have included teachers, speech-language pathologists, parents, administrators, assistive technology specialists, occupational therapists, rehabilitation professionals, and others. Course content is designed for practitioners and is presented at an intermediate level. Knowledge of AAC systems, strategies, and issues is preferred.

For further information on the Summer Seminar please contact Barbara Bauer at 919-684-3740 or email: literacy@acpub.duke.edu.

SAVE THE DATE

The 7th Symposium on Literacy and Disabilities

January 29 & 30, 1998
Durham, North Carolina

Schedule
Thursday, January 23, 1997

7:30	Registration and Continental Breakfast
8:30	Welcome Address, David E. Yoder, Ph.D., CCC/SLP "A Literacy Bill of Rights" Rooms 103 & 104
9:15	Presentation of the 2nd Annual Don Johnston Literacy Lectureship Award Rooms 103 & 104
9:30	Keynote Address: Patricia Cunningham, Ph.D. "When One Size Doesn't Fit All: Balanced Instruction for Diverse Learners" Rooms 103 & 104
10:15	Break (in hall outside rooms 103 & 104)
10:45	Plenary Session: Patricia Cunningham, Ph.D. & Karen Erickson, "Balanced Reading Instruction for Diverse Learners" Rooms 103 & 104
12:00	Grand Opening of the Exhibit Hall with Buffet Luncheon
2:00	Concurrent Sessions (see following pages for complete listing) • School-aged Children with Disabilities • Adolescents and Adults with Disabilities • Assistive Technology / Augmentative & Alternative Communication • Individuals with Disabilities in Inclusive Settings
3:15	Break in the Exhibit Hall
4:00	Concurrent Sessions Continue (see following pages for complete listing)
5:30	Conclusion of Day 1

Schedule
Friday, January 24, 1997

7:45	Continental Breakfast (in Exhibit Hall)
8:30	Plenary Session: Ruie Pritchard, Ph.D. and David Koppenhaver, Ph.D. " Balanced Writing Instruction for Diverse Learners" Rooms 103 & 104
10:30	Break in the Exhibit Hall
11:15	Keynote Address: Gus Estrella " I Can't Talk, But I Can Read and Write" Rooms 103 & 104
12:00	Buffet Luncheon in the Exhibit Hall
1:30	Concurrent Sessions (see following pages for complete listings) • Preschool Children with Disabilities • School-aged Children with Disabilities • Adolescents and Adults with Disabilities • Assistive Technology / Augmentative & Alternative Communication • Individuals with Disabilities in Inclusive Settings
3:15	Break in the Exhibit Hall
4:00	Concurrent Sessions Continue (see following pages for complete listings)
5:30	6th Symposium on Literacy and Disabilities Concludes

The Don Johnston Literacy Lectureship Award

This year's recipient of the Don Johnston Literacy Lectureship Award for career contributions to the learning success of struggling readers is **Patricia M. Cunningham, Ph.D.** Dr. Cunningham is a professor of reading at Wake Forest University in Winston Salem, North Carolina. Prior to her current university teaching, she worked for ten years in public school positions that included first-grade teacher, fourth-grade teacher, remedial reading teacher, curriculum coordinator, and director of reading. Dr. Cunningham publishes and presents widely in her major professional interest, finding alternative teaching strategies for students commonly classified as "at-risk." She and Richard Allington, the 1996 recipient of the Don Johnston Literacy Lectureship Award, recently co-authored two books, *Classrooms that Work: They Can All Read and Write* and *Schools that Work: Where All Children Read and Write*. Dr. Cunningham has co-authored several reading textbooks, and her *Phonics They Use: Words for Reading and Writing* represents a superb collection of participatory and enjoyable activities for children learning early reading skills. An outstanding teacher educator, Dr. Cunningham has written regular columns of practical strategies, activities, and resources in *Reading Today, Educational Leadership,* and *The Reading Teacher.*

Plenary Sessions

Thursday, January 23, 1997

9:30 - 10:15, Keynote, *When One Size Doesn't Fit All: Balanced Instruction for Diverse Learners, Patricia Cunningham, Ph.D., Wake Forest University.* Children in mainstream classrooms are increasingly diverse in their backgrounds, interests, and abilities. Literacy programs must find ways of addressing this diversity, if they are to be successful in teaching all children to read and write. In this keynote presentation, lessons learned from eight years of developing and studying a balanced approach to literacy instruction will be shared. **Room 103 & 104**

10:45 - 12:00, Plenary, *Balanced Reading Instruction for Diverse Learners, Patricia Cunningham, Ph.D., and Karen Erickson, Ph.D., Center for Literacy and Disability Studies.* Balanced reading instruction is designed to meet the needs of all learners by systematically incorporating a variety of instructional methods. In this presentation, principles and practices underlying balanced reading instruction will be shared. We will argue that instruction must be provided at the word and text level with an emphasis on reading for meaning and analogic word analysis.. Strategies for developing a balanced reading program and providing instruction to students with diverse backgrounds, abilities, and needs, will be provided. **Room 103 & 104**

Friday, January 24, 1997

8:30 - 10:30, Plenary, *Balanced Writing Instruction for Diverse Learners, Ruie Pritchard, Ph.D., North Carolina State University, and David Koppenhaver, Ph.D., Center for Literacy and Disability Studies.* Three features of current writing instruction are particularly troubling: its absence from many schools' curricula, its test-driven nature in others, and the exclusion of children with disabilities from participation in the writing curricula of most. In this presentation, we will argue that writing instruction provides the ideal environment for inclusive education with its emphasis on shared process, individual product, and nearly infinite flexibility of content, form, and use. Particular attention will be addressed to implementing a balanced writing program across both the curriculum and also students with diverse backgrounds, abilities, and needs. **Room 103 & 104**

11:15 - 12:00, Keynote, *"I Can't Talk, But I Can Read and Write," Luis G. Estrella, Prentke Romich Company/ Semantic Compaction Systems/United Cerebral Palsy Association Leadership Development Fellow.* "In this talk on literacy and my reliance on assistive devices to communicate and participate in school, my hope is to demonstrate, through my own personal experiences, the trials and tribulations (and rewards) of learning to read and write. At the same time, we must add an interesting ingredient into the formula. Not only do I have cerebral palsy and an inability to talk using my own voice, but I also come from Mexican parents who had to learn how to read and write English as a second language." **Room 103 & 104**

Welcome Address
David E. Yoder, Ph.D., CCC/SLP
Department of Medical Allied Health Professionals
University of North Carolina at Chapel Hill

A LITERACY BILL OF RIGHTS

ALL PERSONS, REGARDLESS OF THE EXTENT OR SEVERITY OF THEIR DISABILITIES, HAVE A BASIC RIGHT TO USE PRINT. BEYOND THIS GENERAL RIGHT, THERE ARE CERTAIN LITERACY RIGHTS THAT SHOULD BE ASSURED FOR ALL PERSONS. THESE BASIC RIGHTS ARE:

1. The right to an *opportunity to learn* to read and write. Opportunity involves engagement in active participation in tasks performed with high success.

2. The right to have *accessible*, clear, meaningful, culturally and linguistically appropriate *texts* at all time. *Texts*, broadly defined, range from picture books to newspapers to novels, cereal boxes, and electronic documents.

3. The right to *interact with others* while reading, writing, or listening to a text. *Interaction* involves questions, comments, discussions, and other communications about or related to the text.

4. The right to *life choices* made available through reading and writing competencies. *Life choices* include, but are not limited to, employment and employment changes, independence, community participation, and self-advocacy.

5. The right to *lifelong educational opportunities* incorporating literacy instruction and use. Literacy *educational opportunities*, regardless of when they are provided, have potential to provide power that cannot be taken away.

6. The right to have *teachers and other service providers who are knowledgeable* about literacy instruction methods and principles. *Methods* include but are not limited to instruction, assessment, and the technologies required to make literacy accessible to individuals with disabilities. *Principles* include, but are not limited to, the beliefs that literacy is learned across places and time, and no person is too disabled to benefit from literacy learning opportunities.

7. The right to live and learn in *environments* that provide *varied models of print use*. *Models* are demonstrations of purposeful print use such as reading a recipe, paying bills, sharing a joke, or writing a letter.

8. The right to live and learn in environments that maintain the *expectations and attitudes* that all *individuals are literacy learners.*

Yoder, D.E., Erickson, K.A. and Koppenhaver, D.A, *Center for Literacy and Disability Studies.*

Concurrent Sessions on Thursday, January 23, 1997

2:00 Concurrent Sessions

Implementing a Multilevel, Multimethod Literacy Program for Students with Mild to Moderate Mental Retardation, *Wanda B. Hedrick , David Katims, and Norma Carr* (SCHOOL-AGE, p. 35) **ROOM 106**

Reading, Writing, Rhyming, and Reciting: Using Poetry to Support Emergent Literacy, *Caroline Musslewhite* (SCHOOL-AGE, p. 60) **ROOM 107**

An Open Forum on Literacy and Adults with Intellectual Disabilities, *John Elkins* (ADOLESCENTS & ADULTS, p. 29) **ROOM 108**

A Summer Institute for Augmented Speakers: Lessons in Language and Literacy for Teachers, Parents, and Children, *Chloe Myers and Jane Murphy* (ASSISTIVE TECHNOLOGY & AAC, p. 64) **ROOM 103**

Inclusive/Collaborative Service Delivery for School-Age Children with Language/Learning Disabilities, *Monica Bradshaw* (INCLUSION, p. 10) **ROOM 104**

Discover: From a Literacy Point of View, *Terry Hammon* (VENDOR PRESENATIONS, p. 31) **ROOM 105**

4:00 Concurrent Sessions

Revisiting the Never Ending Debate: How the Experience of People with Disabilities May Lead to an Emancipatory Literacy, *Christopher Kliewer* (SCHOOL-AGE, p. 51) **ROOM 106**

Strategies for Addressing Difficulties in the Physical Aspects of Written Expression, *Laurel Richardson* (SCHOOL-AGED, p. 69) **ROOM 107**

Motivating Hard to Reach Students: Methods for Improving the Literacy of Adolescents with Learning, Emotional, and Behavioral Disabilities, *Stephanie Spadorcia* (ADOLESCENTS & ADULTS, p. 78) **ROOM 108**

Lost in a Sea of Ink: How I Survived the Storm, *Andrew Sheehan* (ASSISTIVE TECHNOLOGY & AAC, p. 74) **ROOM 103**

Making Special Education Regular and Regular Education Special: A Joining of Two Philosophies, *Elizabeth Huber and Amy Staples* (INCLUSION, p. 50) **ROOM 104**

IntelliTalk, IntelliPics, and Hands-on Concepts, *Arjan Khalsa, IntelliTools* (VENDOR PRESENtATIONS, p. 56) **ROOM 105**

Concurrent Sessions on Thursday, January 23, 1997
Continued

4:45 Concurrent Sessions

Vocabulary Selection: Historical Trends, *Bruce Baker* (SCHOOL-AGE, p. 7) **ROOM 106**

Dynamic Assessment and Instructional Modifications for Students with Seizure Disorders, *Kari Krogh, Tom Humphries, Rose Anne McKay and Jay Rosenfield* (SCHOOL-AGE, p. 52) **ROOM 107**

Effective Reading and Spelling Instruction for Adolescents and Adults with Learning Disabilities, *Elaine Cheesman* (ADOLESCENTS & ADULTS, p. 20) **ROOM 108**

"Let's Read a Story": Using Augmentative and Alternative Communication During Storybook Interactions, *Lisa Wood* (ASSISTIVE TECHNOLOGY & AAC, p. 94) **ROOM 103**

Who? What? How? Achieving Literacy for All, *Maureen Wallace-Deely, Susan Baker, Star Cromartie, Heidi Roberts, Jami Skolnik, and Ellie White* (INCLUSION, p. 82) **ROOM 104**

Object and Symbol-based Access with VoicePal Plus and Traction Pads, *Don Kehoe, Adaptivation, Inc.* (Vendor Presentations, no abstract) **ROOM 105**

Concurrent Sessions on Friday, January 24, 1997

1:30 Concurrent Sessions

The Adventures of Petesie and Carl: Early Literacy and Communication in a Girl with Rett's Syndrome, *Pete and Janet Clary* (PRESCHOOL, p. 19 **ROOM 106**

What is Listening Comprehension Doing in a Reading Diagnosis? *James Cunningham* (SCHOOL-AGED, p. 26) **ROOM 107**

Poetic Literacy: Facilitated Poetry Writing for Students with Special Needs, Part I, *Nick Hogan and Lois Wolf* (ADOLESCENTS & ADULTS, p. 48) **ROOM 108**

Internet Resources for Literacy and Disabilities, *Jane Steelman* (ASSISTIVE TECHNOLOGY & AAC, no abstract) **ROOM 103**

Reading is Everywhere, *Suzanne Ripley,* (INCLUSION, p. 71) **ROOM 104**

R.J. Cooper (VENDOR PRESENTATIONS, no abstract) **ROOM 105**

2:30 Concurrent Sessions

Exploiting Natural Acquisition of Literacy Skills: A Case Example, *Angie and Kasey Hodges and Barbara Shadden* (PRESCHOOL, p. 44) **ROOM 106**

Reading Recovery: A Teaching Tool Adapted for Elementary School-Aged Children with Multiple Disabilities and Hearing Impairments, *Ann B. Hobgood* (SCHOOL-AGED, p. 41) **ROOM 107**

Poetic Literacy: Facilitated Poetry Writing for Students with Special Needs, Part II, *Lois Wolf and Nick Hogan* (ADOLESCENTS &ADULTS, p. 90) **ROOM 108**

Finding the Way: One Student's Search for Literacy, *Joy Nance* (ASSISTIVE TECHNOLOGY & AAC, p. 66) **ROOM 103**

Literacy, Technology, and the Educational Team of a Student with CP, *Hester Brooks* (INCLUSION, p. 14) **ROOM 104**

Developing Language through Social Interaction and Literacy Enjoyment, *Jane Murphy and Chloe Myers* (VENDOR PRESENTATIONS, p. 58) **ROOM 105**

Concurrent Sessions on Friday, January 24, 1997
Continued

4:00 Concurrent Sessions

An Examination of Emergent Literacy in Preschoolers with Hearing Loss, *Melody Harrison* (PRESCHOOL, p. 32) **ROOM 106**

Early Identification and Evaluation of Attentional and Motor-Perceptual Deficits as Markers of Learning Disabilities, *Magnus Landgren, Eva Isberg, and Bengt Kjellmen* (SCHOOL-AGED, p. 57) **ROOM 107**

Documenting Validity in Facilitated Communication: Research and Application, *Cynthia Sheehan* (ADOLESCENTS & ADULTS, p. 76) **ROOM 108**

High Tech Literacy, *Alice Wershing* (ASSISTIVE TECHNOLOGY & AAC, p. 88) **ROOM 103**

Cultural Arts and Technology: A Partnership to Develop Strong, Lifelong Literacy Skills, *Bonnie Snow Henry and Betty Harden Hensley* (INCLUSION, p. 39) **ROOM 104**

What's New at PRC?, *Joe Durbin and Rena Carney, Prentke Romich Company* (VENDOR PRESENTATIONS, p. 27) **ROOM 105**

4:45 Concurrent Sessions

Literacy All Day Long, *Marlene Cummings, Claudia Atkins, Mame Crosslin, and Mary Johnson* (PRESCHOOL, p. 24) **ROOM 106**

A Validated Case Study of Facilitated Communication, *Michael Salomon Weiss, Sheldon Wagner, and Margaret Bauman* (ADOLESCENTS & ADULTS, p. 84) **ROOM 108**

Designing Computer Generated/Multi-Sensory Materials for Teaching Reading and Writing through Word Families, *Kimberly Voss* (ASSISTIVE TECHNOLOGY & AAC, p. 80) **ROOM 103**

Sing Me a Song For My Eyes: Classic Poetry Activities for Young People with Emergent Literacy Skills, *Joanne Cafiero* (INCLUSION, p. 17) **ROOM 104**

Reading, Writing, and Communicating with the Dynavox, *Mel Ellison, Sentient Systems/ Learning Resources* (VENDOR PRESENTATIONS, no abstract) **ROOM 105**

Alphabetical Listing of Presenters

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Alphabetical Listing of Presenters

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Wolf, Lois	48	Friday 1:30	108
Wood, Lisa	94	Thursday 4:45	103

Keynote Address
Patricia Cunningham, Ph.D.
When One Size Doesn't Fit All: Balanced Instruction for Diverse Learners

The Four Blocks:
A Framework for Literacy in Primary Classrooms

Patricia M. Cunningham & Dorothy P. Hall

The four blocks is a framework for beginning reading instruction that had two goals. The first goal is to avoid the pendulum-swing and not be trendy but rather to find a way to combine the major approaches to reading instruction. The second goal is to meet the needs of children with a wide range of entering literacy levels without putting them in ability groups. In order to meet the goal of providing children with a variety of avenues to becoming literate, instructional time is divided fairly evenly between the four major historical approaches to reading instruction. The 2 1/4 - 2 1/2 hours allotted to Language Arts is divided among four blocks--Guided Reading, Self-Selected Reading, Writing and Working with Words--each of which gets 30-40 minutes. To meet our second goal of providing for a wide range of literacy levels without ability grouping the children, we make the instruction within each block as multilevel as possible. Results from a number of different primary classrooms indicate that implementing the 4-blocks framework resulted in superior reading achievement for a wide range of children (Hall, Prevatte & Cunningham, 1995).

Guided Reading

In our first several years, we called this the Basal Block because this was the time when the basal reader drove our instruction. In recent years, teachers have branched out to use other materials in addition to or instead of the adopted basal reader. Depending on the time of year, the needs of the class and the personality of the teacher, guided reading lessons are carried out with the system-wide adopted basal, basal readers from previously adopted series, multiple copies of tradebooks or books from Wright, Rigby or Troll, articles from My Weekly Reader or similar magazines and big books and combinations of these. The purposes of this block are to expose children to a wide range of literature, teach comprehension and teach children how to read in materials that become increasingly harder. The block usually begins with a discussion led by the teacher to build or review any background knowledge necessary to read the selection. Comprehension strategies are also taught and practiced during this block. The reading is done in a variety of small group, partner and individual formats. After the reading is completed, the whole class is called together to discuss the selection and practice strategies. This block sometimes includes writing in response to reading.

Making the guided reading block multilevel

Guided reading is the hardest block to make multilevel. Any selection is going to be too hard for some children and too easy for others. We don't worry anymore about those children for whom grade-level guided reading material is too easy because the other three blocks provide many beyond-grade level opportunities and because our end-of-year results always indicate that our students who begin first grade with high literacy levels read well above grade-level. We do, however, worry about those student for whom grade-level selections are too hard. To make this block meet the needs of children who read below grade level, teachers make a variety of adaptations. Guided reading time in not spent in grade-level material all week. Rather, teachers choose two selections--one grade-level and one easier--to read each week. Each selection is read several times, each time for a different purpose in a different format. Rereading enables children who couldn't read it fluently the first time to achieve fluent reading by the last reading. Children who need help are not left to read by themselves but are supported in a variety of ways. Most teachers use reading partners and teach children how to help their partners rather than do all their reading for them. While some children read the selection by themselves and others read with partners, teachers usually meet with small groups of children. These teacher-supported small groups change on a daily basis and do not include only the low readers.

In addition to the daily guided reading block in which all children are included, many teachers schedule a 10 minute easy reading support group in which very easy books are read and reread. This group of five to six children changes daily. All children are included at least one day each week. Children who need easy reading are included more often, but not every day. One way or another, we try to assure that every child has some guided reading instruction in material at

instructional level or easier several days each week. (For other ways to manage the various levels of children during guided reading, see Cunningham & Allington, 1994.)

Self-Selected Reading

Self-selected reading is that part of a balanced literacy program when children get to choose what they want to read and what parts of their reading they want to respond to. Opportunities are provided for children to share and respond to what is read. Teachers hold individual conferences with children about their books.

In our classrooms, the Self-Selected Reading block includes teacher read-aloud. The teacher reads to the children from a wide range of literature. Next, Children read "on their own level" from a variety of books the teacher has gathered together and keeps on a book shelf or in dishpans or buckets. The teacher selects books for the classroom library on themes they are studying, easy and hard library books, old favorites, new easy predictable books, etc. Every effort is made to have the widest possible range of genre and level available. While the children read, the teacher conferences with and takes anecdotal records on several children each day. The block usually ends with with one or two children sharing their book with the class in a "reader's chair" format.

Making the self-selected reading block multilevel

Self-selected reading is, by definition, multilevel. The component of self-selected reading that makes it multilevel is the fact that children choose what they want to read. These choices, however, can be limited by what reading materials are available and how willing and able children are to read from the available resources. Fielding and Roller (1992) sum up the problem many struggling readers have with self-selected reading:

> While most of the children are quiet, engaged, and reading during independent reading times, there are always a few children who are not. They are picking up spilled crayons, sweeping up shavings from the pencil sharpener, making trips to the water fountain, walking back and forth alongside bookcases, opening and closing books, and gazing at pictures. (p. 678)

The article goes on to indicate that many of the children who "wander round" during self-selected reading time are the ones whose reading ability is limited and concludes that:

> Either they do not know how to find a book that they can read, or there is no book available that they can read or they do not want to read the books they can read. These children remind us of Groucho Marx: They refuse to become a member of any club that will accept them. In book terms, they cannot read the books they want to read and they do not want to read the books they can read. (p. 679).

Fielding and Roller go on to make excellent and practical suggestions about how to support children in reading books they want to read which, without support, would be too difficult and how to make the reading of easy books both enjoyable and socially acceptable. These suggestions include: Helping children determine when a book is just right; encouraging children to read books which the teacher has read aloud; encouraging children to read with a friend and to do repeated readings of books they enjoy; teacher modeling the enjoyment to be found in easier books; setting up programs in which children read to younger children and thus have a real purpose for engaging easy books; and making lots of informational picture books available. Although they do not use the term, following their suggestions would make the self-selected reading time more multilevel. We have incorporated many of their ideas in our Self-Selected Reading block and in addition we steer our more advanced readers toward books that challenge them.

Writing

The writing block is carried out in "Writers' Workshop" fashion (Graves, 1995; Routman, 1995; Calkins, 1994) It begins with a 10-minute mini-lesson. The teacher sits at the overhead projector or with a large piece of chart paper. The teacher writes and models all the things writers do (although not all on any one day!). The teacher thinks aloud--deciding what to write about and then writes. While writing, the teacher models looking at the word wall for a troublesome word which is there as well as inventing the spelling of a few big words. The teacher also makes a few mistakes relating to the items currently on the editor's checklist. When the piece is finished or during the

following day's minilesson, the children help the teacher edit the piece for the items on the checklist. Next the children go to their own writing. They are at all different stages of the writing process--finishing a story, starting a new story, editing, illustrating, etc. While the children write, the teacher conferences with individuals who are getting ready to publish. From 3-5 pieces, they choose one to make into a book. This piece is edited with the teacher's help and the child proceeds to the publishing table where he or she will copy the edited piece and finally illustrate the book. This block ends with "author's chair" in which several students each day share work in progress or their published book.

Making the writing block multilevel

Because it is not limited by the availability or acceptability of appropriate books, writing is the most multilevel block. If teachers allow children to choose their own topics, accept whatever level of first-draft writing each child can accomplish and allow them to work on their pieces as many days as needed, all children can succeed in writing. In addition to teacher acceptance,children choosing their own topics and not expecting finished pieces each day, Writer's Workshops include two teaching opportunities which promote the multilevelness of process writing--minilessons and publishing conferences. In minilessons, the teacher writes and the children get to watch her thinking. In these daily short lessons, teachers show all aspects of the writing process. They model topic selection, planning, writing, revising and editing and they write on a variety of topics in a variety of different forms. Some days they write short pieces. Other days, they begin a piece that takes several days to complete. When doing a longer piece, they model how you reread what you wrote previously in order to pick up your train of thought and continue writing. The minilesson contributes to making process writing multilevel when the teacher includes all different facets of the writing process, writes on a variety of topics in a variety of forms and intentionally writes some shorter easier pieces and some more involved longer pieces.

Another opportunity for meeting the various needs and levels of children comes in the publishing conference. In some classrooms as children develop in their writing, children do some peer revising/editing and then come to the teacher "editor-in-chief" for some final revision/editing before publishing. As teachers help children publish the piece they have chosen, they have the opportunity to truly "individualize" their teaching. Looking at the writing of the child usually reveals both what the child needs to move forward and what the child is ready to understand. The editing conference provides the "teachable moment" in which both advanced and struggling writers can be nudged forward in their literacy development.

Finally, writing is multilevel because for some children writing is their best avenue to becoming readers. When children who are struggling with reading write about their own experiences and then read it back (even if no one else can read it!), they are using their own language and experiences to become readers. Often these children who struggle with even the simplest material during guided reading can read everything in their writing notebook or folder. When children are writing, some children are really working on becoming better writers, others are engaging in the same activity but for them, the writing is how they figure out reading.

Working with Words

In the Working with Words block, children learn to read and spell high-frequency words and learn the patterns which allow them to decode and spell lots of words. (For more information about words-block activities, see Cunningham, 1995.) The first ten minutes of this block are usually given to reviewing the word wall words. Word wall is a display of high-frequency words above or below an alphabet. The words are written with thick black marker on colored paper and are located by first letter only. The teacher adds 5 words a week until there are 110-120 words on the wall. Students practice new and old words daily by looking at them, saying them, clapping or snapping the letters, writing the words an paper, and self-correcting the words with the teacher.

Practice with the high frequency words on the wall takes the first 10 minutes of the words block every day. The remaining 15-25 minutes of words time is given to an activity which helps children learn to decode and spell A variety of different activities are used on different days. Three of the most popular activities will be described.

Rounding up the Rhymes is a words-block activity that follows up the reading of a selection during guided reading or a book the teacher has read aloud at the beginning of the self-selected reading time. Here is an example using that timeless book, In a People House (LeSieg, 1972).

The first (and often second) reading of anything should be focused on meaning and enjoyment. When reading In A People House, there is lots to think about and enjoy. As the mouse shows the bird what is in a people house, children encounter wonderful "Seussian" language and pictures. Mundane things such as bottles, brooms and pillows come to life as the bird and the mouse juggle them, fly them and fight with them!

Returning to the book during the words block, we draw the children's attention to the rhyming words. As we read each page or two, we encourage the children to chime in and try to hear the rhymes they are saying. As children tell us the rhyming words, we write them on index cards and put them in a pocket chart. Here are the rhyming pairs rounded up from the first several pages:

mouse	chairs	brooms	thread	door	pails
house	stairs	rooms	bed	more	nails
				floor	

Next, we remind children that words that rhyme usually have the same spelling pattern and that the spelling pattern in a short word includes all the letters beginning with the first vowel and going to the end of the word. Children then come and underline the spelling patterns in each set of rhymes and decide whether or not they are the same. In this example, all the rhymes have the same spelling patterns except thread and bed. We explain that words that rhyme usually have the same spelling pattern but that sometimes, there is another spelling pattern. Because we want rhymes with the same spelling pattern, we discard thread and bed. We also discard more keeping the other two rhymes door and floor. We now have five sets of words that rhyme and have the same spelling pattern in our pocket chart:

house	chairs	brooms	door	pails
mouse	stairs	rooms	floor	nails

The final part of this activity is to use these words to read and write some other words. This is the transfer step and is critical to the success of this activity for children who "only learn what we teach." We begin the transfer part of this activity by telling children something like,

> "You know that when you are reading books and writing stories, there are many words you have never seen before. You have to figure them out. One way many people figure out how to read and spell new words is to see if they already know any rhyming words or words that have the same spelling pattern. I am going to write some words and you can see which words with the same spelling pattern will help you read them. Then, we are going to try to spell some words by deciding if they rhyme with any of the words in our pocket chart."

Here are the words rounded up from In a People House along with the new words read and spelled based on their rhymes and spelling patterns at the conclusion of this activity.

house	chairs	brooms	door	pails
mouse	stairs	rooms	floor	nails
blouse	pairs	zooms	poor	snails

Making Words (Cunningham & Hall, 1994) is an active, hands-on, manipulative activity in which children learn how to look for patterns in words and how changing just one letter or where to put a letter changes the whole word. The children are given the six to eight letters that will form the final word. The lesson begins with two letter words, then builds to three, four and five letter words until the word that can be made with all the letters is made. They then sort the words according to a variety of patterns including beginning sounds, endings and rhymes and and use the words sorted to read and spell words with similar patterns.

In one lesson, the children had the letters i, u, n, p, r and t. Following the instructions of the teacher, the children made the words:

it, in, pin, nip, rip, run, runt, punt, trip, turn, print, turnip

(The word turnip was chosen because the children had read the story, The Great Big Enormous Turnip during the guided reading block. The last word made is "the secret word" because it always uses all the letters and children delight in trying to figure out what the secret word can be.)

When all the words were made, the teacher lead the children to sort them out first for beginning letters and then for rhyming words. The rhyming words are:

in	nip	runt
pin	rip	punt
	turnip	

Following the same procedure used in the transfer step of Rounding up the Rhymes, the teacher helped them to see that these rhyming words would help them read and spell other rhyming words they might meet in their reading or need to spell while writing. In this lesson, the words the transfer words were stunt, trip, spin and chip.

Guess the Covered Word is another popular words block activity. Its purpose is to help children practice the important strategy of cross checking meaning with letter-sound information. For this activity, the teacher writes four or five sentences on the board, covering a word in each sentence with a 2 sticky notes. Children read each sentence and then make several guesses for the word. There are generally many possibilities for a word that will fit the context and the teacher points out that it can be lots and lots of words when you can't see any of the letters. Next, the teacher takes off the first sticky note which always covers all the letters up to the vowel. Guesses which don't begin with these letters are erased and new guesses which both fit the meaning and start with all the right beginning letters are made. When all the guesses which fit both meaning and beginning sounds have been written, the whole word is revealed. Most teachers tear their sticky notes so that children also become sensitive to word length.

Making the words block multilevel

If you watched children doing the daily word wall practice, you would assume that they are all learning the same thing--how to spell words. But what they are doing externally may not reveal what they are processing internally Imagine that the five new words added to the wall one week were come, where, they, boy, friend. Since these words are usually chosen from high-frequency words read in selections during Guided Reading the previous week, most of the children have learned to read them before they become word-wall words. During the daily word-wall practice, the children who have learned to read them are learning to spell them. Other children, however, who were also introduced to these words last week in their guided reading but who require lots of practice with words have probably not yet learned to read them. As the children engage in their daily word wall practice, some children are learning to spell them and others are learning to read them. Everyone is practicing handwriting as they write and check the words.

Making Words lessons are multilevel in a number of ways. Each lesson begins with short easy words and progresses to some medium-size and big words. Every Making Words lesson ends by the teacher asking,"Has anyone figured out the word we can make if we use all our letters?" Figuring out the secret word which can be made from all the letters in the limited time available is a challenge to even our most advanced readers. Making Words includes even children with very limited literacy who enjoy manipulating the letters and making the words even if they don't get them completely made until the word is made with the big pocket chart letters. By ending each lesson by sorting the words into patterns and then using those pattens to read and spell some new words, we help children of all levels see how you can use the patterns you see in words to read and spell other words.

While rounding up the rhymes, some children are still developing their phonemic awareness as they decide which words rhyme and are learning that rhyming words usually--but not always--have the same spelling pattern. As they use the words rounded up to read and spell new words, children who need it are getting practice practice with beginning letter substitution. Children who already have well-developed phonemic awareness and beginning letter knowledge are practicing the important strategy of using known words to decode and spell unknown rhyming words.

Guess the Covered Word lessons provide review for beginning letter sounds for those who still need it. The most sophisticated readers are consolidating the important strategy of using meaning, all the beginning letters and word length as cues to the identification of an unknown word.

Connections Across the Blocks

So far, we have been describing the blocks as separate entities. As much as possible, teachers try to make connections from one block to another. Many teachers take a theme-approach to teaching. These teachers often select books for guided reading which correlate with their theme. During the writing minilesson when the teacher models writing, he or she often (but not every day) writes something connected to the theme. Some of the books teachers read aloud at the beginning of self-selected reading and some of the books children can choose from are theme connected.

Theme words are not put on the word wall--which we reserve for high-frequency words and words that represent high frequency patterns. But most teachers have a theme board or chart in addition to the word wall. This board changes with each theme and in addition to pictures includes theme-related words which children will need as they pursue that theme. Often the secret word in a making words lesson is theme connected. Sometimes, the sentences a teacher writes for a Guess the Covered Word lesson relate to the theme.

In addition to theme connections, there are other connections across the blocks. We practice word wall words during the words block but we select them once they have been introduced in guided reading and we make sure that the children know that when they are writing, they spell words as best they can unless the word is on the word wall. Word wall words must be spelled correctly!

Rounding up the Rhymes occurs during the words block but the book from which we are rounding has usually been read by the children during guided reading or read aloud by the teacher to begin the self-selected reading block. Sometimes, we do Guess the Covered Word activities by using post-it-notes to cover one word on each page of a big book. We often introduce vocabulary during guided reading through picture walks and while reading with small groups, we coach children on how to decode words using picture, context and letter sound clues.

In our minilesson at the beginning of each day's writing time, we model how we can find words we need on the word wall and how to stretch out words listening for the sounds to spell big words not available in the room. When we are helping children edit, we praise them for their good attempts and spelling and coach them to use things they are learning during the words block.

Most teachers who have organized their framework within the four-blocks framework find that it is natural and easy to make connections across the blocks. By providing instruction in all four blocks, we provide children with many different ways to learn to read and write. Connections across the blocks help children build bridges between what they are learning.

The basic notions of 4-blocks framework are quite simple but its implementation is complex. There is a lot of variation depending on how early or late in the year it is and whether the framework is being carried out in first or second grade. There is also much variation attributed to the individual teaching styles of the teacher and the particular makeup of the class being taught.

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Vocabulary Selection: Historical Trends

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Importance

Educators and therapists often have to make vocabulary decisions. Differing ideas about vocabulary selection have been proposed over the years. This presentation discusses those decisions in a historical context and examines trends extending from the 1960's. What words an augmented communicator, who is young or who has cognitive disabilities learns, and what words any augmented communicator has access to on a consistent basis can have important developmental, linguistic, and interactional consequences. This presentation proposes that certain long-term historical trends may be working toward the disadvantage of augmented communicators both in terms of interaction and literacy.

Methods

In the 1950's, very strong models concerning language acquisition began to appear (Chomsky, 1957). These models had a significant impact across a broad range of disciplines including speech-language pathology and special education. Later revisions and defenses of these early strong models (Chomsky, 1965) established formalisms in syntax and phonology as primary concerns in the understanding of early language acquisition.

Developmental linguistics seemed to imply that individuals with cognitive impairments could or should acquire language in the same way and through the same steps that typically developing children acquire language. Methods focusing on the acquisition of grammar and various inductive and specific grammatical approaches were generalized as theoretical tools and teaching methods for a variety of populations. Theorists and researchers
note the extensive use of pronouns, verbs, and other functional pivot words in typically developing children and this realization affected teaching methods for individuals physically capable of speech but who had severe cognitive disabilities.

The educational use of the linguistic models developed by Chomsky and those sharing his point of view, however, began to be questioned in the early 1970's. Teaching and training protocols based on phrase structure analysis and higher-order grammatical rules did not seem to be meeting the needs of individuals with profound cognitive disabilities, whose integration into community-based settings was rapidly progressing. Theories derived from B. F. Skinner (1957) in which language is described as a behavior subject to operant conditioning began to play a role in thinking about communication for people with severe or profound cognitive disabilities.

Chomsky and his movement viewed language as divisible into an inner competence and an outer performance. The inner competence is highly structured, rule-driven, and generative. Skinner's view, on the other hand, regarded language as any other animal behavior -- learned and conditioned through stimulus, response, and reinforcement. Language viewed not as a performance phenomenon based on an internal competence but rather as a moldable behavior opened new horizons for thinking about communicative behaviors for people with severe cognitive challenges. Behaviorism culminated in the

belief that people learned language through the imitation of models which could be taught by operant conditioning (Garcia, Guess and Byrnes, 1973).

Concurrent with these developments was a growing research that individuals with severe cognitive challenges could be taught labeling behaviors. Physical items could be labeled, speech patterns could be imitated, and people with a wide variety of severe cognitive, linguistic, and psychological challenges were shown to develop certain types of communicative behaviors (Risley and Wolf, 1966).

The view of language as a behavior and labeling as a successful methodology has produced benefits for certain groups of individuals, particularly those for whom it was originally developed, that is, people with severe or profound cognitive impairments who were physically able to speak or make hand signs. The importation of such approaches into augmentative communication began in the late 1970's and has substantially contributed to the current climate of methodologies used for a broad spectrum of augmentative communication populations.

This presentation questions current vocabulary selection processes and speculates that they are based on methodologies developed from a dated (Skinnerian) approach and designed for a specific population, not necessarily the broad range of augmented communicators. The presentation examines the implications of behaviorist language approaches on language development and literacy. Language is crucial in literacy because the main factor in successful literacy learning is language processing not individual phonological and word-based skills. Consequently, children who do not have access to vocabulary that enables them to engage in language processing will not have maximal success in literacy learning.

Application

This presentation speculates that the pendulum swung strongly at one point toward formalistic, syntax-driven teaching methods and then swung the other direction to a behaviorist methodology emphasizing labeling, naming, and pre-stored sentences (Baker. 1986). It further proposes that an entire style of vocabulary selection and language representation has been sponsored by behaviorist views of language which have now been called into question both theoretically and practically.

Recognizing that this presentation is speculative and only accounts for certain factors, the author, nevertheless, proposes that a return to a more language-oriented model, that is, pivot words, pronouns, helping verbs, etc. may expedite language learning. interaction and literacy. Many people with mild to moderate cognitive impairments use word combinations and exhibit morphological awareness. Constructing systems that do not provide individuals with the power to organize their own word combinations may present a significant and unnecessary barrier to personal expression.

In particular, this presentation will demonstrate how the use of the activity-based learning models (Rainforth and York, 1987) can be employed for teaching and representing simple, core, functional words (it, this, that, here, there, etc.) often thought too abstract and too numerous for current teaching methods and representational techniques.

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Inclusive/Collaborative Service Delivery for Language/Learning Disabled School-Age Children

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Importance

This presentation will discuss a collaborative model of service-delivery in inclusion classrooms for school-age children with language-learning disabilities. The discussed model includes meeting the needs of children with language-learning disabilities in the areas of language, reading, and writing through an integrated manner within the regular education classroom.

Difficulties in learning reading and writing and learning language are co-occurring issues. A number of investigations have looked at relationships between early oral language development and written language development. Both retrospective (Aram & Nation, 1980) and longitudinal (Menyuk, Chesnick, Liebergott, Korngold, & D'Agostino, 1991) studies have shown that preschool children with speech and language impairments are at risk for failure in the development of reading. Measures of receptive language ability and expressive language ability in preschool children have been shown to be correlated with reading ability at age eight (Bishop & Adams, 1990). Results suggest that delayed speech and language development are symptoms of a common problem that extends into development of written language. The problems exhibited by the children become more subtle as the obvious misarticulations, morphological errors, and syntactic errors of the preschool child change to written language problems of the elementary school student.

Collaborative service delivery models can facilitate the remediation of oral and written language problems as well as the generalization of oral and written language development through increased exposure to academically relevant information and literature. Rather than engaging a child in separate activities through a pull-out approach, the child can be engaged repeatedly to relevant information that is integrated across several areas within the classroom situation.

The re-authorization of PL 101-476 states that service delivery models for the child with special needs include least restrictive environments and shared decision making. A collaborative service delivery model meets this criteria. A collaborative team can develop mutual goals and objectives and share responsibility in achieving those goals within the common environment of the classroom.

Methods

This presentation will discuss an integrated view of the remediation of reading, writing, and language, strategies that the speech-language pathologist can use to facilitate these areas, and how these strategies can be implemented through a collaborative service delivery model.

An integrated view of the development of reading, writing, and language involves principles of whole-to-part learning. Research has looked at the process of learning language as whole-to-part (Nelson, 1985) and the process of learning reading and writing as developing reciprocally (Goodman, 1986; Calkins, 1986). Nelson (1985) maintains that learning proceeds from the whole to the parts of the whole. Within that whole event, the adult parses out meaningful relationships. As the child is engaged in interactive situations repeatedly, language is refined.

Development of language shifts from lower levels such as indication to higher levels such as inferencing. As language is refined the child acquires distance between the actual referent and language used to refer to the referent (Blank, Rose, & Berlin, 1978). The highest level of distance or abstraction is metalinguistic. Metalinguistic abilities are the abilities to think about language as an abstract concept. Research has indicated that children with language impairments have difficulty with acquiring metalinguistic abilities which impacts oral and written language (vanKleek, 1984) and that children with speech and language impairments are at risk for failure in the development of oral and written language (Catts, 1989).

If the view is that language learning occurs as a whole-to-part process with oral and written language developing reciprocally, strategies to remediate the development of these components

require a meaningful, interactive plan that simultaneously involves language, reading, and writing (Westby, 1991). Strategies used within this plan will help the child refine language to develop higher levels of abstraction which involves an understanding of melinguistic concepts.

Setting up an integrated plan involves determining thematic content with related concepts. Thematic organization allows for centralized, integrated activities and conceptual information. New information and written and oral language objectives are met within the plan through specific strategies geared to meet the needs of the child with language-learning difficulties. The following information contains strategies that will be discussed in the presentation.

Language as an integrated component within the plan can be facilitated through strategies termed scaffolding. Research has indicated that scaffolding strategies can help organize language at varying levels of development (Bradshaw, M., 1995; Norris & Hoffman, 1990). An adult's scaffolds temporally assume responsibility for part of the actions expected of the child (Bruner, 1978). As the child independently takes on more of the responsibility for the actions, the adult relinquishes control to the child.

Scaffolding strategies include cloze procedures in which adult pauses indicate that the child should fill in information. A second procedure is the binary choice in which the adult states information offering the child two alternate utterances. Relational terms constitute a third procedure. These are used to mark temporal and causal events (i.e., before, after, because, if-then). Relational terms can prompt the child that more information is needed and can cue the child about the type of information. Pointing, gazing, and gestures can be used as scaffolding procedures. Another strategy is phonemic cues in which the adult prompts a word or phrase by use of the initial sound or syllable of the word.

Additionally, several types of questions can be used as scaffolds for the child. These include constituent questions, comprehension questions, and summarization questions. Constituent questions are used as a scaffolding procedure to elicit specific information from the child. Comprehension questions ask for information at higher levels of language. Summarization questions allow the child a second opportunity to communicate the information and the adult can evaluate the child's overall comprehension of the information.

Language is a transient mode of communication, and reading and writing are ways to help children focus on and organize different and difficult aspects of language. Flowcharting or graphic organizers are visual maps that help organize text and stories that is read or organize elements for a child to write stories (Norris & Hoffman, 1993). Main ideas are linked by causal, temporal, and spatial relationships. When the child is involved in writing a flowchart can be used to place an organizational structure on the child's ideas.

When the child uses the flowchart to write text, the child can verbalize the sentence that is to be written. As the child says the words, the adult can draw lines in which the words are to be written. This allows the transient language to become halted. Then, the child can attempt to write the sentence. Within that context, differences in grammatical markers and phonemic markers and how they create differences in meaning can be addressed.

As stated previously, flowcharting is one way to organize text that is read. For example, an activity may be to research similarities and differences between two insects. Flowcharts can be used to organize the expository text and facilitate recall of new information. As the child pieces out relevant information, main ideas and relationships can be charted.

Another procedure to facilitate reading is communicative reading strategies (Norris, 1991). Reading instruction must be presented in a manner that addresses the language deficits in which the child is taught to understand the meaning of the text as an integrated part of the reading process. If the child is using language at a level of complexity that is labeling and describing, teaching reading through metalinguistic methods may not be effective. Communicative Reading Strategies (CRS) are techniques that use reading as a strategy for processing difficult language. As the child begins to process difficult language, reading fluency, word recognition and comprehension improve.

Three basic steps are used when implementing CRS. First, the child is provided the concept that he is to read before he reads a sentence, phrases or paragraph. This is termed a preparatory set, meaning it is a strategy that prepares the child for the printed material. Secondly, the child reads information, so that the words are integrated with the meaning established by the prep set. The oral

reading also provides the adult with an opportunity to listen to the quality of the reading. If reading miscues occur, the adult can use context cues with attention to the print to help the child process the written language. More information is provided if the child does not appear to understand the text. Thirdly, after information has been read and understood, the adult should summarize and add information to add more meaning to what the child read.

Once an integrated plan and strategies within that plan are designed, the next procedure is how to use this plan and strategies in a collaborative service delivery model. The model discussed will include the classroom teacher, the special education teacher, and the speech language pathologist. Additionally, in the future speech-language assistants (SLA) may be part of service delivery in the public school setting through certification in North Carolina and through ASHA guidelines. SLA responsibilities include implementation of set goals and objectives requiring adequate and effective supervision. The SLA can be a part of the collaborative team which will improve time management and effective services by combining supervision with intervention. The team will also include the educational diagnostician which will allow for tracking of student progress through both qualitative and quantitaive measures (Hoffman, L., 1990).

To design a successful collaborative program, several factors must be addressed (Bland,L.; Prelock, P.; Creaghead, N.A.; Donnelly, C.; & Kretschmer, 1995). Strong communication between collaborators must be established as well as shared responsibility. The team must meet weekly to evaluate the progress of the target children and plan for the following week. An effective collaborative relationship must include respect of multiple perspectives, problem-solving, and a willingness to expand knowledge bases (Wallach & Butler, 1994).

Appropriate and sufficient time within the classroom setting must be maintained. In this model, the speech-language pathologist has a primary role in the direct classroom situation. For this situation to be productive, time with targeted children must be adequate and efficacious. An example situation that lends itself to meet this criteria is involvement in a center-based classroom. Center based classrooms allow for time flexibility, small-group situations, varied activities focusing on specific goals and objectives, and charting progress.

Shared goals and objectives are an integral part of a successful collaborative models. Use of an integrated approach to reading, writing, and language allows for common goals and objectives as opposed to isolated areas that are remediated in different ways. Working on shared goals and objectives within a common environment lends itself to the mutual use of materials and resources. This is an important factor considering the varied activities in which one team member may have more resources.

This section of the presentation will conclude will a discussion of preliminary findings from research investigating language, reading, and writing abilities of children with language-learning disabilities receiving services within an inclusion setting compared to language, reading, and writing abilities of children with language-learning disabilities receiving services through a pull-out approach.

Application

Even after an exhaustive search and analysis has been conducted to determine who will be involved, how will the individuals be involved, and when the program will begin, there will be "bumps in the road". Obstacles can occur to create disequilibrium in the program (Bland,L.; Prelock, P.; Creaghead, N.A.; Donnelly, C.; & Kretschmer, 1995). The final part of this presentation will address those obstacles.

Once the team is together, there may be an unrealistic idea of how the program will flow and expectations are high. However, acting on new ideas with new strategies is a learning process. The team will feel positive about some aspects and negative about others. The key is keep lines of communication open and maintain flexibility within the program to make changes when needed.

Another obstacle may be undertraining of individuals in the team in some areas. Again, a willingness to share information, resources, materials, and support is key. One solution may be maintaining a current inventory or pool resources to order materials that can be utilized in many ways. Additionally, with all this new information and ideas, overloading of individuals can become a problem. Therefore, it is important to recognize that all processes take time and balance. Another

issue may be scheduling and structuring weekly meeting times. This presentation will address how to structure meetings to maintain an effective use of time.

Within the school itself, there may be lack of support by other teachers or administrators which can create negative feelings. An important key to this obstacle is to remain positive and to remember that change is hard and others reactions may be simply demonstrating that concept. This presentation will discuss ways to demonstrate accountability and success of the program.

Finally, the team may have all these new ideas of how things can change, but they may encounter a curriculum that is rigid and inflexible. Again, the concept that this is a process rather than an overnight shift is important to keep in mind. Selection of key areas within the curriculum and investigation of supplementary activities and materials that both support and expand on the existing curriculum may be a possible solution.

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Literacy, Technology, and The Educational Team of a CP Student

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Importance

This presentation has relevance for classroom teachers and parents of children with motor and cognitive deficits. It describes a multifaceted approach to teaching literacy which involved close cooperation among family, school staff and outside service providers--speech and language pathologist, occupational therapist, physiotherapist, and a consultant in literacy and technology over a three year period. The student is a youngster with a diagnosis of hypertonia and truncal ataxia, which impairs both her gross and fine motor functions. She is dysarthric, and appears to have some cognitive limitations.

Methods

I was asked to join Marina's team as a specialist in literacy and technology in 1993. At the time, this six year old was in transition from kindergarten to first grade. The special needs director in her public school felt that technology might be an important part of her program. At the time, her language was extremely difficult for the uninitiated to understand, and her fine motor skills were severely compromised. She had just completed kindergarten in a mainstream setting, and there was concern because her rate of progress in learning letters and sounds lagged far behind her classmates.I met with her for two one hour sessions a week over the summer and in the fall taught her aide, classroom teacher and speech pathologist how to use some computer programs as part of the regular curriculum. This sequence of providing direct service during the summer and consultation to the school staff during the school year has continued, and this past summer Marina reached a milestone--she began to independently read connected text.

Over the years, we have worked closely as a team. This has included monthly team meetings, and occasional contact in between. The physical therapist has provided important information on positioning at the desk or computer. The occupational therapist has also provided useful information on ways to heighten Marina's attention level, and in turn, she has been impressed with Marina's increased dexterity, eye-hand coordination and fine motor control as she became fluent in using the mouse. The speech and language pathologist and reading specialist shared many common goals, so we collaborated on teaching oral and written language. In the early days, rhymes which Marina was using to practice certain sound elements were transcribed on the computer, and using voice synthesis, she could hear the words and then recite them. Using KidPix, she also colored computer-generated pictures to illustrate her practice rhymes. As Marina progressed through the grades, we were often able to provide computer programs that supplemented the regular curriculum.

In an unexpected social bonus, the computer also became her playmate. After a lesson, she routinely stayed on the machine for another hour or more, and when other children came to play, she would invite them to join her at the computer. On those days when she did not have a playmate, the computer often became a surrogate. Play on the

computer has come to be a very powerful aspect for Marina, because it is one of the few things she can do completely successfully and COMPLETELY ALONE. Initially in school, she defended her proprietorship over the machine, but as she has become more confident, her grip has loosened. Now she enjoys collaborating, pushing the mouse back and forth as she and a companion take turns.

Reading instruction has included a substantial amount of explicit phonics to build phonemic awareness, as well as the building of a sight vocabulary of high frequency and important words, all using a mixture of text, manipulatives and technology. Because of our frequent contact, the teachers, family members and specialists have been able to integrate content and expectations so Marina experiences consistency rather than fragmentation in spite of the many adults involved.

Currently Marina is writing on the computer, using My Words, which includes a preselected word bank, speech synthesis and the option to record digitized sound. She practices math facts with Number Munchers, builds math concepts using Unifix Software, and explores American history with her classmates using Imagination Express, Time Travel: U.S.A. She is in the process of mastering Oregon Trail at home, in anticipation of a unit on westward expansion which begins in February. When we completed our summer tutorial three years ago, Marina turned to me with a very sad face and confided, "You know, I can't read." Two years ago, she was found to need glasses and she put them on with pride, only to try to destroy them the following week. She had overheard the adult discussion that led to the decision to get her glasses, and her interpretation was that glasses would enable her to read. So she put them on, but they didn't work. I contrast these experiences with her expression this September, when she returned to school beaming, and said, "Do you want to hear me read?"

Application

Each child is unique and has particular individual needs, and this is especially true of children with low-incidence disabilities. The combination of strengths and weaknesses requires tailoring the program to meet those needs. Even so, there are certain features that I have found retain relevance for many children with varied special needs profiles. I have tried to extract them from the whole intervention and provide some guidelines that have general applicability. First three rules for the whole team:

1) Provide consistency in terms of materials used across disciplines;
2) Agree on expectations, both for achievement and behavior;
3) Emphasize on phonics as well asproviding rich exposure to literature.

And suggestions for computer use:

1) Allow ample time to play on the computer. If the child sees it as a gratifying recreational tool, she will go back to it time after time, and practice all the critical skills we are trying to teach. If the process is too managed, she is more likely to interpret it as a teacher-driven exercise and only use it under supervision.
2) Choose programs that have some merit, but good play value as well. Marina has spent hours with Hello Kitty, and she astonished us all by navigating successfully though her father's copy of Myst.

3) Although many programs belong on home and school machines (assuming the child has a home computer) there should be some boundaries. At home, the student is likely to need all the school programs in order to complete homework, but be sure to have some programs that are special for home--these are often the ones the child turns to when friends come over, and it gives her a chance to play teacher.
4) Don't expect the child to be self-taught. If you introduce a new program, spend at least one or two sessions sharing it. The adult can either play the role of teacher, or of inquirer, asking what various features do, or how they work. Without this introduction, the child is likely to get frustrated when the program does something she didn't expect and abandon it.
5) Sit on your hands if necessary to avoid taking over the mouse. If you need to take over in order to do something, ask, and while you are doing whatever you need to, describe the process to model it for the child.
6) Always use the correct vocabulary. Because Marina has always heard terms like menu bar, scroll bar, title bar, close box, file--she uses them. It is easier than referring to "the gray thingie over on the left side of the screen" and it makes communication more effective when she needs help because she's having a problem with her computer.
7) If a program has levels of difficulty that can be set in the management options, start with the easiest setting. This can always be justified when beginning a new program since it allows you to concentrate on the features, not the challenge. It is easier to increase the level of difficulty later than to decrease it once the child has become discouraged.
8) If there is a way to create a board or card game with some aspect of the computer porgram, you can increase the learning opportunities. For example, print out the word list from Reader Rabbit and tape the words to the faces of playing cards or wooden tiles to play word games--matching, rhyming, etc. Or cut out the picture of Arthur from the outer package, mount it on a block and play act 'The Further Adventures of Arthur.'

Marina is only one of the children for whom these techniques have been successful. I would propose to demonstrate some of the software and related materials she has been using, along with samples of her own work and anecdotal evidence of the outcomes.

Sing Me A Song For My Eyes:
Classic Poetry Activities for Young People With Emergent Literacy

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Importance

This presentation will provide activities for children, adolescents and young adults with emergent literacy and language intervention needs. Picture Communication Symbols have been utilized to adapt children's literature for youngsters from the pre-school to elementary years. Adapting classic poetry from American and English literature, such as the works of Carl Sandburg, Robert Frost, Emily Dickinson, Langston Hughes, and Maya Angelou make available age-appropriate literature and language experiences for older children in language classrooms and inclusive settings.

It is widely accepted that poetry gives the individual a sense of the rhythm and flow of language as well as stimulating a love for the mere sounds of words. Phonological awareness is an essential part of literacy learning and enhances awareness of sound production as well as articulation. In this sense, literacy and communication are bonded together as two mutually reinforcing skills. Reading, writing, speaking and communicating can be targeted in a classroom using a single, multifocus activity. The poetry represented in words and Picture Communication Symbols (Mayer-Johnson), is the multifocus activity.

Historically, children with disabilities have had too few experiences with the Arts, and poetry in particular. Curricula strongly focus on activities of daily living with literacy outcomes in the areas of function rather than enjoyment. Poetry is the music of our language and literacy activities using poetry can help implement some of the critical language and communication outcomes, while infusing joy into the curriculum.

Poetry creates a bridge between individuals with language and communication needs and their typical peers. It is a common language, a rich context for inclusion, literacy, phonological awareness, articulation, and communication. Poetry enhances sequencing skills, develops memory and stimulates comfort and ease with language. Adolescents with developmental disabilities are learning to read, recite and enjoy the poetry of Robert Frost, William Shakespeare, Carl Sandburg and Emily Dickinson. These experiences in literature elevate the student's learning to age-appropriate levels and beyond. Participating students, their families and peers expressed astonishment, joy and pride in participating in these classic poetry activities.

Methods

The poetry used in these activities are well loved poems from the classics of American and English Literature. Poetry is used, sometimes in its entirety; other times verses or couplets are used - lines pulled from context for their unique ability to spark a memory or feeling, like a snapshot. The poetry is chosen for its ability to clearly sustain many levels of meaning from the most concrete, visual and evocative, to the abstract. In this way the poem lends itself to differentiated instruction for many kinds of learners. It is most beneficial to begin with a poem which has been illustrated in book format. A list of such literature is included in the accompanying reference list. Robert Frost's Stopping by Woods on a Snowy Evening, now in its entirety in an illustrated book, is a sharply visual narrative which sparks a sense of questioning and wonder. For children with emergent literacy, this author has set the poem in Frost's original words and Picture Communication Symbols. Using an overhead projector, students can follow the flow of the poem while learning the words and symbols. Daily reading of the poem creates a comfort and familiarity with it so that the student begins to learn the vocabulary, meaning and rhythm. The couplets provide the context for learning about rhyme, phonemes and graphemes. Unfamiliar

words, such as "harness" and "downy" add to vocabulary learning in an age appropriate context. Finally, the mystery in Frost's poem stimulates questions, comments and discussions. Poetry activities are presented as paper and pencil worksheets, visual symbols programmed for AAC devices and discussion topics with AAC response cards.

Other adapted poetry activities include works from William Shakespeare, Emily Dickinson, Carl Sandburg, Eleanor Farjeon, Russell Hoban and others. The poems presented will include accompanying picture and word formats and related activities. In addition, instructions will be presented for group choral reading, solo dramatizations, writing related descriptions, and original couplets and poems.

Application

The practitioner will be able to take the presentation packet and utilize it with his/her students/clients. In order to create one's own poetry units, choose appropriate poetry for literature and language learning: poems with clear, crisp visual images and a minimum of difficult vocabulary. In fact, if the practitioner is attracted to the images or sound of the poem, his/her enthusiasm will insure stimulating and fun activities. Poetry which has been illustrated by line or verse is easier to teach and format for AAC use. Poems which are familiar artifacts of our culture are also appropriate candidates. It is recommended that one consider the poetry and literature of writers the typical peers are studying.

Once a poem has been selected, format the poem using Boardmaker (Mayer-Johnson) for students needing the PCS and type the poem in large print for the readers. There is some question as to whether the word should be left in the cell with the symbol or placed above the symbol and cell. It appears that the practitioner should make that decision based on the particular student. A question to ask is how easily would it be to fade the symbol and focus on reading the word? Each word, including articles, prepositions, pronouns, are included to maintain the rhythm of the poem. If there are no visual symbols for the word, simply write the word in the cell. If you are choosing a poem without illustrations choose a short 2-4 line poem with clear, sharp themes which are humorous, familiar or descriptive. In all poems, attempt to keep the cells visually congruent with the words, that is, format the PCS with the same words per line as the author. Considering the limitations of Boardmaker, you may choose to format your poem horizontally or change the cell size. In general, a short Emily Dickinson poem may provide a wealth of stimulus for phonics, vocabulary, and narrative while easily lending itself to PCS formatting.

When students have developed a level of comfort with the poem there is a wealth of activities which are fun and reinforcing and specifically target language and literacy. These activities include group choral reading, individual solo dramatizations, reading using AAC devices, poetry reading partnerships (students alternating lines), memorization, creating drawings, collages, related art projects, reading/ pointing using the classroom overhead projector, and participating in school wide arts performances.

The joy of words need not be limited to those who are fluent speakers and readers. Students of all abilities can exercise their literacy and language muscle while experiencing the magic, rhythm and rhyme of poetry.

THE ADVENTURES OF PETESIE AND CARL
EARLY LITERACY AND COMMUNICATION IN A RETT GIRL

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IMPORTANCE:

Rett Syndrome deprives little girls of all speech, voluntary hand movement, ambulation, and some would say, cognitive abilities. When first diagnosed in America twelve years ago, the outlook was horrible and bleak: beautiful, tiny girls who were considered mindless. But parent after parent reported the same observation: she really seems to understand a lot; look at her eyes, she knows exactly what you are saying; I don't know, but she sure looks like she's getting it.

Well, she does get it, and more. Not only does she understand, but she delights in understanding. Girls heretofore considered severely to profoundly retarded may have cognition, undetected because of severe apraxia, that goes well beyond what was considered possible just a few years ago.

METHODS:

1. Picture card devices - from 2 to a bunch.
2. Eye pointing won't get it, young lady.
3. Do you want to get out of bed? Touch my hand.
4. What do you want to wear to school? Show me.
5. Which book - If I Were a Moose or Carl's Masquerade ?
6. Again? You've read it 5 times.
7. Touch the screen and turn the page.

APPLICATION:

Does anyone find it peculiar that we'll read to someone in a deep coma but not to a severely disabled child? If we don't awaken the sleeper, was nothing accomplished? Should you ever encounter a Rett girl or woman, just remember: She understands.

Effective Reading and Spelling Instruction for Adolescents and Adults with Learning Disabilities

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Importance

Adolescents and adults with reading disability often slip through the cracks of high school, adult education or even college courses without appropriate instruction. According to the U.S. Department of Education, 72 million people over the age of 17, or one out of every three adult Americans, cannot read and write normal adult material.

Current research in reading disability reported by Dr. G. Reid Lyon, Branch Chief of The Learning Disabilities and Developmental Psychology Branch of the National Institute of Child Health and Human Development (NICHD), estimates that reading disability affects 17% of school-age children to some degree.[1] NICHD research shows that this disability is a lifelong condition that one does not outgrow. A lack of phonemic awareness -- the inability to hear separate sounds, or phonemes, in words -- is the core deficit in reading disability. There are tests currently available which can test a group of kindergarteners or first graders in twenty minutes.

Students with reading disability can learn to read and write if given appropriate, research-based instruction. However, the time required for appropriate instruction increases significantly with age. By the time the student reaches adolescence, the time needed for successful intervention is nearly doubled.

State laws that define learning disability with achievement-ability discrepancy formulae encourage schools to adopt the "wait and fail" method of intervention. In other words, wait until the child is in third or fourth grade, and shows a reading level two years below grade level before authorizing special education services.

Unfortunately, fewer than 10% of teachers are prepared adequately to teach students with specific reading disability, according to the NICHD. Of those teachers who are trained, few work with adolescents or adults. In Connecticut, The State of Connecticut does not require that special education teachers take course work in reading instruction for students with reading disabilities.

Read to Succeed has developed a user-friendly model of instruction that is based on current research in reading disabilities. Our experience shows that adults ranging in age from 18 to 71 who have at least average intelligence improve their reading ability significantly with research-based instruction. The graph on the next page shows the effectiveness of our program.

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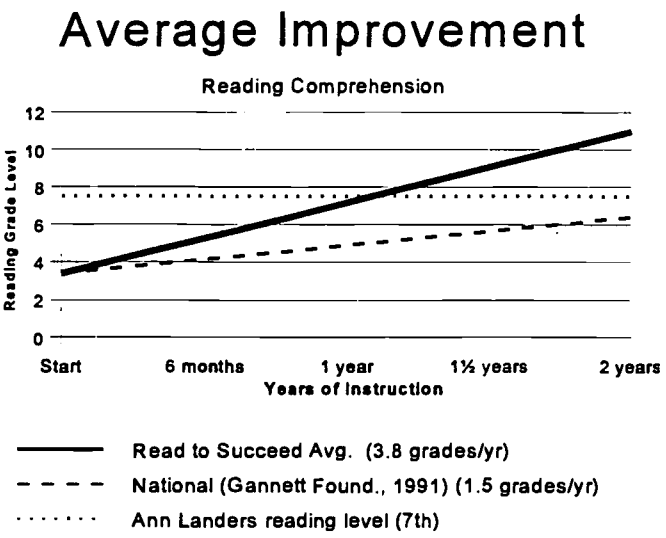
[1] Lyon, G. R. Learning Disabilities. *Special Education for Children*, Vol. 6 No 1, Spring, 1996

Methods

Several key factors make Read to Succeed effective. First, we give each applicant a test to ensure that he or she has at least average intelligence, a crucial factor for success. We then interview the applicant to decide if that person can agree to receive instruction for two hour per day, three to four times per week. If the first interview is successful, we schedule a second day to give a battery of tests. These tests assess his or her level of phonemic awareness and errors made in speaking, reading and spelling, both real words and nonsense syllables.



Secondly, Read to Succeed instruction is based in current research in reading disability. It combines the following factors.

- Instruction is intensive and individualized. Students receive 45 minutes of one-to-one instruction per day, three to four days per week, either with a professional teacher or with a highly trained volunteer. Computer programs reinforce concepts taught by the teachers.
- Our core curriculum is Multisensory Structured Language instruction. This means that we teach only one new concept per lesson. Concepts are presented in a tightly controlled format, providing ample opportunity for maximum review and practice to develop fluency and automaticity. Our curriculum includes sound/letter correspondences, syllable types, prefixes, suffixes and spelling rules.
- Each 45-minute lesson follows the same sequence. These lessons include reviewing learned concepts, decoding real and nonsense word lists, reading sentences and paragraphs, exercises to develop phonemic awareness, spelling and writing. Students do homework daily.
- Students spend an additional hour using computer programs that develop reading comprehension and reinforce concepts learned in the daily lessons.

Thirdly, Read to Succeed uses volunteer tutors who assist the teachers. Screening potential tutors for language deficiencies is vital. Read to Succeed accepts 80% of those who apply to volunteer. We train tutors in stages, from beginning to advanced. Our tutors enable students to receive instruction on a daily basis, and helps reduce the cost of the program. However, training tutors is the most difficult part of this program.

Application

To implement this model, one needs the right combination of professional and volunteer staff, materials and assistive technology and appropriate students.

First, teachers must have advanced training in Multisensory Structured Language Instructional techniques. Training programs which are based in Orton-Gillingham techniques will give teachers the skills they need to instruct students with specific reading disability. Contact the Orton Dyslexia Society for a list of qualified training programs. (410-296-0232)

Secondly, one needs to purchase appropriate materials. Materials that develop phonemic

awareness are crucial. Our staff and students find that the Lindamood-Bell Auditory Discrimination in Depth program is very effective. (1-800-233-1819). We use this prior to and within instruction using texts that present sound/letter correspondences.

Printed materials need to present words, and nonsense syllables, in a tightly controlled sequence. Words and nonsense syllables need to be presented in isolation and within sentences and paragraphs. Effective texts include *Let's Read* by Leonard Bloomfield, Clarence L. Barnhart and Robert K. Barnhart; *Angling for Words* by Carolyn C. Bowen; *Alphabetic Phonics* by Aylett Royall Cox; *Reading from Scratch* by Dorothy van den Honert; and *The Wilson Reading System* by Barbara Wilson. All but the *Wilson* materials are available from Educators Publishing Service, Inc. (1-800-225-5750). The *Wilson* materials are available direct from the publisher (1-800-899-8454). Selecting texts that are appropriate for your students' intelligence and severity of reading disability is important. No one text is appropriate for all students.

Computer programs that reinforce instruction are invaluable. Students with reading disability need differing amounts of non-judgemental repetition. Computers are ideal for this purpose. In addition, computers solve many management problems. Teachers can work with individuals or groups of up to three students, while the remaining students work at the computers. Hartley programs (1-800-247-1380) are very user-friendly and develop comprehension skills. Orton-Gillingham trained professionals developed Lexia software (1-800-435-3942). This program develops phonemic awareness and reinforces letter/sound correspondences. Our students learn to use it in less than five minutes.

Volunteer tutors enable us to help far more students than would otherwise be possible. However, volunteers must be carefully screened, trained and supervised. We screen potential volunteers with the Lindamood-Bell Auditory Conceptualization (LAC)Test to determine if they have adequate phonemic awareness. We use the Woodcock Word Attack Test to assess their ability to decode lists of nonsense words. Finally, we ask each applicant to write a paragraph explaining why they want to volunteer. Any leniency during this screening will result in a volunteer that is more trouble than they are worth.

Initial volunteer training focuses on our methodology and basic concepts. It lasts four weeks, and involves hands-on work with adult students. This gives the volunteers the immediate gratification of helping while they are still under professional supervision. Volunteers help for two - three hours, once per week.

After volunteers have mastered the basics -- usually within a few months -- we give them intermediate level training, and eventually advanced level training. We developed a training video to standardize training and allow volunteers to review procedures at home, between training sessions.

Using volunteers also had a surprising and unexpected benefit. It significantly increases our students' self-esteem. Our students, by virtue of daily attendance, help volunteers learn the sequence of instruction and methodology. Professional teachers help students understand their reading disability and help them discover how they best learn. Students give this information to volunteer tutors. For instruction to be effective, students must take an active role. Consequently, Read to Succeed instruction is done by a team of three equal partners -- professional teacher, volunteer tutor and student.

Ultimately, it is the students themselves who make the program successful. We accept only those individuals for whom this type of instruction is appropriate. The means that almost every student succeeds. New students rapidly lose the doubt that they will fail, which is customarily

the case with other programs they attended.

Each student must pass an initial two-month probation period before we fully accept him or her into the program. We allow each student twelve absences per year for any reason. (Serious medical conditions and work vacations are exempt from this period.) If a student misses more than twelve days in twelve months, we ask that he or she leave the program. Our drop out rate is 11%, 40% lower than the national average.

Read to Succeed is in Hartford, Connecticut, a city where over half the children live below the poverty level and the schools are 98% minority. Read to Succeed acts as an unofficial magnet school, attracting students from more than 20 suburban towns. Because our curriculum follows a tightly controlled sequence, more experienced students can help the newcomers. New friendships develop into a natural support system for people with common learning styles and similar personal histories.

Read to Succeed is a successful model of reading and writing instruction for adolescents and adults with reading disability. Students improve at an average rate of 3 - 4 grades per year. Most enter the program reading at an early elementary level and complete the curriculum in one and one-half years, reading at the high school or college level. For this model to be implemented successfully, a school must be willing to hire teachers trained in Multisensory Language Instruction, accept only students for whom this instruction will be successful and screen and train volunteer tutors. Computers improve the program, but are not indispensable.

It is never too late to learn to read. Our forty-five year old students marvel at how quickly the younger students learn, but the seventy-one-year-old leaves every day with tears of joy in her eyes. After years of trying, she is finally learning to read successfully -- a skill that eluded her for more than sixty years.

Literacy All Day Long

Marlene Rayner Cummings, M.A., CCC-Sp, PPI, Utica Community Schools
Claudia Atkins, Utica Community Schools
Mame Crosslin, M.A., Ed.S., Utica Community Schools
Mary Johnson, M.A.T., Utica Community Schools

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Sterling Heights, MI. 48313

Program Strand: Preschool-aged children with disabilities.

The importance of providing an environment which promotes literacy learning in young children is well documented. Current trends in early childhood curriculum and classroom design include a variety of options for exposure to literacy during a class session. As educators attempt to provide more exposure to emergent literacy materials and activities, they often layer "literacy" upon an already existing curriculum or classroom environment. This may suggest that literacy learning is seen as only one of many activities presented in the classroom program. Administrators, special educators and itinerate staff would be well served to examine the literacy model utilized in their special education and included preschool programs. If, in that exploration process, you find the emergent literacy component to be lacking, we encourage you to consider the following program design. While attempting to set the vision for a literate future for our young children with mild to severe communication and learning difficulties we have discovered that "exposure" to literacy materials is not enough. Thus, we have attempted to create a classroom program where literacy, coupled with communication and play, serve as the foundation for learning.

We have chosen for the purposes of this presentation to share with you some of the curricular and classroom components we have found to support a rich, literacy learning, environment. These include:

*administrative component
- +as change agent
- +team member
- +support

*curriculum component
- +literacy based thematic units
- +classroom schedule
- +classroom centers

*assistive technology component
- +computers
- +AAC low tech and high tech systems

*environmental component
- +story station
- +symbol frame
- +classroom centers

*family component
- +family handbook
- +calendar packets
- +family book bags

Initiating the development of a new program or redefining the parameters of a preexisting program is much more comprehensive than just adding activities and materials. Beginning to ask the following questions may serve as a starting place as you begin to look at your specific situation and the changes you hope to incur in your programming plans for young children with communication and learning difficulties:

* changes at the vision level : What is the vision/outcomes for the students you serve in your

program?

* changes at the team level: What players presently impact your program design and implementation?
* changes at the philosophical level: What are your beliefs? (ex. We believe all children learn.)
* changes at the curricular level: What do you see as the foundation stones in your program?
* changes at the environmental level: How does your classroom layout support your philosophical beliefs and curricular foundation stones?
* changes at the family level: How do you actively inform, support and/or engage families at each level?
* changes at the transition level: Can you articulate and replicate the teaching strategies and modifications being implemented, as the children transition to other leaning environments?

What is Listening Comprehension Doing in a Reading Diagnosis?

James W. Cunningham, UNC-Chapel Hill

CB#3500, UNC
Chapel Hill, NC 27599-3500

Importance

Every teacher of reading wants students to develop silent reading comprehension ability and then grow in that ability. This presentation concerns the use of a listening comprehension test in combination with a silent reading comprehension test to determine whether the obstacle to a particular student's reading comprehension improvement is in the reading or the language domain.

Methods

A series of sample profiles will be used to show participants that a comparison of listening and silent reading comprehension scores compellingly divides students into two groups: those readers whose lack of **reading** skills is holding their silent reading comprehension down; and, those readers whose lack of **language** skills is holding their silent reading comprehension down. For students with language problems that interfere with reading comprehension development, participants will be shown how to differentiate those with an auditory processing deficit from those who lack the ability to comprehend **written** (or **book**) language regardless of how it is presented to them.

Application

Participants will be made aware of commercially available tests and shown how to give them to obtain both a listening comprehension and a silent reading comprehension score. Modifying such tests for use with non-speaking persons will be discussed. Instruction for students with a problem comprehending written-language regardless of how it is presented to them will be discussed.

What's New at PRC?

Joseph S. Durbin, MBA
President of Prentke Romich Company

Rena Carney, M.S.
Regional Consultant of Prentke Romich Company

Prentke Romich Company
1022 Heyl Road
Wooster, OH 44691

Importance

This presentation will review new products, product revisions, and services recently made available by the Prentke Romich Company. PRC AAC systems use the powerful Minspeak® language representation system. Items covered will include DeltaTalker™ infrared control, Liberator™ 2.0 software, Unity™ for AlphaTalker™ (a Minspeak® Application Program™ for AlphaTalker™), BUILLD™ for Unity™/AT (a line of Minspeak® therapy materials), the EZ Phone® (a telephone that can be operated using switches or infrared commands), and an infrared keyboard and mouse emulator for computer access.

Application

Prentke Romich Company is the world leading manufacturer in the areas of augmentative and alternative communication (AAC), computer access and environmental controls. Responding to customers' input and needs, the PRC headquarters is routinely the scene of developments that are having an impact on the lives of people with disabilities. Those that will be shared during this session are new products, product updates, and services available in 1997.

PRC communication aids feature Minspeak®, a powerful way of coding vocabulary using short sequences of multi-meaning icons. Minspeak® promotes automaticity for faster communication through the use of a continuous cognitive process. There are no changing word lists or changing pictures or overlays which need to be analyzed before making the next selection.

EZ Phone® is a telephone designed for people with disabilities. It can be operated by single or dual control switch (e.g., puff-sip) or by infrared control. While it can be used alone, it is ideal companion to AAC devices, such as the DeltaTalker™ and Liberator™, that have infrared control as an option.

DeltaTalker™ infrared remote control is an optional feature that allows people who use this AAC device to have wireless computer access and environmental control. It can learn the codes of remote controls from TVs, VCRs, stereo systems, and others. It also knows the One for All X-10 commands and can operate the EZ PhoneR.

Liberator™ 2.0 offers features that make Liberator™ even more powerful, new features include word prediction for accessing infrequently used vocabulary, a built-in tutorial, improved macro support, and others. Existing Liberators™ can be upgraded.

Unity™/AT is a Minspeak® Application Program (MAP) system for the AlphaTalker™ that provides a core vocabulary but also provides a transition to UnityT/128, the more powerful MAP used in DeltaTalker™ and Liberator™. Unity™ is a vocabulary and symbol system that grows with the individual, eliminating the need to change MAPs.

Computer access for people unable to use the standard keyboard and mouse is possible using several PRC products. An infrared receiver allows wireless access from DeltaTalker™ to a printer or computer. JOUSET, a joystick mouse operated with mouth or chin movements was developed at the Neil Squire Foundation in Vancouver and transferred to PRC for manufacture and distribution.

An Open Forum on Literacy and Adults with Intellectual Disabilities

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This session is designed as a sharing experience in which as moderator I will bring some evidence from the work of colleagues and myself in the Fred and Eleanor Schonell Special Education Research Centre in The University of Queensland. In particular, my colleagues Christa van Kraayenoord and Margaret Farrell pursued research programs which addressed the acquisition of literacy (broadly defined) by adults with intellectual disabilities of various levels.

Christa van Kraayenoord managed a collaborative study with four elements.

- A critical review of the current literature and programs in Australia and abroad.
- An appraisal of the needs and competencies of a representative sample of the client group.
- Review of current skills and training of relevant staff.
- A pilot study and evaluation of a literacy education program/s for people with an intellectual disability (van Kraayenoord, 1992, p.1)

The first three were completed, and for the last, "...a study was undertaken of the competencies and needs of a sample of adults with intellectual disabilities in their work environments. This study is a detailed description of the literacy behaviours of this group of individuals" (van Kraayenoord, 1991, p.2). In addition,

> ...five special projects were undertaken. ...One project describes a training programme for tutors who will teach adults with intellectual disabilities. ...The second project describes the instruction given by one service provider who taught two cohorts of students with intellectual disabilities. It is seen as an example of the type of literacy learning that may be common in other locations throughout Australia. A third project examined the nature of support offered to students with intellectual disabilities at a community college (van Kraayenoord, 1991, p.2).

The last two projects concerned severe intellectual disability. One described facilitated communication and the other the use of rebuses.

I want also to refer to research and writing regarding Down syndrome by Margaret Farrell, herself a very experienced teacher of students with severe learning disabilities. I include the conclusion of her chapter in Stratford and Gunn's (1996) new book.

> In summary, until quite recently literacy instruction for persons with Down syndrome has most often been considered in terms of the language deficits and learning difficulties characteristic of the syndrome rather than from the point of view of what is known about how other children and adults learn to read and write. Research as well as teaching approaches have reflected limited assumptions about what persons with Down syndrome might achieve. Studies have tended to discuss literacy acquisitions in terms of whether students can master particular discrete skills, and for the most part, to bypass questions about what part literacy might play in the lives of students, especially as they move into adolescence and adulthood.

No doubt researchers and teachers do see skills and techniques in perspective and in terms of overall purpose, but it seems that a consistently narrow focus on isolated skill outcomes, particular where behavioural techniques are employed, can lead to situations where the pupils, and sometimes even the teachers, lose sight of what literacy is for. For regular school children, literacy instruction is regarded as a major aspect of lifelong intellectual growth, fundamentally related to the development of oral language and thought. Why not also for children with Down syndrome? (Farrell, 1996, p.296)

Other research on literacy among persons with Down syndrome with which Margaret has participated has been reported in the following publications:

Farrell, M.E. (1990). Literacy skills of the intellectually disabled. Open Letter - Australian Journal for Adult Literacy Research and Practice, 1(2), 14-26.

Farrell, M. (1990). The reading and writing skills of a group of young adults with moderate intellectual disabilities. Report to the Department of Employment, Vocational Education and Training, St. Lucia: Fred and Eleanor Schonell Special Education Research Centre.

Farrell, M. & Elkins, J. (1991). Literacy and the adolescent with Down syndrome. In C. Denholm (Ed.), Adolescents with Down syndrome: International perspectives on research and programme development. Victoria, BC: University of Victoria.

Farrell, M. & Elkins, J. (1994/5). Literacy for all? The case of Down syndrome. Journal of Reading, 38, 270-280.

Having introduced the topic of literacy among children and adults with intellectual disability of varying degrees, I will moderate a discussion about issues and research needs.

References

van Kraayenoord, C.E. (Ed.) (1992). A survey of adult literacy provision for people with intellectual disabilities. Report to the International Literacy Year Secretariat. Brisbane: Schonell Special Education Research Centre, Queensland Division of Intellectual Disability Services and Division of Adult Education, Access and Equity (BEVFET).

Farrell, M. (1996). Continuing literacy development. In B. Stratford & P. Gunn (Eds.), New approaches to Down syndrome (pp 280-299). London: Cassell.

Discover: From A Literacy Point of View

Terry Hamman, Don Johnston Inc.

1000 N. Rand Rd., Bldg. 115
Wauconda, Il., U. S., 60084

Importance

With the continued increase in the number of students who are struggling with learning, there is a growing need for accessible software to assist in the development of basic skills. Teachers, therapists and parents can learn about software from Don Johnston Incorporated that are designed to help students develop the basic skills that they need to be successful.

Methods

Discover:Switch™, a large colorful switch done in collaboration with AbleNet, has Ke:nx® technology built in. Discover:Switch™ is the easy-to-use computer switch that allows students to access any program. Discover:Switch™ features: automating launching of applications, automatically attaches setups to applications, complete mouse movement, speech capability and a design program so that people can create their own setups.

Co:Writer® is the intelligent word prediction program that reduces the difficulties of getting words down on paper and instills the desire to write. Students learn many essential skills, such as: spelling, word decoding, simple sentence structure, contextual practice and the ability to form more complex sentences.

Write:OutLoud® is the talking word processor with a talking spell checker that makes students enjoy writing. Write:OutLoud® motivates students to write; the auditory cues give struggling students positive reinforcement. Some of the features of Write:OutLoud® are: speaks as students type or reads aloud after typing, highlights each word as it speaks to show direct correlation between written and spoken words and offers many speaking toptions to match students' learning styles.

Simon Sounds It Out™ is a phonics learning and practice program that guides students to better reading skills. Mirrors the way that students really learn language.

UKanDu® series, featuring UKanDu® Little Books, Circletime Tales® Deluxe, K.C. & Clyde in Fly Ball® and Camp Frog Hollow™. This series helps beginning readers and readers with learning struggles in exercising literacy skills.

Application

Participants will learn how to use a variety of programs to meet an individual's reading and writing needs. Several programs will be used in combination to highlight and teach specific skills. Participants will learn how to combine various pieces of software to meet individual learning needs as well as curriculum needs.

An Examination of Emergent Literacy in Preschoolers with Hearing Loss

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Importance

In order to better understand the well documented literacy learning difficulties in persons with hearing loss, researchers have recently begun focusing on emergent literacy in this population. Emergent literacy is defined as the early reading and writing attempts of young children that precede and later develop into more conventional forms of literacy (Teale, 1987). Emergent literacy research takes the position that oral and written language are concurrent, interrelated and mutually beneficial (Teale and Sulzby, 1986), a substantial shift from the more traditional view that oral language proficiency is prerequisite to literacy learning.

Researchers have concluded from home and school observations of two- to five-year olds that while there may be differences in the learning environments of children with and without hearing loss, particularly in oral language and communication, their knowledge and use of written language is similar (Rottenberg and Searfoss, 1992, Williams, 1994). Ewoldt (1985, 1991) reported that children with and without hearing loss demonstrate similar behaviors, learning patterns, and strategy use in learning to read and write.

Several researchers conclude that children with hearing loss often demonstrate understanding and use of language well beyond their oral language or face-to-face communication skill (Conway, 1985; Williams, 1994). In fact, children with hearing loss may use literacy as a primary form of communication and interaction (Rottenberg and Searfoss, 1992). While these researchers conclude that direct instruction is not necessary for emergent literacy learning to occur, teachers and parents can foster such learning in a variety of ways.

All of the studies above have employed descriptive or ethnographic methods in a small number of selected homes or classrooms in order to investigate what young children with hearing loss know about literacy, and how they come to know it. In an attempt to promote emergent literacy skills in this group of children, a study was designed to determine the greatest difficulties encountered and most effective strategies used by parents and teachers working with preschoolers with hearing loss. The results of the study will be discussed with reference to previous studies of literacy acquisition in young children with hearing loss as well as best practice recommendations for nondisabled preschoolers. The role of speech-language pathologists will be highlighted in supporting early interventionists and families as well as promoting emergent literacy in preschoolers with hearing loss.

Methods

In an attempt to broaden understanding of emergent literacy learning, we surveyed teachers and parents of preschoolers with hearing loss across the United States. Using the annual directory of *The American Annals of the Deaf* and *The Volta Review*, two hundred and ten programs serving preschoolers with hearing loss were identified and contacted. Letters were sent explaining the study and inviting participation to the classroom teachers in each program. Seventy-one preschool teachers responded and we each of them one teacher and two parent surveys. The teachers distributed the parent surveys to the parents, who then returned the completed surveys directly to the researchers in addressed, stamped envelopes. Fifty-two teacher surveys were returned for a return rate of 73%. Of the 142 parent surveys distributed by the teachers, 50 were returned for a return rate of 48%.

The questionnaires included a pair of open-ended questions. The first asked teachers and parents to describe the greatest difficulties their children encountered in improving their developing reading and writing abilities. The second asked teachers and parents to reflect on the most successful literacy activities in which their children had been involved.

Responses were categorized and tabulated. Subcatgories were generated when distinct groups of responses were identified within a particular type of response. For example, one category of responses to the question on greatest difficulties centered on parental behavior and home environment. Subcategories of responses included: (1) Families' failure to use sign language; (2) parents not reading with the child; (3) hearing parents' difficulties building the language base of their children with hearing loss; (4) general lack of parent involvement with the child; (5) insufficient models of literacy-related behaviors; and (6) other difficulties. Interrater reliability was .97 for categorization of teacher responses related to greatest difficulties and .95 for categorization of parent responses. Categorization of responses related to successful literacy activities was .95 for teacher response and .94 for parent responses. Interrater reliability ranged from .83 to 1.00.

Teacher and parent responses were compared and contrasted with previous findings. The overwhelming majority of teacher responses (94.3%) attributed the greatest difficulty of the children in learning to read and write to a within-child (e.g., language delays, limited background knowledge) or within-family (e.g., lack of parent involvement, inability to sign) source. By contrast, over 50% of parent responses identified no particular difficulties in their child's written language learning. Two other categories accounted for almost all of the learning difficulties parents perceived: children's overall language delays or difficulties (20 %) and children's general lack of awareness of letter-sound correspondences (20%). Overall, parents reported a much more positive perspective of the emerging literacy skills of their children than that reported by the teachers.

Application

This study was designed to investigate emergent literacy skills in preschoolers with hearing loss. Speech pathologists have the opportunity to play an important role in supporting early interventionists. This study will provide participants with an increased understanding of the challenges that early interventionists and parents perceive when promoting emergent literacy in preschoolers with hearing loss. The study will also increase the participant's understanding of strategies that early interventionists and parents have successfully employed in promoting the developmental literacy skills in preschoolers with hearing loss. Finally, participants will compare and contrast early interventionist and parent report with (a) previous small-N observational studies of preschoolers with hearing loss; and (b) best practice recommendations for nondisabled children.

Implementing a Multilevel, Multimethod Literacy Program for Students with a Mild to Moderate Mental Retardation

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David Katims, The University of Texas at San Antonio
Norma Carr, Northeast Independent School District

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Importance

Traditionally, the education of children with mild to moderate mental retardation served in self-contained special education classrooms has not focused on literacy instruction (Hargis, 1982; Radabaugh & Yukish, 1982). Social, vocational, functional, and readiness skills have been emphasized in these classes over the years. Recent research, however, has demonstrated that movement toward more conventional forms of literacy is possible for this population of students (Coleman-Pierce, 1991; Englert, Raphael, & Mariage, 1994; Fitzgerald, Roberts, Pierce, & Schule, 1995; Katims, 1991, 1994, 1996; Klenk, 1994; Koppenhaver, Pierce, Steelman, & Yoder, 1995; Light & Kelford-Smith, 1993; Marvin & Mirenda, 1993). In these studies structured techniques were used to encourage students to interact with books and written materials, usually with a competent adult as a model.

The Four Blocks Literacy Program is a multilevel, multimethod language arts program used in general education literacy program for a number of years (Cunningham, P.M., & Hall, D.P., 1991; Cunningham, 1991; Hall, D.P., Prevatte, C. & Cunningham, P.M., 1995). This comprehensive program was designed to provide a balance between more traditional reading instruction (which includes guided reading with a basal and direct phonics instruction) with the more constructivist orientation of the whole language approach (which uses the writing process and children's literature). Additionally, this method was designed to accommodate the diverse abilities found in regular education classrooms without ability grouping. The Four Blocks Literacy Program has been successfully implemented in hundreds of regular education classrooms across the United States (Hall, D.P., & Cunningham, 1995). Although constructivist-orientated, emergent literacy/whole language approaches are becoming more common in special education classrooms, published research using the Four Blocks Literacy Program method in classrooms for children with mild to moderate disabilities is nonexistent. The purpose of the present study is to investigate progress in literacy made by students with mild to moderate mental retardation when they are instructed using the Four Blocks Literacy Program.

Methods

Dr. David Katims is a professor of Special Education, Dr. Wanda Hedrick is a professor of Reading and Literacy Education, and Ms. Norma Carr is a Special Education classroom teacher. Each of these three professionals collaborated together to create the Four Block Literacy Program in order to structure literacy instruction in a self-contained classroom for students with mild to moderate levels of mental retardation.

While enrolled in classes with both professors Katims and Hedrick, Norma Carr demonstrated an interest in changing the focus of her self-contained special education class for students with mild to moderate mental retardation. Although Ms.

Carr is an experienced special education teacher, this was her first year in the present school district teaching children ages 7-9 years of age. She had previously taught in a program that served preschool children with disabilities, and focused her instruction on emergent literacy levels only. With her success with students at younger ages, she was convinced that these older children would also benefit from integrated literacy instruction. It is important to note that a typical self-contained classroom for children similar to the ones involved in this study generally focuses on curriculum such as Life Centered Career Education (LCCE), and does not involve literacy instruction.

As part of the university class that Professor Hedrick teaches, she instructed Ms. Carr in the use of the Four Blocks Literacy Program. Ms. Carr decided to adapt the program to meet the needs of her students. Ms. Carr has 11 children enrolled in her classroom (8 males and 3 females). Each of the participants for the present study are served in a self-contained, third and fourth grade classroom at an elementary school located in a south Texas, middle-socioeconomic status (SES), working-class school district. Each of the eleven students who participated in the project were identified as having mild to moderate levels of mental retardation on the basis of Texas State Board of Education Rules and Regulations, which are intended to comply with the Individuals with Disabilities Education Act (P.L. 101-476). This definition of mental retardation is similar to that of the 1992 American Association on Mental Retardation's definition of the mental retardation (Luckasson, 1992). The average full-scale Intelligence Quotient (IQ) of the participants of the study was 68 (range 72-41); adaptive skill levels ascertained from Adaptive Behavior Scales ranged from the 1st to the 4th stanine.

Drs. Katims and Hedrick agreed to provide technical assistance for Ms. Carr's instructional endeavor. Dr. Katims, Dr. Hedrick, and an assistant administered a variety of pre-tests in order to capture the diversity of literacy abilities in the classroom for research purposes, as well as to provide guidance for instructional decision-making. The following pre-testing was administered:

1. TERA II (Test of Early Reading Ability, II);
2. Story retelling (was audio-taped);
3. Brigance Inventory of Basic Skills;
4. TOWL (Test of Written Language);
5. An Analytical Informal Reading test (was audio-taped); and
6. Three writing samples (these samples was collected by Carr using several writing prompts)

Application

In our presentation we will provide the audience with a complete description and suggestions for adaptations for using the Four Blocks Literacy Program, such as the one used in the present study. We will provide descriptions of the pre-tests and preliminary results of the students' progress thus far. These results might serve as a stimulus for the audience to consider using the procedures described in the presentation. In addition, the audience might find the presentation helpful in their communication with school administrators and parents in attempting to describe the potential use of such a program for students with mild to moderate levels of disabilities. Although post-test are unavailable at this time (this is a school-year long program where post-test data will be taken in May, 1997), interim results of this literacy project suggests great potential in the areas of curriculum development and instructional procedures for students with disabilities. Sample lesson plans, assessment procedures, curriculum development. and instructional techniques will be described for the audience.

CULTURAL ARTS AND TECHNOLOGY: A PARTNERSHIP TO DEVELOP STRONG, LIFELONG LITERACY SKILLS

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Betty Harden Hensley, Ms, CCC-SLP
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IMPORTANCE

Exceptional children often have difficulty mastering literacy skills and must receive special help in order to meet minimal literacy expectations. But, educators have long felt the need to develop alternative methods to better meet the needs of special students as well as those students in classrooms who are not certified as "exceptional," but clearly have literacy needs that are not being met by traditional methods. In addition, for many of these students, cultural arts must take a backseat to academic instruction because of time constraints. An integrated instructional program developed by the authors in the Deaf Education Department at Cotswold Elementary School has demonstrated potential to develop and enhance literacy skills in most students while providing them with cultural arts and technology instruction. This presentation will share student results, methods and materials, and the process for setting up a similar program in other schools. Educators working with children with a variety of challenges will find this information beneficial, and those working with deaf and hard-of-hearing and learning disabled students will be excited about the new and different ways they will be able to work with their children.

METHODS

This presentation will use examples of children's work, computer programs, and videos to demonstrate how to use visual arts, drama, and computer technology to develop strong literacy skills. Authors will also share how to meet specific IEP goals while using this type of program. Participants will take home handouts that will show them how to develop plays based on literature that address individual IEP goals. In addition, they will have a list of software and related materials that have been tried and proven to be effective in the development of literacy skills in classrooms. They will understand how the use of visual arts will provide their students with an additional form of communication that will help them to develop important literacy concepts.

APPLICATION

This presentation will help the educator to use materials currently available in most elementary schools. It will demonstrate how to use word-processing, data bases, and

children's multi-media and publishing software to integrate academic instruction into enjoyable and meaningful literacy projects. It will show how to apply software in new and different ways.In addition, teachers will have an understanding of how to adapt materials that they are presently using to meet the needs of all of their students. Teachers will also be given a library of art activities that are designed to meet specific whole language objectives for setting, main idea, character, sequence, cause and effect, and expansion. A suggested book list for each of these objectives will be included in the handout.

READING RECOVERY: A TEACHING TOOL ADAPTED FOR ELEMENTARY SCHOOL-AGED CHILDREN WITH MULTIPLE DISABILITIES AND HEARING IMPAIRMENTS

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"The essence of teaching children must be to assure each an equal opportunity, not to become equal, but to become different - to realize whatever unique potential of body, mind, and spirit he or she possesses."

IMPORTANCE

Teaching children with multiple disabilities and hearing impairments to become independent readers and achieve a maximum literacy level has been a challenge for generations of exceptional education teachers. Traditional teaching methods have failed generations of children and the current reading "fads" have proven to be not much better in reaching literacy goals for many of these children. For example, research has shown that for the deaf and hard of hearing population with no other major impairments, most adults still read and write only at an average of the third to fifth grade level. Students with special needs are going to need special interventions if they are to learn the maximum that they are capable of. Special techniques adapted to their individual special needs are essential. Each child, no matter how severe their disabilities, has the right to become a literate citizen. Those of us in exceptional education have a lot to learn from research being done in the regular education field. Programs such as Reading Recovery, which was developed for regular education students, have great potential when adapted for special populations. Although the training for this program is a very intensive, year-long graduate course, many of the individual techniques used to help these children become independent readers can be learned by both educators and parents in other settings.

METHODS

As a classroom teacher of deaf and hard of hearing children, I was trained using the "whole language" approach to reading and writing. I immersed my children in literature. The printed word was everywhere and I exuded an enthusiasm for reading and writing. There were all kinds of papers and writing implements available to the children at all times. Hundreds of books on every topic and reading level filled the shelves. We wrote for meaningful and exciting reasons. We had books on tape and books that we created by using the sewing machine. There was excitement in the air but yet the children were not learning to read and write at the pace that I felt they were capable of. I

knew I had to do more, so I enrolled in a year long training course to become a Reading Recovery teacher. Of my first four students, two were regular education hearing students. one was a profoundly deaf child with normal intelligence, and one was a severely multiply impaired, profoundly deaf child with a moderate mental handicap. In subsequent years, I used Reading Recovery techniques to teach children with severe learning disabilities and behavioral/emotional disabilities. I also adapted the techniques to teach older children (12-13 year olds) who were non-readers or were 3-4 years delayed in their literacy skills. I modified the requirements of the teaching program as necessary to accommodate the individual child.

Reading Recovery is an intensive early intervention program designed to help low-achieving first grade children learn to read successfully. It is designed to be implemented using specially trained teachers working with individual children in daily 30 minute lessons. It is an effort to reach the lowest 20% of first graders who are having the most difficulty learning to read and write. During the 12 to 20 weeks of the program, these children accelerate their rate of learning until they reach their peers and become independent learners. The program was originally developed by New Zealand psychologist and educator, Marie Clay in 1979 for use with students with normal intelligence and no other physical or learning disabilities. The program does not advocate any one style, method, or solution to reading/writing difficulties. It encourages the use of multi-strategies tailored to each child for his/her particular strengths and weaknesses, making it particularly useful to those of us working with children with a variety disabilities. Because all book selections and lesson plan decisions are made individually by the person working with the child rather than being dictated by the creator of the program or by a publisher, this program is easily adapted to those children with special needs.

APPLICATION

Reading Recovery provides a model that can be followed by regular education teachers, resource teachers, and parents to help students with disabilities learn to read and write at their highest possible level. Reading Recovery is based on the assumption that "a programme for a child having difficulty learning to read should be based on a detailed observation of that child as a reader and writer, with particular attention to what that child can do. The programme will work out of these strengths and not waste time teaching anything already known." (Clay, 1993) As we become better observers of children, we can quickly identify points of difficulty for an individual child and use the strengths we have observed to help him/her learn new strategies for reading and writing.

Reading Recovery is a program that is used in many school systems throughout the United States. Each system either employs a teacher leader (or is affiliated with a system that does) who could be an excellent resource for those who have an interest in pursuing more about the possibility of using these techniques. Also, Marie Clay has written several books that could be helpful in understanding more about the original research and development as well as in learning more about her teaching techniques. Becoming certified as a Reading Recovery teacher requires two, one-semester graduate

level courses, but much can be learned from observations, readings, and consultations with teachers and teacher leaders.

Participants will hear more detail about the Reading Recovery program and adaptations for special populations. They will see Clay's books, sample materials used, demonstrations of some of the techniques, and will receive handouts explaining them.

Exploiting Natural Acquisition of Literacy Skills: A Case Example

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Importance

For children with developmental disabilities, particularly those with impaired verbal communication, literacy is arguably one of the most important skills that can be acquired. Although literacy's role in cognitive development and educational participation is well documented, the critical role of reading and writing in the development of communication skills through augmentative communication (AAC) technology has only received attention in recent years. In the case of sophisticated AAC devices such as the Liberator, relatively new programs such as Unity provide young users with a hierarchy of language skills (and associated motor and cognitive challenges) that lead to the eventual development of comprehensive use of the full potential of Word Strategy. However, the early acquisition of even the most basic literacy skills in any AAC user, and particularly in the Liberator user, can modify and escalate the development of communication.

Although professionals and families have become more sensitive to the need to foster emergent literacy in nonverbal children with developmental disabilities, most early intervention efforts remain focused on facilitating communication through AAC technology. Approaches such as Goosens' "engineering the environment" have broadened our perspective on mechanisms for providing communication opportunities and for exploiting multiple AAC approaches for the same child. However, for the child with relatively normal cognitive abilities and primary impairments in the motor domain, AAC efforts during the preschool years are rich with opportunities to build emergent literacy skills.

This presentation provides an overview of literacy skill development in one preschool child, K.H., now aged five and enrolled in a regular kindergarten classroom in the public schools. From K.H.'s earliest communicative use of a Wolf device through her introduction to the Liberator at age three (prior to commercial availability of Unity) and subsequent emersion in an engineered school environment, she had begun to acquire such skills as letter and word recognition, recognition of the basics of written language (left to right presentation of material, the visual appearance of written sentences, etc.), phonics, and beginning spelling approximations without any direct intervention from those working with her. The incidental learning opportunities available through various AAC systems appear to have been the critical element in the acquisition of these skills. Once the relatively advanced state of her emerging literacy was recognized, interventions were modified to exploit further development of reading and writing. At present, while more traditional training in use of the Liberator and in expansion of vocabulary and use of complex syntactic forms with the Liberator is continuing, literacy has been identified as one primary intervention target.

The example of K.H.'s incidental acquisition of literacy-related skills should be of value to speech-language pathologists, educators, and family caregivers. Her example demonstrates the multiple literacy-related opportunities available to the preschool AAC user and should encourage professionals and caregivers to become more active in exploiting such opportunities and in encouraging literacy skill acquisition at an early age.

Methods

In order to explain the incidental literacy learning opportunities available to K.H., it is first necessary to provide some background intervention about the child and the services and AAC interventions to which she has been exposed.

The Child. K.H. suffered neurological damage during delivery, with resulting moderate-to-severe motor impairments diagnosed as mixed-type cerebral palsy. She has been receiving

physical therapy, occupational therapy, and speech-language therapy since age six months. K.H. was first enrolled in a preschool educational program for children with developmental disabilities at age three. After less than a year in this program, she was switched to a different preschool program in the area, where she remained enrolled for one year prior to her current enrollment in a regular kindergarten classroom in the Fayetteville, AR public schools. She is currently five years old. Receptive language testing has established average to above average skills on standardized measures. Assessment of cognitive development also suggests average to above average cognitive skills. During the course of K.H.'s five years of life, she has managed to attract a loyal cadre of professionals from all disciplines who continue to work with her and participate in many of her school conferences in order to facilitate all transitions and ensure that her participation in educational activities is maximized and normalized.

AAC and K.H. As noted above, K.H. has been receiving some form of speech-language therapy since age six months. She has always been highly communicative, and remains determined to express herself through verbal channels to this day, despite severe oral-motor impairments. At age two, K.H. was provided with a Wolf communication device. Only the pre-programmed overlays provided with the Wolf were used. K.H. "tolerated" the Wolf for one to two months. However, she did not like the synthetic speech and the system appeared too limited for her communication needs and capabilities.

At age two-and-a-half, K.H. received an augmentative communication evaluation from Easter Seals in Little Rock, AR and a Liberator was recommended. After the usual difficulties in obtaining needed funding, K.H. received the Liberator shortly after her third birthday. During much of her third year, Liberator training was carried out by the preschool speech-language pathologist and the family, with consultation from outside professionals. Outside personnel encouraged the family and school personnel to use additional communication boards with PCS symbols to assist in communication in situations where the Liberator was not readily accessed or when K.H.'s Liberator skills were not yet advanced sufficiently to use the device effectively. One such use of a PCS board involved facilitating K.H.'s active participation in story reading and retelling, by creation of a board designed specifically around content and characters in a favorite children's book. K.H. also used a BIGmack in the classroom for very basic messages, particularly since use of other forms of augmented communication were not being encouraged. Eventually, difficulties in getting classroom personnel to facilitate use of the Liberator resulted in K.H. being withdrawn from that particular educational environment.

Augmentative communication interventions were picked up by the University of Arkansas Speech and Hearing Clinic in the summer of 1995, just prior to K.H.'s fourth birthday and have continued at that facility through the present. During that same summer, K.H.'s mother attended a literacy workshop at the University of North Carolina at Chapel Hill. Assessment materials provided by Dr. Karen Erickson were used and it was determined that K.H. possessed most basic pre-literacy skills related to storybook reading. K.H. was enrolled in a preschool classroom during her fourth year, while continuing SLP services at the University clinic. The preschool classroom in which she was enrolled was totally reconfigured following Carol Goosens' approach to engineering the environment. As a result, in addition to the Liberator, K.H. had available multiple PCS picture/word displays around the environment to enhance her ability to communicate effectively. Similar boards have proved to be useful in specific home situations (like in the bathroom). Beginning in the spring of 1996, speech-language interventions at the U of A Speech and Hearing Clinic incorporated specific literacy objectives. When K.H. was enrolled in public school kindergarten in the fall of 1996, the classroom teacher noted that she already displayed letter recognition, phonic, and word recognition skills expected at the end of the kindergarten year. There has been some concern about K.H.'s advanced level of skills, and outside professionals have attempted to explain on several occasions why K.H. needs higher literacy skills than her peers in order to become increasingly more independent in using the Liberator.

Pre-Literacy and Literacy Exposure. Apart from the family's early and continuing exposure of K.H. to book reading and computer based activities, all of K.H.'s AAC interventions have provided opportunities for the development of a variety of pre-literacy and literacy skills,

although no conscious attempt was made to train these skills until she was approximately four years of age. Examples of incidental learning opportunities exploited by K.H. without outside intervention are listed below and will be discussed in greater detail in this presentation.

- Early AAC work with Wolf provided PCS icons with words underneath.
- K.H.'s fascination with the Liberator meant she attended to all aspects of its operations, including:
  a. Watching others place the device in Spell Mode to determine an appropriate icon sequence (K.H. early learned to place the device in Spell Mode by herself);
  b. Wanting to "spell" words herself, and being given the opportunity through others identifying each letter and initially pointing out its location to her (K.H. learned the entire alphabet this way without any formal training, and she had acquired recognition of all alphabet letters within six to eight months of obtaining the Liberator);
  c. Learning to monitor the LED display of the Liberator for feedback about the accuracy of her selections (again, K.H. apparently learned to do this by watching others use the LED to monitor her messages or to identify icon sequences when a word was entered in Spell Mode);
  d. Initiating "spelling" of words on her own, by placing the Liberator in Spell Mode without prompting and, around her first birthday, attempting to spell "pizza" for her clinicians when they didn't understand what she was trying to say. The spelling was inaccurate in terms of vowels, but contained the appropriate consonants.
- Exposure to additional common word through K.H.'s engineered environment in preschool.

Once K.H.'s incidentally acquired skills were recognized by family and professionals, informal probes of phonics and word recognition was performed in speech-language therapy and at home. A desire to pursue literacy, if appropriate, was motivated by the sense that K.H. had almost reached a kind of plateau with the Liberator. She continued to acquire the ability to use developmentally appropriate syntactic and morphological forms, but new vocabulary was added more slowly, and, not surprisingly, did not seem to be retained if words were not used regularly. The gap between what she wished to communicate and the capabilities of either the Liberator or the communication overlays available in her engineered environment was widening. Although Unity was now available from Prentke-Romich, K.H. had already progressed way beyond the early Unity levels and it seemed inappropriate to attempt to get her to "back up" in her skills acquisition. Being able to spell would provide K.H. with the opportunity for finding Liberator icon sequences for vocabulary she did not know and for producing speech output for such words.

Treatment (and home) literacy-related activities initiated since Spring of 1996 include the following, all of which will be discussed in greater detail in this presentation. It should be noted that K.H. prefers these activities to all others, and would even do what many would perceive as drill or rote learning (e.g., sound/symbol correspondence practice) for extended periods of time atypical of a child her age. It is the impression of all working with her both that she knows that these skills demonstrate her strengths and also that she is aware, on some level, that the ability to read and spell will provide her with the independence she wishes.

- Basic phonics work with consonant letters and their sounds, emphasizing identification of words beginning with designated sounds. Within the course of less than three months, K.H. could identify the most common sounds associated with all consonant letters. Work has now begun on identifying final consonants, with the preliminary letters of a word spelled by the adult partner and K.H. asked to fill in the final word.
- Some preliminary work with vowel letters and their corresponding sounds. K.H. can now identify the more common sounds associated with "a" and "o", although vowel sounds have understandably proved more difficult to acquire.
- Constant emphasis upon "hear the word in your head" to facilitate more than sight vocabulary acquisition.
- Identification of K.H.'s strategies in successful selection of sight vocabulary named by the adult partner and promotion of multiple strategies. For example, it was determined

that she identified words first by initial consonant and secondarily by final consonant. An additional strategy of looking at length and numbers of syllables (consonant-vowel pairings) has been introduced.

- Expansion of sight vocabulary through reading activities. Stories are read to K.H. while she "reads" along with the adult. The book is then read again, and K.H. is asked to fill in appropriate content words by selecting from up to 10 or more word cards.
- Encouragement of K.H.'s attempts to spell any vocabulary item for which she does not know the Liberator icon sequence. This has been particularly important because K.H. is a perfectionist who does not like to risk "failure" -- encouraging attempts to spell, even if not totally accurate, have reduced her reluctance to take risks.
- Increased use of monitoring of the printed word on the Liberator LED by having K.H. turn off speech output until an entire message had been generated.

K.H. will be attending the symposium and opportunities for audience members to interact with her and observe the manner in which she approaches Liberator communication and literacy-associated activities will be provided during this presentation.

Application

The primary purpose of this presentation is to make symposium participants more aware of pre-literacy and literacy opportunities available to preschool AAC users as part of their AAC experiences. Although K.H. is clearly a highly motivated child with considerable capacity for learning from her environment without active facilitation from family or professionals, it is probable that many preschool AAC users are ready for more advanced literacy experiences and interventions long before skills are assessed or interventions are introduced. The concluding portion of this session will involve active dialogue with the audience as strategies for exploiting the literacy opportunities presented by AAC and for monitoring a child's emergent literacy are explored. Questions to be addressed through discussion include:

- How do I exploit the printed material associated with AAC without unduly complicating the process of a child acquiring functional use of one or more AAC systems?
- How can I monitor whether or not a particular child has begun to identify and/or respond to printed word material associated with AAC?
- What tools exist for assessing a child's readiness for literacy?
- If a child demonstrates the acquisition of some sight vocabulary, how do I determine what salient aspects of the word stimulus the child is responding to?
- How can literacy skills training be incorporated into existing preschool educational and/or speech-language therapy services focusing on AAC usage (particularly in view of the fact that there never seem to be enough hours in the day for AAC training alone)?

POETIC LITERACY:
Facilitated Poetry Writing For Students With Special Needs (Part 1)

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Importance

Poetry reading and writing is often thought of as a "higher level" literacy skill, and is either passed over as inaccessible for students with special learning needs or is treated only with shallow, sing-song rhymes. This workshop re-creates poetry as a valid vehicle for reading, writing, and self-expression for all people.

We feel it vitally important that all people have the opportunity to speak, write and read the stories of their lives. The genre of poetry allows access to the hidden genius and the simple but powerful wisdom of lives lived with courage and fear, self-pity and acceptance. We must demonstrate that this is possible. In this workshop we present poetry written by people with disabilities.

We have focused this particular proposal on working with adolescents and adults. We developed this work as part of our reading/writing workshop for a classroom of young adults with a variety of physical, cognitive and emotional difficulties, and will relate it to whole person teaching which integrates reading, writing, and a healthy emotional life.

Educators can bring this to reading and writing venues and can use it to link emotional health and self-expression with a variety of poetic formats. Speech-language therapists will find this an invaluable context for concept development, vocabulary skills, association skills, use of metaphoric language, phonology development, and listening skills.

Methods

Part one

Participants will be exposed to a variety of strategies to initiate and deepen poetic thinking when working with individuals or groups. This develops a prepatory set for them to follow discussion of the development of some of our students poems.

Part two

A selection of our students poems will be presented. We will follow their development from their genesis in discussions, health and sexuality curriculae, service learning projects, and literacy learning. Participants will see the evolution of the poem from initial concept through drafts and revisions and to a final published work. Specific cueing decisions which we made as facilitators to move the writing process forward will be analyzed and other possibilities will be discussed with the group. This will accomplish the following goals:

•Demonstrate how the writing process can be applied to writing poetry, thus helping to make a possibly unfamiliar topic more accessible and familiar for participants;

•Provide clear information and modeling about how poetry has been successfully facilitated by telling them the stories behind poems which they have heard, and;

•Teach them that facilitation is an art with a set of techniques, having no "correct" answers, thereby empowering them to facilitate poetry however they wish on Monday morning.

Part three

Question and answer period, with a list of resources provided for further reading and thought.

Application

We address the issue of application in two important ways for participants. The first is to make links throughout the body of the presentation to curriculae and topics pertinent to adolescents and adults. By doing this, we both model and explain that the reading and writing of poetry can be linked to a wide variety of settings in everyday lives.

The second opportunity to make this real and usable is the invitation into part two of the workshop. Part two is a chance to move beyond the teaching stories presented in part one by experiencing facilitation of one's own poetic struggles and gifts.

Making Special Education Regular and Regular Education Special: A Joining of Two Philosophies

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Importance

Historically, students identified as having "special" needs have been educated in "special" environments, away from traditional curriculum and their same-age peers. This tradition of serving students was founded on the best of intentions but the worst of logic. Research has demonstrated that students with disabilities rarely catch up to their nondisabled peers when educated separately, rarely are exposed to traditional curriculum when educated separately, and in fact demonstrate less advances in communication, literacy, and social facility than students educated in more inclusive environments.

In special education classrooms, curriculum is individualized. With regard to literacy, this individualization often results in the removal of the social, meaning-based component so important to language and literacy development. Children get fewer opportunities to engage in print-based activities and, when they do get opportunities, they are isolated skill and drill types of activities. Regular education classrooms vary widely in their literacy offerings but consistently offer rich communication and social settings in which language is fostered.

Creating a balanced, literacy-focused, developmentally appropriate classroom which is suitable for the education of all students, not just those students who are easily taught, is not as difficult as it has sometimes been made out to be. In this session, the classroom practices of a kindergarten teacher who believes in the value of inclusion and the importance of literacy will be presented. Principles of individualized instruction will be combined with the notions of emergent literacy and inclusion.

Methods

This presentation will take the audience through a typical, literacy-filled day in Ms. Huber's kindergarten classroom. Sign-in, journal, morning meeting, reading buddies, storytime, rest time, snack time, and centers represent just a sampling of activities the children engage in each day that have a literacy component to them. Examples of children's work and photographs of the classroom will be provided to give the audience a visual representation of classroom activities. Adaptations for children with disabilities (including Attention Deficit Disorder, central nervous system disorders, communication disorders, and orthopedic impairments) will be discussed and materials will be displayed.

Examples of Individual Education Plan (IEP) goals for developmentally appropriate literacy development will be discussed and participants will have the opportunity to brainstorm ideas of how to meet individual needs without falling into the trap of skills-based instruction. Issues such as protecting the child from a skills-based IEP, going beyond the skills-based IEP, and writing quality IEPs which incorporate literacy goals will be discussed.

Applications

This presentation will provide strategies to regular education and special education teachers regarding practical ways to include children with a variety of disabilities in a developmentally-appropriate, literacy- and language-rich, early-elementary school classroom. Materials (and how to make and use them) will be shared, holistic literacy goals for IEPs will be discussed, and resources for further reading will be offered. These classroom strategies can be used in any environment - regular or special education, but they are designed to promote literacy learning for all children in an inclusive environment.

Revisiting the Never Ending Debate: How the Experiences of People with Disabilities May Lead to an Emancipatory Literacy

by

Christopher Kliewer
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Presentation purpose:

This presentation will describe the processes whereby people with certain disabilities have traditionally been separated from the literate community. These processes will be exposed as neither inherent, logical, nor scientific, but are rather prevalent moral decisions in which particular people are categorized into devalued groups, and are set apart from literacy opportunities and expectations. Contexts that resist these stratification processes will be described, and the liberatory consequences explored.

Importance:

The manner in which this topic is addressed will interest researchers, teachers, parents, and individuals with disabilities. First, I will describe current definitions of literacy acquisition including 1) conformity on the part of the student to a teacher-transmitted hierarchy of psychologically-deduced subskills; 2) conformity on the part of the student to a hierarchy of psychologically-deduced concepts that must be discovered by the student rather than transmitted directly to her; and 3) literacy as a social web of evolving relationships connecting students to their larger contexts including peers, teachers, and materials.

Secondly, I will describe the dilemma of conformity for students with Down syndrome. This dilemma results in partial or complete separation from the literate community when literacy is defined as conformity.

Lastly, I will describe how the third definition results in all students achieving membership in the literate community. Within this framework, literacy is both a value and a tool for connectedness.

Method:

The ideas presented reflect systematically gathered stories from the school lives of students participating in several qualitative studies I have conducted. The information also was gathered from biographical and autobiographical stories on the experience of being disabled in Western culture. The importance of everyday experience (lived experience) on understanding both literacy and disability will be addrssed from an interpretivist framework.

Application:

Interpreting literacy as meaning constructed in relationships of connectedness results in a reinterpretation of traditional classroom teaching structures, and provides a set of ideas for a discourse of possibility entering classroom literacy instruction.

Dynamic Assessment And Instructional Modifications For Students With Seizure Disorders

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and Psychology Intern, Hospital for Sick Children
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Importance:

Seizure disorders are the most prevalent neurological disorder of childhood. In all cultures, children with epilepsy are at greater risk of academic underachievement and school failure (Dodson, 1992). Research has demonstrated that many of these children have deficits in specific areas of neuropsychological functioning resulting in difficulties in memory, concentration, and academic performance (Dodrill, 1981; Huberty, Risinger, & McNeilis, 1992; McCarthy, Richman, & Yarbrogh, 1995).

Seizure disorders can be caused by a number of factors including injury, illness, congenital lesions or a genetic abnormality (Bird, 1994; Cohen, 1993). Seizure disorders that exist in the form of Idiopathic Epilepsy, may be accompanied by learning difficulties. However, in those children with conditions where the seizures are an accompanying symptom of an underlying condition affecting neurological development and function, the extent of the cognitive difficulties tends to be greater (Fritz, 1994). Such conditions would include, for example, Rasmussens Syndrome, Sturge Weber Syndrome, and Landau-Kleffner Syndrome. The cognitive deficits that occur in these children directly interfere with their ability to acquire literacy-related skills.

A number of factors can affect learning, including those that are seizure related, such as frequency, duration, severity, type, and location. In addition, interictal (between-seizure electrical activity in the brain), etiology of seizure disorder, medication with associated side-effects, and the child's IQ before the onset of seizures also affects learning. There are many challenges that face these children's teachers and parents. One of the first challenges that needs to be faced is learning to recognize the many ways that seizures can manifest themselves. This is particularly relevant for those children who have more unusual or subtle seizures (e.g., the child might appear to be sleep walking without being responsive or demonstrate very short staring episodes). It is important to detect these events so that the parent and teacher will know when to modify their expectations and instructional methods.

In terms of instruction, it is important to understand how seizure activity in certain parts of the brain affects the child in the classroom and at home. For example, if the seizure is in the right temporal lobe the child may have visuospatial problems, affecting hand writing, recognition of familiar words, and general gross motor activity. They may also have a poor sense of time and space, making changes in routines upsetting. Another characteristic may be the difficulty in reading social cues resulting in perceived poor manners or behavioural problems. Children who experience seizure activity in the left temporal lobe on the other hand, may have significant difficulties in language and verbal skills, as well as related reasoning and verbal learning processing. Recognizing and remembering what is heard can be very problematic. In these children reading and spelling are affected as may be speech. Children with frontal lobe seizures may have a disruption of smooth spontaneous speech and may find independent work challenging (Svoboda, 1979).

Teachers and parents spend a large amount of time and energy ensuring the physical safety of the child, managing their behaviour, and dealing with the reactions of others. In the view of the authors, one of the most important challenge for teachers and parents is to increase the amount of time that these children are academically engaged. This is relevant to children with seizure disorders for several reasons: they are often sent home after each seizure they have even though they may be able to continue with the lessons after a break; their seizure-related behaviour is sometimes misinterpreted as defiance and they are suspended from school; and they require extra support particularly, immediately after having a seizure in order to continue with instruction.

There are many factors that need to be considered when parents and teachers workto support academic success in students with seizure disorders. This session will review how dynamic assessment and instructional modifications can be used to support success in reading and writing. The central questions that will be addressed in this session will be:

1. Detecting subtle and unusual seizures
2. Understanding the seizure-related factors that have an impact on cognitive functioning
3. Using dynamic assessment approaches to capture response to instruction
4. Modifying instruction according to learning profile
5. Modifying instruction in immediate response to a seizure
6. Increasing academic engaged time

Methods:

This conference session will address the issues mentioned above by drawing upon the direct intensive experience of working with small numbers of students with seizure disorders within a clinical classroom setting. This Clinical Classroom is part of the Child Development Centre of the Hospital for Sick Children, the largest children's hospital in Canada. Within this setting,dynamic assessment involving careful observation and trial teaching is used over an eight week period with groups of five to eight children who have seizure disorders. Parents and community school teachers play a role in determining the instructional needs and in implementing recommendations that are based on joint learning. Hospital staff such as paediatricians, psychologists, speech pathologists, clinical researchers and social workers assist the teacher diagnostician in implementing the dynamic assessment program and in making instructional recommendations.

While this is an intervention program which takes place in a classroom within the hospital, it recognizes the need for the child to maintain contact with his or her community school, teacher and peers. This is one of the reasons why the students comes to the Clinical Classroom for three days a week and remains in their community schools for two days a week. These two days also provide the Clinical Classroom teacher with an opportunityto visit the community school and work with the other teachers on the effectiveness and feasibility of various instructional methods.

This program recognizes that a dynamic, long-term approach is needed in order to derive useful information. Static assessments would capture different levels of performance depending on the type of medication the student was on and level of seizure activity in the brain at the time of the assessment. Instead, the Clinical Classroom team works to recognize seizures along with their cognitive and behavioural correlates. A series of instructional techniques are used and tested based on the response that the student provides, i.e., indicators of academic success. When children are having seizures during instruction, an attempt is made to develop a protocol of instructional methods to gradually bring the child back intothe instructional activity. This protocol depends upon the length, severity, and type of seizure as well as its impact upon the child physically and cognitively.

Several of the authors have develop a list of modifications to the instructional environment that are particularly appropriate for students who have seizure disorders. This has been based on clinical research within the Clinical Classroom, as well as previous research and in particular, the work of Yesseldyke & Christenson's (1993) Teacher Instructional Environment System - II (TIES-II). The areas of instructional environments include instructional match, expectations, cognitive emphasis, instructional presentation, academic engaged time, and relevant practise.

The presentation will focus on issues related to dynamic assessment and instructional modification for students with seizure disorders. The information will be of relevance to teachers and parents. During the presentation, overheads will be used to review the major points along with handouts. With parental permission, videotape footage of children and teachers in the Clinical Classroom will be used to illustrate the actual use of assessment and instructional techniques.

1. Detecting subtle and unusual seizures
2. Understanding the seizure-related factors that have an impact upon cognitive functioning
3. Using dynamic assessment approaches to capture response to instruction
4. Modifying instruction according to learning profile
5. Modifying instruction in immediate response to a seizure
6. Increasing academic engaged time

The presentation will cover the following areas:

1. A description of the Clinical Classroom Program at the Hospital for Sick Children where many of these idea and techniques have been developed. This will include a description of the program model which involves parents, teachers, and health care professionals (e.g., psychologists, paediatricians, teacher diagnosticians and speech pathologists)as partners.
2. A description of the types of seizures, what they look like, and their cognitive and behavioural correlates.

3. A description of a dynamic assessment approach that incorporates observation, and student response to trial teaching. This may be accompanied by videotape footage.
4. Modifying instruction according to learning profile, seizures in the classroom and other instructional issues for students with seizure disorders. This will include the demonstration of several techniques.

Specific techniques for modifying instruction and instructional environment will include:

-metacognitive "stop and think" technique
-developing classroom and home routines
-use of direct instruction to increase repetition in teaching and practice
-designing routines for regular positive feedback on behaviour
-educational opportunities for students, teachers, peers, parents

Applications:

In addition to the presentation handouts, participants will be provided with a small guide outlining types of learning difficulties, instructional modifications, and specific techniques that have been found to be effective. If will include practical information so that it can assist the teacher or parent participant in applying the information within their own setting.

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INTELLITALK, INTELLIPICS, AND HANDS-ON CONCEPTS

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In this presentation, IntelliTools will focus on several products that promote literacy for persons with disabilities. These include:

IntelliTalk - a talking word processor that can speak letters, words, or sentences as they are being typed. It can also read back text from the screen by word, sentence, or paragraph. Users can adjust the font size as well as background and letter colors for improved visibility. IntelliTalk can be used with another of our tools, Overlay Maker, to provide auditory and visual feedback when using a custom-designed overlay. This powerful combination allows the user to create activities that support the physical and cognitive needs of individual learners.

IntelliPics - an easy-to-use authoring program that allows users to create accessible, multimedia activities. Just choose a picture from the picture library and add sound and motion. IntelliPics is excellent for building vocabulary as well as introducing basic concepts such as counting, color, and size.

Hands-On Concepts - an exciting line of theme-based learning programs that build basic literacy skills.

The original Hands-On Concepts uses 6 familiar themes to teach basic concepts such as sequencing, cause and effect, and numbers and colors. Activities reinforce the connection between oral and written language, introduce new vocabulary, and help develop speaking and listening skills.

Hands-On Concepts: Animal Habitats uses a charming, original story to introduce students to five unique habitats: the Jungle, the Desert, the Grasslands, the Mountains, and the Arctic. Accessible by mouse and IntelliKeys. Mary overlays can be used with a keyguard. Special templates and graphics allow users to customize overlays to better meet individual needs.

Special features of Animal Habitats:

- Original storybook and retell overlay reinforces sequencing, rhyming, prediction, and comprehension skills.
- Habitat overlays contain standard features such as a FACTS key, a WHO AM I? key, a SOUNDS key, and a RHYMING key.
- Activities reinforce phonemic awareness through the use of alliterative rhymes and quizzes.
- Two advanced overlays develop story-writing and counting skills.
- Resource Guide provides additional factual information as well as lots of off-computer extension activities.

EARLY IDENTIFICATION AND EVALUATION OF ATTENTIONAL AND MOTOR-PERCEPTUAL DEFICITS AS MARKERS OF LEARNING DISABILITIES

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Literacy and dyslexia are often part of a complex of abilities and disabilities. Early detection is a pre-requisite for proper intervention. For instance, with programs for stimulating phonological awareness in preschool children. In a Swedish study of children with deficits in attention, motor control, and perception (DAMP), four our of five children and significant school achievement problems at 10 years of age.

Are a substantial portion of children with learning disabilities recruited from children DAMP? Are there indications of language disorder in these children's history and is lack of critical skills like phonological awareness detectable in a school entrant screening examination?

The Swedish Child Health Care Program covers approximately 99% of the child population and Child Health Centers (CHC) are recommended to screen for DAMP. We have used a screening and assessment procedure as a complimentary addition to the ordinary CHC examination performed around 6 years to evaluate epidemiology and comorbidity between various disorders. Furthermore, in our daily work with children (families) admitted to our team, we have found a useful method for work-up. We here, present results from our research and also our clinical method.

Material/Screening/Assessment:
One hundred and thirteen 6-year old children were assessed, 62 of whom had DAMP and 51 constituting a comparison group after participating in a population screening study. The screening procedure comprised (1) four questions for completion by parents regarding the child's psychomotor development and 10 items regarding the child's attentional functions and behavior (2) six questions to the preschool teacher and (3) a standardized motor examination at the CHC. The assessment comprised a detailed history, psychiatric and neurodevelopmental examination, neuropsychological assessment and speech/language evaluation.

Epidemiology and Comorbidity:
In the total population, 10.7% of the children were identified with neurodevelopmental/psychiatric disorders. The prevalence rates were: DAMP 5.3-6.9%, ADHD (Attention Deficit Hyperactivity Disorder) 2.4-4.0% and Mental retardation 2.4%. All children with DAMP had attention deficits and about half of them fulfilled the criteria for ADHD.

Language Disorder:
Language disorder and motor clumsiness in first degree relatives were found at substantially higher rates in children with DAMP as compared to the control group. Language disorder was or had been present in two thirds of the DAMP-group. Furthermore, at six years of age, before starting primary school the children with DAMP differed significantly from the comparison group in several tests assessing phonological skills.

Parental and Child Involvement in the Assessment Practice:
Our district (Skaraborg) has approximately 300,000 inhabitants and the organization for early detection and assessment of learning disorders has three levels. The first is the school entrant screening examination conducted by the CHC personal, the second is a local interdisciplinary evaluation and the third is our team at the central hospital of the district. To this central team, the complicated cases are referred. The team consists of a neuropediatrician, a child psychiatrist, a psychologist, a special education teacher and a physical therapist. Other professionals like for instance speech therapists are often engaged.

In developing routines for the team work in our central team, we have our model ("the seven steps") useful. The main themes are early involvement of the parents in the assessment process, involvement of the child's school and several follow-ups. Furthermore, careful information of the results is given to the family and discussed with members of the family. After permission from the family, the child's school will have similar information and discussion.

Developing Language through Social Interaction and Literacy Enjoyment

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Importance

This presentation will discuss a philosophy of language and literacy development which is presently being utilized in products developed at ZYGO Industries, Inc. These products include (i) a package of adaptive emergent literacy materials, including books, software, overlays and suggested teaching strategies; and (ii) a word generative language application program for a dedicated voice output system. Both products will be introduced and demonstrated. These products maintain a strong emphasis on the philosophy that everyone should have access to materials that promote social closeness, written expression, reading comprehension and enjoyment, and the ability to express abstract thoughts. These products also recognize that learners need to have multiple experiences in exploring language and literacy materials. It is the exploration and revisiting of the multiple applications within each activity which promotes learning of the embedded concepts.

This presentation is likely to be of interest to teachers, parents, therapists, and individuals with developmental disabilities.

Methods

The adaptive emergent literacy materials seek to address many of the obstacles which are commonly encountered by learners with developmental disabilities when they engage in reading activities. These obstacles include lack of access, limited participation, the unlikelihood of being able to revisit texts again or to explore books independently, and the limited opportunities for discussing texts. Such obstacles mean that many young learners find learning important literacy lessons (such as: story structure; the rhyme and rhythm of texts; sequencing; print awareness and letter naming) very difficult.

The presentation will introduce a package of emergent literacy materials which will help make learning literacy lessons fun, meaningful and purposeful. The materials enable the active participation of the learner, and are supported by picture communication symbols, as well as overlays, so that the learner can retell, read as well as discuss the texts. These materials strengthen all the aspects of language expression and understanding so that individuals can truly enjoy literacy activities and share their experiences in varied modalities.

The language application software seeks to enhance language expression by providing a logical organization of vocabulary to stimulate growth in syntax and grammar. It stresses the importance of developing complex thoughts by moving away from one dimensional topic organization of language overlays to generating thoughts word-by-word. This word generative approach increases the demands of language which is important if expectations are to move forward. This application can be integrated into literacy tasks while providing an avenue for social interaction.

The presentation demonstrates the products; yet, the strength of it, is the shared philosophy of teaching language and literacy skills, so that everyone can have access to materials that promote social closeness, written expression, reading comprehension and enjoyment, and the ability to express abstract thoughts.

Application
This presentation emphasizes the importance of cohesive teaching in the areas of language and literacy. Parents, teachers, therapists and individuals with developmental disabilities will recognize that if facilitators come to the teaching task with strong expectations that language and literacy learning can be fun, stimulating and empowering for learners that their time and investment will reward learners with valuable life long skills.

Reading, Writing, Rhyming, and Reciting: Using Poetry to Support Emergent Literacy

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Importance: The Power of Poetry

This topic is of interest to interventionists (parents, regular and special education teachers, speech-language pathologists) working with students who use AAC and are at the emergent literacy level. Strategies will be suggested for using poetry to support emergent literacy learning for students at all age and ability levels. Many poems have inherent features that make them delightful for children, and excellent vehicles of emergent literacy and AAC learning. These features can also make poetry especially accessible for students with disabilities:

- Rhythm: Poetry offers endless opportunities to introduce students to various types of rhythm. This rhythm may be repeated verse by verse, such as Lewis Carroll's "Jabberwocky."
- Rhyme: It is no longer considered obligatory that a poem have rhyming to be considered a "real" poem. However, as with storytelling, rhyming can help children feel more "connected" to the poem, and can help with emergent literacy skills. Children who are developing language may begin to organize words on the basis of sound similarities as soon as they begin to talk (Bradley, 1988). The Russian writer Churkovsky (1963) explored the fascination that young children show with sound play, including rhyming. He provides a wealth of examples of spontaneous rhymes produced by children from different countries while engaging win word play. Bradley (1988) cites studies indicating that the origins of phonological awareness lie in the early word play of children.
- Repeated Lines, Phrases, or Words: Repetition can help children with special needs be a part of the action. Many poems offer one or more repeated lines or phrases, as seen in the chart.
- Alliteration: Young children enjoy listening to and exploring alliteration, and it serves the educational purpose of putting phonemes "on display." For example, e. e. cummings offers us "maggie and milly and molly and may," while Robert Francis's "Base Stealer" gives alliterative descriptions of his baseball player: "Running a scattering of steps sidewise, How he teeters, skitters, tingles, teases, Taunts them. . ."

Methods: Poetry, Literacy, and AAC — Learning Opportunities

A range of issues are important to interventionists: (1) Guidelines — choosing poetry to promote classroom or individual goals; (2) Listening To Poetry — an important element, with a range of listening approaches and objectives covered; (3) Poetry Exploration — experiencing poetry related to thematic materials or specific poets; (4) Poetry Performance — ". . . a method of learning which uses theatrical techniques to enhance the study of poetry. Using poems as scripts and working primarily in small performance teams, students read, discuss, direct, and dramatize poetry" (Wolf, 1990, p. 3); (5) Responding To Poetry — oral, written, or other forms of response to the ideas and feelings evoked through poetry.

Levels Of Poetry for AAC Users

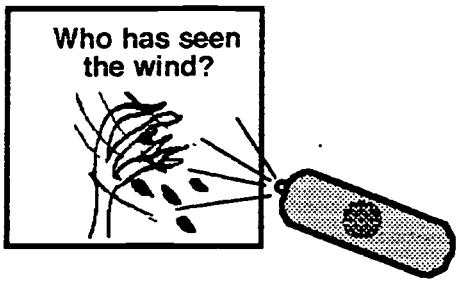
For children with disabilities, it may be possible to identify successive levels of participation that provide the greatest possible scaffolding, and therefore the greatest possible success (Musselwhite & King-DeBaun, 1997). The easiest level identified is use of a repeated line as a refrain, including a "get-ready" cue. Samples Levels of Poetry are included at the end of this paper.

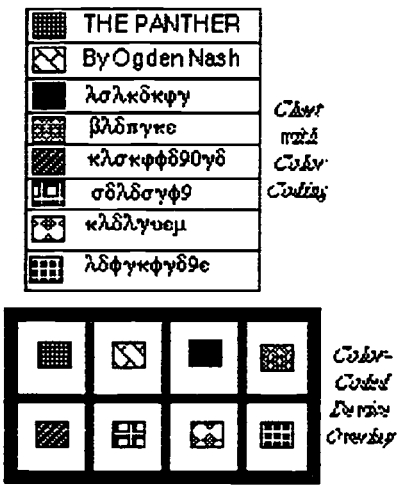
Application

Special Issues for Students with Special Needs

Accomodations may be necessary for successful poetry performance for students with a variety of special needs. Following are some sample adaptations:

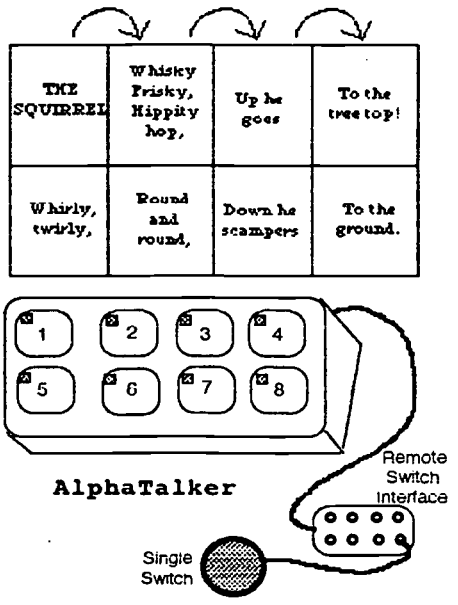
Student Needs Help With Timing of Poetry Performance: Many individuals will initially need help in timing their lines so that they "flow" with the poem. For examples, students at the emergent literacy level, students with attention deficit disorders, or students with cognitive delays may need prompting. A squeeze light may be used as a reminder to speak a word, phrase, or line at this juncture. Thus, Amanda's partner may use "shadow light cueing (Goossens' and Crain, 1992, pp. 257-261) to indicate the appropriate timing for insertion of the entry. The student may produce the line via speech, device, or computer.





Student is at the Emergent Literacy Level: For students who do not read independently, props and other visual prompts may help them to participate more fully in poetry performances. For example, symbols or drawings (by adults or children) may be placed in a pocket chart or adhered to a flannelboard or velcro display to represent words, phrases, or poem lines. These materials may be used as reminders to help students memorize their lines, or may be used as a visual cue for timing of poetry performance. Use of color-coding can be another aid to help student's determine who goes next. The poem is written on a flip board or in lines inserted into a pocket chart. Each line has a color next to it. Each student is then given a color card, to indicate which line(s) they should speak. Some students may deliver their lines via speech output devices.

Student Is Non Speaking: Use a speech output device, or the speech output of a computer. Sample augmentative communication devices: remote switch devices, for which student presses a switch to speak a word, phrase, or line(ex:Action Voice, Cheap Talk; AlphaTalker (Remote Switch), Lynx, SpeakEasy, SwitchMate, Wolf (Alternate Input Peripheral version); Voice Pal +; direct selection devices (ex: AlphaTalker, BigMack; Message Mate; DeltaTalker; Macaw III,Liberator, DigiVox); scanning devices (ex: Liberator, Macaw, ScanMate, AlphaTalker,Macaw); dynamic screen devices (ex: Dynavox, Pegasus, Gus, Speaking Dynamically). Consider using "Magic Tricks", such as those described by Musselwhite and King-DeBaun (1996). For example, many devices (e.g., AlphaTalker, Megawolf, Macaw, Message Mate) can be used in "step-scanning" mode, with the student pressing a switch to speak each line of a poem. This reduces or eliminates timed switch activation.



Poetry As A Springboard To Writing

Poetry — like music — can be a familiar format to jump-start emergent writing. The features of rhyme, rhythm, repetition, predictability, and alliteration, present in many poems and rhymes for young children, can support early writing attempts. Below are some general tips:

Start With Familiar Verses: This is the idea of "old forms / new functions", creating "poetry parodies"; a good first start is to insert each student's nameinto the rhyme, using a pocket chart.

Introduce Substitution of Rhyming Words: McCracken & McCracken (1986) suggest creating a "rhyming word bank"; so, for "Cinderella dressed in yellow", think of color words + rhymes

Introduce New Poetry Patterns Requiring Single-Word Modifications: Students can build "letter banks," or word category banks, such as nouns, verbs, and adjectives.

Introduce More Complex Poetry Patterns: Now students can replace several words in a new poem, such as changing "I saw a proud, mysterious cat" from Vachel Lindsay's poem "The Mysterious Cat" to "I saw a huge, scary tiger."

Construct A Poem From An Idea Bank: Students should not always be limited to patterned writing. Some students will want to create their own poetic patterns. It may help students to use an idea bank of poetic words that stimulate poetry writing on a particular topic. Occasional use of templates is helpful for device- or computer-generated poems, due to the time-saving features for teachers. However, overuse of templates will result in "formula-style" poetry that is not authentic for the writer.

RESOURCES: POETRY SAMPLERS FOR OLDER STUDENTS

THE DESERT IS MY MOTHER by Pat Mora, (1994) Houston, TX, Piñata Books
English & Spanish; Rhythm, beautiful, colorful graphics, slot-filler (I say ___, she ___, such as "I say feed me. She serves red prickly pear on a spiked cactus.)

JOYFUL NOISE: Poems For Two Voices by Paul Fleischman (1988), NY, Harper & Row, 44 pp.
14 poems about insects; fanciful and lyrical; excellent for older students; lots of rhythm, repetition, and echoing; two part poems, fabulous for poetry performance; illustrations look like etchings/very sophisticated

A LIGHT IN THE ATTIC, by Shel Silverstien, 1981, NY, Harper & Row, 169pp
Simple drawings, clever poems; rhyming, slot-filler, rhythm; some poems offer repetition (ex: Whatif)

THE NEW KID ON THE BLOCK; by Jack Prelutsky (1984) NY Greenwillow Books, 160 pp
Wide range of zany poems from popular author - lots of rhythm and rhyme; fun sketched illustrations; slot-filler, alliteration - Ex: The Mungle and the Munn: The duo met to duel at dawn (the Mungle and the Munn)

ROOMRIMES BY Sylvia Cassedy, NY: Thomas Y. Crowell1987, 72pp
Poems from A (attic) to L (loft) to W (widow's walk) to Z (zoo); very humorous; lots of slot-filler, sound play, & rhyming; many repeated lines; funky illustrations (not childish)

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McCracken, R. & McCracken, M. (1986). *Stories, Songs and Poetry to Teach Reading and Writing.* Chicago, IL: American Library Association.

Musselwhite, C. & King-DeBaun, P. (1997). *Emergent literacy success: Merging whole language and technology.* Southeast Augmentative Comm Conference / Creative Communicating.

Wolf, A. (1993). *It's show Tme! Poetry from the page to the stage.* Asheville, NC: Poetry Alive! Productions.

Wolf, A. (1990). *Something is going to happen: Teacher's Edition.* Asheville, NC: Poetry Alive! Productions.

LEVELS OF POETRY PARTICIPATION

Musselwhite & King-DeBaun, 1997, *Emergent Literacy Success: Merging Technology and Whole Language For Students With Disabilities*, Creative Communicating / Southeast Augmentative Communication Conference Publications

Level I: Repeated Line as Refrain (Final Position)

Poem	Author	Prompt	Refrain (#)
Little Orphant Annie	James W. Riley	"An the Gobble-uns 'll git you"	"Ef you Don't Watch Out" (4)
The Voice That Beautifies	Navaho trad.	"Again and again it sounds"	"The voice that beautifies the land" (3)
Times-Square-Shoeshine	Maya Angelou		"pow pow" (18)

Level 2: Repeated Line Within A Poem

Poem	Author	Repeated Line (#)
Song of the Settlers	Jessamyn West	"Freedom is a hard-bought thing" (4) (Initial)
The Rum Tum Tugger	T.S. Eliot	"Yes, the Rum Tum Tugger is a Curious Cat" (3)

Level 3: Insert One Line Only

Poem	Author	Single Line - Final Position
Mommy Slept Late . .	John Ciardi	"I'd sooner eat the plate!"
Stopping by Woods . . .	Robert Frost	"And miles to go before I sleep" (2)

Level 4: Repeated Phrases or Words

Poem	Author	Words or Phrases / Position (#)
Arithmetic	Carl Sandburg	"Arithmetic is . . . " (Initial) (5)
Give Me The Splendid Silent Sun	Walt Whitman	"Give me. . ." (Initial) (7)
We Real Cool	Gwendolyn Brooks	"we" (embedded) (8)

Level 5: Insert Two Different Lines / Phrases

Poem	Author	Repeated Lines / Phrases (#)	
Father William	Lewis Carroll	"You are old" (4)	"In my youth" (3)
Conversation	David McCord	"No dear" (8)	"Oh dear" (3)

Level 6: Insert Several Different Lines / Phrases

Poem	Author	Repeated Lines / Phrases (#)	
Mr. Mistoffelees	T.S. Eliot	"And we all say: OH" (3) "Was there ever" (2) "As Magical Mr. Mistoffelees" (3)	"Well I never!" (3) "A cat so clever" (3)

Poem	Author	# of Lines
Autumn, I'm Nobody, I Never Saw a Moor, etc.	Emily Dickinson	8, 8, 8
Fog, Paper I, Paper II, Doors, Phizzog, Primer Lesson	Carl Sandburg	6, 5, 5, 6 , 8, 4
The Panther, The Termite, The Kitten, The Lama, Celery	Ogden Nash	6, 4, 4, 8, 4

A Summer Institute for Augmented Speakers: Lessons in Language and Literacy for Teachers, Parents and Children.

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Importance

Although a wealth of research into literacy learning and teaching exists, few studies have included persons with disabilities, especially those with developmental disabilities. Even fewer studies have employed an adult with developmental disabilities to teach, model and elicit language and literacy skills. Of the relatively little research that has been done in this area, most has concentrated on word study alone, rather than reading and writing for meaning, and as part of the much broader picture of discourse and social participation.

With the movement towards full-inclusion more children with developmental disabilities have been afforded the opportunity to be part of a community of speakers, readers and writers. The opportunity cannot be fully realized in the absence of research to further practical knowledge and application of successful teaching and learning strategies.

This research sought to document successful teaching and learning strategies and to devise a model to further the development of language and literacy among children with developmental disabilities. All parties who endeavor to educate children with developmental disabilities to participate in society as informed and productive citizens will be interested in this paper.

Methods

An action research approach was used in this study. A variety of mechanisms were used to evaluate the program, including language, literacy and computer confidence assessments, questionnaires, surveys, case studies and video taping. All the participants in the study were given a battery of assessments to evaluate their language skills, literacy skills, and computer competency. Educators and parents were given surveys that would investigate their personal attitudes towards language and literacy development in children with developmental disabilities and to assess their feelings regarding their role in that development. Questionnaires were given to parents and educators to provide practical information about each child's physical access, reading interests and social participation at home and school.

The participants in the study were chosen according to a strict criteria including commitments from their parents or caregivers to be active participants, as well as criteria relating to their age, their challenges as augmented speakers with severe speech impairments, their participation using augmentative communication system(s), their seating and positioning and their language and literacy developmental status.

The personnel in the study included a literacy instructor (as principle investigator) who managed the classroom organization; a speech language pathologist (as augmentative and alternative communication specialist and computer instructor); an augmented speaker to provide appropriate language modeling with a language immersion approach, and two graduate students in speech language pathology to assist in production of materials and support of the participants. In addition, the study was fortunate to have a trained educational assistant and one other volunteer to assist with any other support as needed.

Each participant (child) attended daily, two-hour sessions for a period of four weeks. Sessions ran in the early afternoon with parents and/or caregivers attending the Friday session, to observe, ask questions and learn how to support their child's language, literacy and communication development at home. The intervention consisted of three interdependent strands: (i) language immersion to teach language and communication skills (including vocabulary, sentence structure,

grammar and pragmatics) within the framework of total language immersion (e.g., augmentative communication aid use by instructors and students); (ii) literacy instruction and interaction to develop individual skills of each participant by planning tailored intervention programs based on the individual's literacy assessment in addition to developing the group as a literacy club, with collaborative reading and writing activities (such as plays, books, recipes, jokes, stories, poems) reinforcing literacy as purposeful, enjoyable, and meaningful; and (iii) computer instruction and interaction to develop confidence with computer and other technologies associated with program (e.g. tape recorder, voice output communication aid) for example by teaching the participants how to operate a new device or load a piece of software.
A transition period took place 6-8 weeks after the intervention period and consisted of weekly visits (for 4 weeks) helped the transition of newly acquired skills and supported the development or language, literacy and technology skills in their school environment.

Application
This study demonstrated the importance and effectiveness of a language immersion approach to developing language and literacy skills among augmented speakers. To illustrate the value placed upon language immersion, this study (i) employed an augmented speaker as a key member of the instruction team; (ii)modeled all language spoken in the classroom through picture symbol representation; (iii)represented all written language in the same picture symbol form; and (iv) enhanced computers and dedicated devices with the same picture symbol representation (i.e. matching print and speech to symbol). Illustrations of this language immersion approach will be provided during the presentation.
Another key component of this research was the emphasis placed upon observation which informed curriculum planning. A cyclical process of observation, curriculum planning, and revision was in place, enabling the team to meet both group and individual needs in all aspects of the curriculum. In addition, the ethos of the team and the participants was to address needs immediately to ensure success on a daily basis.
Collaboration with parents, caregivers, schools and other interested parties during the Summer Institute and during the Transition period was an effective tool in fostering systems change. The process included sharing an increased awareness of learning styles and expectations; the importance of consistency of approaches and a shared philosophy for teaching language and literacy; the demonstration of techniques; and the ultimate empowerment brought about through increased understanding by all parties.
The presenters will share practical examples for classroom and home environments to support language and literacy development.

Finding the Way: One Student's Search for Literacy

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Importance

The challenge for general and special educators is to give all students the tools necessary for independence throughout life. Literacy instruction can provide students the foundation for future successes in school and employment. Yet, students with disabilities often experience early learning difficulties due to cognitive, communication, and physical deficits. Studies show that between seventy and ninety percent of persons with disabilities cannot read or write at the same level of their non disabled peers (Koppenhaver, et. al., 1993).

However, literacy acquisition by students with significant disabilities enable them more success in communication and control over their environment. Persons with disabilities who complete high school are twice as likely to find jobs as those who do not finish school. As with typical students, literacy is the key to long term success.

Methods

Finding appropriate methods for literacy instruction for a student with significant disabilities is similar to a journey. At times the road is smooth; at others it is bumpy. Knowing one's destination from the beginning is crucial. Having a map is necessary to provide guidance. However, the appearance of unexpected detours can produce the need for alternate plans or a route change, while roadblocks could cause delays or suspend travel.

One such journey was begun by a group of parents, teachers, and therapists several years ago. Their search involved finding the most appropriate methods of literacy instruction for Jordan, a thirteen year old boy with significant disabilities related to cerebral palsy due to a premature birth. His spastic quadriplegia contributes to his lack of gross and fine motor skills, his poor functional vision, and no understandable speech. He drives a power wheelchair with a proportional head switch and communicates with a dedicated augmentative communication device, the Dynavox, as well as with vocalizations and gestures. He attends a public middle school where he is included in a sixth grade class where he receives full time special educational support. His previous educational experiences include five years in a segregated school, one year in a self contained class in an elementary school, and four years in inclusive classes in the same elementary school.

Jordan's introduction to literacy began early. With both parents as teachers, Jordan had books read to him during the preschool years. Around the age of six, he became involved in the telling of stories with assistance from a tape recorder and a loop tape for reading a repeated line from a book (Musselwhite, 1988). His formal literacy training included an introduction to phonics using the Open Court reading series for one year. As he moved into a regular second grade class, Jordan was included in a reading group which utilized a language experience approach to reading. This group included several able-bodied peers who were reading below grade level as well as Jordan and another student with significant disabilities. For two years he was involved in daily small group reading and writing activities. He used picture/word cards, an eyegaze frame/vest, loop tapes, and a computer for participation.

During this same time, Jordan's parents, teachers, and therapists were pursuing the purchase of an electronic communication device. After several years and countless evaluations, he received a Dynavox at the end of his third grade year. As his fourth grade year began, the educational team questioned the best method for teaching Jordan to read and write. At the same time, staff from the Center for Literacy and Disability Studies began to research issues related to literacy acquisition of students with significant disabilities in inclusive settings. With direction from Dr. Karen Erickson, a program was developed which gave Jordan direct instruction to improve his silent reading comprehension (Erickson, et. al., 1996).

Initially, Jordan was assessed in the areas of listening comprehension, reading comprehension, and word identification. Dr. Erickson adapted the Johns Basic Reading Inventory (1991) to determine in which areas Jordan was having difficulty. Modifications included pictures for graded word lists, multiple choice answers for graded reading passages, and the Dynavox for the developmental spelling test. Results indicated Jordan's strength to be in the area of listening comprehension with 90% accuracy at the third grade level and 80% accuracy at the fourth grade level. Weaknesses were revealed in the areas of reading comprehension and word identification. He was unable to read silently or answer any questions successfully at the primer level. Word identification skills were stronger with seven of eight primer level words recognized and six of ten first grade words identified. An abbreviated developmental spelling test (Ferroli and Shanahan, 1987) demonstrated Jordan's understanding of initial and final letter-sound correspondences in words.

With this information gathered, it was determined that Jordan would benefit from direct instruction in improving writing, print processing, word identification, and listening skills. Because there were opportunities for sustained reading and writing in his fourth and fifth grade classes, Jordan participated in literacy instruction through modified and alternative activities in the general education classroom.

Application

Providing appropriate literacy instruction to students with significant needs such as Jordan's can be a challenge. However, with cooperation and support from home and school, information and assistance about best practices for literacy instruction, appropriate materials and equipment, as well as creativity and perseverance, a program for literacy instruction can be implemented for any student. Participation in regular education can provide an added benefit of motivation from peers and age appropriate curriculum not available in a more restricted setting.

A major factor which contributes to a successful literacy program for students with significant disabilities is positive expectations from all persons involved in programming decisions. When each student is valued and expected to benefit from experiences involving reading and writing, progress can be anticipated. Jordan didn't only increase his literacy skills, but he improved his visual, motor, and communication skills also. A supportive environment not only contributed to his reaching measurable goals but to his increase in self-esteem as well. Opportunities must be provided where each student can achieve success. With all team members working together, this possibility can become a reality.

Information regarding appropriate methods for literacy instruction of students with significant disabilities is another critical factor. Teaching reading has traditionally been provided through phonics, basals, literature, or language experience/writing. Each has its benefits. However, because all students do not learn in the same way, a multi-method approach should be implemented. One such program, the Four Block Model, has been developed by Dr. Patricia Cunningham from Wake Forest University (Cunningham and Allington, 1994). This model supports balanced literacy instruction through guided reading activities, writing, working with words and self-selected reading opportunities. With adaptations developed by Dr. Karen Erickson, this program has become the framework for Jordan's literacy intervention (Erickson).

Guided reading opportunities were provided to Jordan daily in the areas of language arts, science, and social studies. He continued to learn to listen and comprehend grade level texts through shared reading and supported reading activities using a variety of books and other printed materials. The Dynavox provided the means by which he could be involved in discussion or assessment related to classroom topics. Preprogrammed vocabulary words as well as a keyboard for composing novel messages allowed Jordan active participation in most listening comprehension activities.

Similarly, the Dynavox allowed Jordan a means by which to express his thoughts in daily writing activities. Given his weakness in composing complete thoughts, a model was furnished by another writer. Using preprogrammed words and messages, Jordan would set the topic. His

partner then proceeded to write and read aloud several simple sentences about the topic. He was then given the opportunity to write his own text using inventive spelling as well as his preprogrammed words and messages. With time, his conventional spelling and composition has improved. The use of the Dynawrite, a word prediction feature of the Dynavox, strengthened his writing as well.

Working with words gave Jordan further opportunities to increase his knowledge of letters and sounds as well as strategies for identifying unknown words. Instruction focused on an activity known as Making Words (Cunningham and Allington). Six or seven letters were preprogrammed onto a screen on the Dynavox which he combined to spell target words. These words were then used as a replacement to weekly spelling words. With time, spelling improved over contexts. He began to include a vowel in most words, usually used the correct initial and final consonants, and began to spell three letter words correctly.

Self-selected reading provided Jordan opportunities for reading primer level books. Commercial books with large print as well as those written about Jordan's particular interests which incorporated photographs and magazine pictures were used. Some texts from stories were programmed into the Dynavox for independent access by Jordan. Similarly, a method was finally devised by which he could turn pages in a book independently. Individual book pages were placed in plastic page protectors and put into a three ring binder. With this secured to a low angled easel, Jordan could turn pages using a hand splint with a rubber tipped pointer.

Assistive technology and other appropriate materials provided Jordan tools for increased literacy success. The Dynavox, a Macintosh computer with Ke:nx, and adapted books gave him a method for independent access for reading and writing. Similarly, assistive devices and equipment provide greater opportunities for active participation by the students who use them. Therefore their availability is crucial to literacy instruction for students with significant disabilities.

Finally, the creative use of time and materials can promote literacy success for all students. Because each student has his own set of strengths and needs, programs must be adapted accordingly. Also, because needs change over time, ongoing assessment is critical. Jordan's difficulty with reading connected print has made it necessary to change activities and materials on several occasions over the years. It is hoped that with various methods of instruction and materials as well as perseverance from Jordan and his team, he will become a competent reader, writer, and communicator. Persistence in the development and refinement of activities based on each student's unique qualities is therefore essential.

Successful implementation of literacy instruction for a student with significant disabilities can be a challenge. It is often accomplished only through unexpected roadblocks and detours along the way. The journey may be long, often rerouted, or delayed, but the arrival will be tremendously gratifying. Providing another student with the tools necessary for lifelong success will be achieved.

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Strategies for Addressing Difficulties in the Physical Aspects of Written Expression

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Importance

Educators and parents who are concerned with delays in their child's ability to write or encode ideas will be interested in exploring avenues for improving the child's proficiency. Written expression is an integral part of literacy acquisition. For this reason, the physical component must not be ignored.

Methods

In this presentation, the following methods and issues aimed at improving a child's proficiency with written language will be discussed.

I. Determine Approach
   A. Fine/gross physical limitations
   B. Modifications to the environment
II. Discussion of Motor Limitations
   A. Observation of status
      1. Sitting posture
      2. Hand function
      3. Sensory implications
   B. Intervention Strategies
      1. Low/no cost classroom ideas
      2. Consideration of handwriting curricula
      3. Kinesthetic teaching model
      4. Splinting
III. Environmental Modification Demonstration
   A. Low tech methods
      1. Alternative writing utensils
      2. Alternative utensil holders
      3. Stamping
      4. Sticker selection
      5. Icon Selection
      6. Dictation
   B. High(er) tech methods
      1. Input device selection
      2. Trackball, mouse. trackpad
         a. Positioning
         b. Adaptation of device
      3. Alternative keyboards

4. Keyboarding
    a. Word processing
    b. Word prediction
5. Voice feedback
6. Computerized story completion

Application

So what now? Use the strategies demonstrated and discussed to incorporate more appropriate methods of facilitating written expression. Be aware that the greatest obstacle often comes in the form of the reluctant service provider. Techniques for promoting acceptance of new methods will be shared. Support of the service provider, and creativity with strategy implementation will be the best starting points possible.

Reading is Everywhere

Suzanne Ripley, NICHCY
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Alex Ripley, Student

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This is a presentation of pragmatical approaches to major obstacles in teaching reading, of collaboration of home, school and community, and of identification of national and local resources. And it is a presentation of what is possible when people become involved with a cause and with each other.

Importance

Successful reading instruction, especially for students with disabilities, and even more critically for adolescents and young adults, is often dependent on a multifaced approach.

Teachers may or may not be available to provide reading instruction in the classroom. Even when teachers are providing this instruction, it is often for an inadequate amount of time each day, and requires reinforcement if it is to be successful. Often there is no reading instruction at all for high school students. For students in vocational programs, year 5, 6, and 7 of high school, or out of school, there is rarely any reading instruction at all.

Parents may experience frustration in requesting reading instruction for their sons and daughters with developmental disabilities who are at the secondary or post secondary school levels. Lack of formal programs for reading at the secondary school and vocational school levels, along with years of slow or not progress in reading can be a deterrent to families in successfully advocating for literacy programs through the public schools. School staff, often also concerned about the literacy needs of students, may not have staff with experience in teaching reading and may not have anyone who is responsible for developing literacy programs to meet the needs of students with developmental disabilities. State level education policies have over the years increased literacy standards while encouraging local schools to exempt students with developmental disabilities from these requirements.

There is a national priority for literacy in the United States, the Department of Education launched its Read Right Now program this past year, and literacy is one of the key factors used to measure competency standards in most of the states. Yet these standards seem to have overlooked students

with developmental disabilities, formally and informally. Instead of increasing reading programs for these students, instead of recognizing and addressing their needs, these students are summarily exempt from what is presented as a national priority. It is tragic that so basic and vital a skill as reading is not even a part of the school curricula for the majority of secondary and post secondary level students with disabilities.

But this is also a time of Communities as Schools and Schools as Communities. Parent involvement is also a current national education initiative. The U.S. Department of Education has held regular nationally televised community meetings on Parent Involvement in Education. National magazines are packed with articles about Parent Involvement and several national organizations are promoting this concept. The presidential campaigns were full of rhetoric on family and community involvement in education and the National PTA has just published its standards for Parent Involvement. This is a time of bringing the community into the school rooms and bringing students, especially secondary and post secondary students with disabilities, into the community.

Methods

In this session we will present resources for families, schools and communities to collaborate to address the literacy needs of older students with developmental disabilities. There are a selection of formal and informal supports available across the country which can become involved in teaching reading. From family members, to literacy councils, to local volunteers, to peer tutors, to commercially available low level reading books, to libraries, to national literacy organizations, to glossy ads in the Sunday paper -- resources abound. If you know where to look, resources can be identified.

With the emphasis on extended roles and responsibilities for families and communities in the education of their young people, we will present methods for working together to teach older students with developmental disabilities. If literacy is presented as a national initiative, if family and community involvement are presented as vital to the success of our education systems, then we need to be sure *our* students are part of this debate. No more exemption forms which remove students with developmental disabilities from public view, it's time we not only recognize their difficulties with reading but also identify methods to improve their reading.

This session will offer a list of generic and selected specific resources and address methods for identification of local resources. We will present methods for finding available reading programs, tailoring existing programs to individual needs, and developing individual reading programs at home. Knowing what's available combined with methods for putting these resources to use for an individual student is the truly collaborative approach to learning.

Application

A replicable model will be offered. We will present one example of how this method has been applied, successfully, to the needs of one student. Alex, age 21, has multiple disabilities and

began learning to read at age 17.

Alex's school had no reading curricula or reading materials for high school students with developmental disabilities. The school system's reading specialist did not work with high school teachers, the curriculum specialist did not work with special education programs, and the special education program did not have literacy as a goal. In fact, all students labeled developmentally delayed are exempt from all literacy tests and standards.

But Alex wanted to read. Lida Hawk, formerly a paraprofessional with the high school, wanted to teach Alex to read. She will talk about her work to identify local resources for teaching beginning reading to teenagers, her work with the local literacy council office, reading curricula she found, and her work with Alex to identify his learning styles and to determine the most effective way to teach him. Mrs. Hawk identified resources in the community, both formal and informal sources for assistance in teaching reading. She talked to teachers, volunteers with the literacy council, and read about methods for teaching reading. She applied what she learned and tailored her methods to address the specific needs of her student.

When Mrs. Hawk retired, she continued her work with Alex as a volunteer. Alex has continued to progress. Mrs. Hawk is sharing her methods with Alex's family, his teacher, and most importantly she has inspired Alex to keep working.

The family became actively involved through reports and observation. Reading once a week with Mrs. Hawk was not going to effective unless the family took an active role too. The parents bought books and took a more active role when Alex entered a vocational program and spent much less time in the classroom.

Mrs. Hawk will discuss difficulties encountered, logistics of working outside the school setting, and the solutions to less structured learning environments. She will also answer questions about her methods and experiences.

Alex will talk about his dedication to learning to read, his work and progress, and will demonstrate his reading instruction methods with Mrs. Hawk. He will also answer questions about his participation in this program.

Lost in a Sea of Ink: How I Survived the Storm

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Importance

There are some kids who just can't write. And there are some kids who can write, but don't show it. One of the jobs of a teacher is, with the help of outside resources. to separate the ones who can't write from the ones who won't write. For students who won't write, - the only help may be encouragement. But for the ones who can't write, there are many tools and learning plans with which to help them. I'm one of the kids who couldn't write. In this presentation I'm going to share my experiences in writing: the good, the bad and the ugly.

Writing is a very important tool. People who can't write suffer greatly. Children who can't write are prone to be distressed and frustrated with their schoolwork. It can lower their self esteem and their peers may jeer at them because of it. It becomes apparent when a child can't write and may lower their value in the eyes of other students as far as partners for classroom projects may go.

I'm in 8th grade now and through most of my years in school I felt pressured and stressed. It was obvious to everyone, especially me, that I couldn't write. Kids made fun of me and teachers told me I wasn't trying hard enough. I don't know why kids were making fun of me in school. It could have been my writing, my disorganization, my hearing loss, my ADHD, or all the teachers I had to have to help me. But it really doesn't matter why, it just happened and it really felt bad. Being told you're not trying can make a student feel like giving up, like not really wanting to even try to write anymore and like there's no hope. That's why it's important to know how to help kids with writing disabilities and other problems. When they are able to write and learn it can not only improve their academics but change how others see them and how they feel about themselves.

Methods

Many things and a lot of effort went into making me a good writer and a successful student. I had to work with my parents and teachers in order to get my ideas out in written form. I can't remember how letters go when I try to write them and I can't remember what letters go with which sounds or how to put the sounds in order to spell. There were a lot of things we did over the years to help me. Some worked and some didn't. In this presentation I will describe the pros and cons of the methods I used. When I used a tape recorder or dictation to someone I was able to get my ideas out, but often they were disorganized and not really a "written product". When I was able to use the computer, I could get a written product to edit, but my spelling is so bad that I couldn't even get the spell checker to recognize the words. Also my fine motor problem slowed me down so I forgot a lot of my ideas. When I used the Power Secretary it is like combining the tape recorder and computer. I can get my ideas out and spelled correctly and I can also see my product so I can start to edit it.

The Alpha Smart is like an "overgrown organizer". This product is a full sized keyboard with a screen and 8 files. I use this in my classes to take notes when I can't use the Power Secretary. Even though the spelling is still a big problem, I can get a few ideas down.

I find it hard to concentrate in classes because of my hearing loss and ADHD. To help with these problems I take Ritalin and use an FM system with my hearing aid. In class, the teacher wears a transmitter and her voice is picked up by my aids. It sounds like she's standing right over

my shoulder and it's really hard not to listen. This helps a lot.

Application

It took me awhile to figure out how I can learn best. Because of my distractibility and written learning disability my ideas were hidden for awhile. Once I could see my ideas come out on the Power Secretary. I got a little more confidence to keep trying. In this presentation I will show some of my work examples and how some teachers helped me and some teachers hurt me when I was trying to learn. I will also demonstrate and talk about some of the devices I use to help myself in school.

Teachers: Teachers are very important in determining how successful a kid feels. They should know how to find out what kids can do and try to find methods that show their success. A good place to start is to find out how to make a student comfortable with getting their ideas out. It helps if you believe that the student is trying their best even if their writing or learning is poor. I don't think kids start out trying to do badly. If a student has someone to help as their partner to learn, it will make them try even harder and not be afraid to fail. That's the only way kids will learn to be successful learners.

Tape Recorder: This is valuable in learning. It lets the student express their ideas freely and without the hindrance of writing. The problem with this for note taking or expressing ideas are several. One cannot easily access notes or ideas without a lot of time replaying the tape. Also, when expressing ideas, the student has no product to edit and cannot learn to improve spelling, punctuation, grammar or idea flow. I have found this tool very useful in small assignments such as homework.

Computer/portable keyboard: The computer is a good tool and overcomes all the difficulties experienced in using the tape recorder. Unfortunately it hinders the idea flow because you have to think about spelling, letter sequences. and finding the right keys

Power Secretary: The Power Secretary is a combination of the computer and a tape recorder. It is only a minor hindrance to idea flow and can be time effective because the student does not have to worry about spelling and typing. Your ideas come out on paper so you can edit your work.

FM System: This system focuses the student's attention on the speaker. For students who have hearing and/or attention problems it is very effective. The problem comes in the FM waves being susceptible to static and that can be distracting in and of itself. Also the equipment is sort of fragile and needs to be repaired often.

Documenting Validity in Facilitated Communication: Research and Application

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Importance

Individuals with severe communication disabilities are perhaps the most vulnerable among us. Over the past few years, the method of facilitated communication has been developed to assist these individuals who often have no other avenue for communication of even their most basic needs. With the assistance of a facilitator to steady or support their arm, users of facilitated communication can express their thoughts and needs by typing out words or pointing to symbols or objects. Because of the nature of the method and the unexpected competence some individuals with disabilities demonstrate through their facilitated communication, questions of validity are common. Validity concerns are, in fact, appropriate and should lead to the documentation of each individual's use of facilitated communication and their communication growth using the method. Responsible use of this method must include documentation of the facilitated communication speaker's validity. Not to do so could allow inappropriate facilitator influence to affect the speaker's communication.

Many issues have arisen in regard to the appropriateness of facilitated communication validity documentation. In this presenter's experience (as well as in the research literature) poor performance on confrontational testing involving specific word retrieval skills has led to the discontinuance of the use of facilitated communication with certain individuals. However, under different conditions, in context or conversational formats, the same individuals may be able to document the validity of their communication.

The complex nature of appropriate documentation of facilitated communication and indeed the fragile and inconsistent ability of many facilitated communication speakers' use of the method demands an intense scrutiny of each individual's use of the method in order to insure that the speaker's right to authentic communication are protected.

Methods

This presentation examines research which documents the validity of the facilitated communication of three individuals with autism and mental retardation. A message passing format was used in order to best simulate the natural conditions under which facilitated communication occurs for the speakers.

Conversations with facilitated communication users were documented and analyzed for disclosure of information unknown to the facilitator. Despite the fact that each of the participants was able to demonstrate authentic communication, their performance was inconsistent. Many factors such as language and memory impairments, situational stressors, frustration and behavioral difficulties appear to influence the speaker's communicative ability. Stress and anxiety of the speaker and the facilitator also appear to impact on the communication outcome.

Within the research context, conversations were analyzed to discover what factors generally lead to the disclosure of unknown information to the facilitator. Repeated opportunities, facilitator redirection, encouragement, and control over choice of conversational content appear to positively influence the individual's ability to demonstrate authentic communication through facilitation.

Analysis of incorrect responses within conversational content also provide rich data which may further the understancing of factors interfering with consistent communication abilities. Participants in the study struggled with perseveration, tangential thoughts, and automatic closure

responses which negatively impacted on their communication. Each of the participants was interviewed and their own thoughts of perceptual overload, memory difficulties and lack of confidence in the facilitator shed light on relevant factors from the user's viewpoint.

Application

In this presentation, video displays will be used to demonstrate the factors which positively and negatively influence the ability of individuals to demonstrate valid facilitated communication. Examples of how to best design situations which enhance the individual's ability to communicate will be discussed as will the nature of positive and negative facilitator influences.

Portfolios are a vital tool in assessing and documenting not only an individual's valid use of facilitated communication, but can also lead to program planning and goal development for IEP's. Specific delineation of "confidence levels" of valid communication will be presented.

Participants in this presentation will learn how to develop a facilitated communication portfolio which will be productive not only in documenting a level of validity of the facilitated communication speaker, but may also be useful in directing program planning to even further improve the individual's communication skills.

Motivating the Hard to Reach Student: Methods for Improving the Literacy of Adolescents with Learning, Emotional, and Behavioral Disabilities

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Importance:

A majority of students in the middle and high school levels are not performing to the best of their abilities in the literacy areas. Often this occurence is due not to a lack of ability to read or write, but rather to their unique learning, emotional, and behavioral needs. This presentation will address the needs of those students who have the capability of succeeding with reading and writing, but are blocked from this success by their unique learning, emotional, and behavioral needs. More specifically, this presentation will address the impact of these needs in reading and writing, and how to use them as building blocks toward reaching goals. This presentation will address the issue of students' attitudes towards literacy learning. It is often less of a risk to prove to the adults that they can't read or write through avoidance, rather than the risk of trying and not being able to succeed. Most of these students have a past history of failure in reading and writing that impinges upon their performance in their current classrooms. Teachers of adolescents are the agents for change in this area. By addressing their self-efficacy attitudes, a change for the better could be made that will affect how they approach reading and writing from then on. Parents and other adults involved with the student can also act as agents for change in this process by encouraging, supporting, and promoting any movement toward better literacy learning. The most important need is to find strengths within these students to use as a vehicle to improve literacy learning. These strengths need to come out of their expressed interests and demonstrated successes to be most effective.

Method:

Through example case studies of students with various learning, emotional, and behavioral needs, a framework for finding students' unique interests, working with those interests in a mode that is comfortable for them but that will at the same time push them up the ladder of literacy will be demonstrated. This framework includes the "basic tenets" for setting up this environment within a classroom: 1.) students' interests are what you work with, 2.) any reading or writing they do is acceptable, 3.) despite their age, students need to go through the same stages of reading and writing development that younger students go through , 4.) work with what the students give you, and 5.) a classroom atmosphere that demonstrates that no matter what the students do, you will accept their reading and writing and use it to help them learn. This will be done through descriptions of students and their needs, copies of their work in writing and through pictures, as well as examples of materials used within these cases.

Student cases such as Joe will be presented: Joe was a sixteen year old, bilingual high school sophomore whom I met in a psychiatric hospital setting. Joe entered the classroom on his first day and made statements of refusal to work that he viewed as "baby-stuff". Joe sat down at one end of the classroom and demanded to be given "the hardest thing you got to read."

Application:

This presentation will demonstrate how the "basic tenets" for setting up a classroom atmosphere that promotes literacy learning can be used. The rules will be demonstrated within the example cases, where they come into contact with real students; students that resemble others seen in many classrooms. Teachers that are working towards improving literacy learning with their students can use these rules as a guide to answer this question: Ultimately, what is the main goal for each one of the students in my classroom? All students with learning, emotional, and behavioral needs benefit from a classroom that exemplifies the acceptance of small improvements in literacy, student interests, and current performance abilities.

Designing Computer Generated/Multi-Sensory Materials for Teaching Reading and Writing Through Word Families

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Importance

I remember a few years ago leaving my daughter's annual appointment with her neuropsychologist with new bits of information gleaned through testing that helped us determine where she was educationally and developmentally.

Born with Down syndrome, Ashley, now 12 years old, had open heart surgery at 2 and 1/2 years of age to correct a severe congenital heart defect. Serious complications occurred which left Ashley with brain damage that, at a minimum, affected her vision and ability to speak.

Unable to effectively expressive herself verbally because of expressive aphasia, Ashley was able to demonstrate during the testing her ability to read some simple words by representing her comprehension through sign language. While her acquisition of literacy was encouraging, I knew she needed a systematic approach to move her from a simple sight word vocabulary to meaningful and functional literacy. The neuropsychologist recommended "word families."

I left the appointment realizing that teaching her word families could be her "ticket" to literacy. Then through all the enthusiasm, it suddenly dawned on me: how would I teach word families to a child who cannot speak, has significant visual issues, cannot write independently, and does not yet have the ability to use a keyboard? And, more importantly, because of all these issues, once a method was designed, how would I be able to determine if the approach was working given the fact that she would have a difficult time demonstrating her comprehension verbally like most children? That was the challenge ahead.

Methods

Ashley had many strengths: she was able to match objects very well and was quite proficient at lotto; she understood that an icon could represent a concept, action or thought; she could receptively identify the letters of the alphabet; and, she had exhibited a better retention of activities which were paired with a motor activity. The problems related to her vision could be overcome by the size of prompts, by providing higher contrast (such as, black on white), and by positioning. She learned best visually but could learn auditorily with much needed repetition. She needed a multi-sensory approach which minimized the impact of her disabilities.

Using plastic letter manipulatives that are approximately 1 1/4" in height, I first designed materials on the computer which closely matched the plastic letters in size, color, and design. Ashley could place the plastic letters with one to one correspondence onto printed text. Although she did quite well with the materials, it was clear that the slight difference in the text design was bothersome to her. Some children might not be able to move on with the process of learning, but remain "stuck" on the differences rather than focusing on the sameness.

Next, I decided to design a computer generated font which exactly matched the plastic letter manipulatives to eliminate the variable of the difference in text design. I received permission from Lakeshore® Educational Materials who markets the Lakeshore Letter Jar to design such a font. Loaded into a computer's system folder, the font could be selected just like Helvetica, or Times, which I am using to type this document. And the color of the text could be adjusted to closely

match the blue color of the lowercase plastic letters or the red of the uppercase letters in a paint program or by choosing "text color" in a word processing program.

Additionally, I designed fonts which were "dashed lines" to provide a "guide" for writing selected targeted words. These fonts could provide the necessary size by adjusting the text size in any text program, such as ClarisWorks or Word. The fonts were designed in a number of different ways to accommodate the different learning styles of various children, including a manuscript font which prints out on "lined paper" and one which provides directional arrows for letter strokes.

Materials were designed for 58 different 2 letter word families (example: -at, -op) and 3 letter word families (example: -ick, -ate). Four simple target words for each word family were chosen. Materials provided the additional visual prompt of an icon chosen from Mayer-Johnson's Boardmaker™ software. (Boardmaker™ is a "graphics database containing over 3,000 Picture Communication Symbols in bitmapped clip art form.") For icons which were unavailable, I drew these in a computer drawing program for incorporation into the materials. For augmentative communication users with icon based systems, there is an inherent advantage to using the same set of icons for their instructional materials as their augmentative communication device since generalization can be challenging for many children with disabilities.

To the right of the icon, the text of each target word was typed with the font which matched the plastic letter manipulatives. The beginning of the word was typed in blue to match the letters while the root ending of the word family was typed in black to reinforce the pattern. Additionally, the first page of the set of materials was designed so that it could be cut apart and placed on Language Master® cards for use with an auditory card reader for auditory feedback. Subsequent pages faded the prompt toward the independent spelling of the target words with the Boardmaker icon as a cue.

Finally, the dashed line font allowed for the design of pages to practice writing the words in simple manuscript.

Application

Provided the letters to place on the target words, Ashley is instructed to place them from left to right on the corresponding text. When given unnecessary letters, she is now able to mentally eliminate letters which do not fit into the set and physically remove the unnecessary manipulatives before beginning the lesson.

Visual phonics are used to help her "decode" the word and an explanation or definition of the word is provided when necessary. And, by fading the prompt, we can determine at what point the "decoding" is breaking down: has she established the pattern of the root ending; is she seeing only the first letter of the word; does she have trouble with 2 or more consonants paired with a root ending rather than a single consonant, such as c-l-a-p versus c-a-p?

Placing the plastic letters provides the motoric input, as does the handwriting activity. With the future commercial availability of these special fonts, along with a computer, and color printer, additional materials can be designed by parents, teachers, and professionals to reinforce the word family concept or support the acquisition of new spelling words.

School has had great success implementing this process both in an inclusive setting and in a resource room. Her teacher shared with me recently the day of a spelling test in her resource room. Having completed the materials for the "-at family," the word m-a-t was dashed on the blackboard for a class "spelling bee." Ashley came to the board, traced over the word, read it and said "mat", scored herself a point, and sat down. Now that's multi-sensory!

Who?What?How? Achieving Literacy For All

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Importance

WHO?

Deerfield Public Schools (School District 109) is located 20 miles north of Chicago, Illinois. It has four (4) elementary buildings and two (2) junior high buildings. The total enrollment for the 1995/96 school year was 2500. Approximately ten (10) to twelve (12) percent of the student population is identified as having a special education needs requiring assistance. The total number of students with Individualized Education Plans (IEPs) is 385. These students have a variety of needs including but not limited to:

- Down Syndrome
- Autism/PDD
- Mental Impairments
- Physical Disabilities
- Learning Disabilities
- Emotional Disabilities
- Attention Deficit Disorder
- Multiple Handicaps

The audience for this session includes:

- Regular classroom teachers
- Special education teachers
- Speech and language therapists
- Administrators
- Inclusion facilitators
- Parents

This topic is important because it provides a framework for addressing literacy instruction for students with a wide variety of needs. The main issues addressed are how to formally and informally assess literacy and develop a systematic literacy program incorporated into a regular classroom. Literacy is an integral focus of programming for all students with special needs. Techniques and assistive technology are used during instruction. Case study examples will be provided to demonstrate improved literacy learning.

Methods

WHAT?

Literacy assessment is modified to meet a student's individual needs. A variety of different assessment techniques will be described:

- Adapted Concepts about Print (Marie Clay)
- Curriculum -based measures
- Basic Reading Inventory
- Adapted Durrell Reading Analysis
- Developmental Spelling Test (Darrell Morris)
- Project Prevent Assessment (National Louis University)

Based on a student's skill level, an appropriate literacy program is developed. A combination of instructional programs exists. The following frameworks will be described:

- Project Prevent (National Louis University's) based upon Reading Recovery
- Individualized Instructional Programs (use of assistive technology {light and high technology} to teach literacy skills)
- Integration into Pegasus Reading Program (district curriculum)

Three case studies will be used to explain the assessment and instructional framework which documents improvements in literacy skills development.

- One 1st grade student with Down Syndrome.
- One 4th grade student with a mental impairment.
- One 1st grade student with Autism.

These three students have very different levels of literacy development. All of them use assistive technology as an integral part of their literacy instruction. Materials, techniques and resources will be shared.

Application

HOW?

The case studies presented will include an overview of each student, how literacy skills were assessed, and concrete examples of activities used daily. The participants' variety of learning styles will be addressed through incorporating a combination of lecture, slides, overheads, hands-on materials, and assistive technology. Participants will gain knowledge about how to begin assessment and instructional strategies needed to work with students who have significant impairments.

The unique nature of this presentation is that regular and special education staff will be co-presenting. Inclusion practices and co-teaching concepts incorporated in a literacy program will be described. The regular education teacher will discuss her perspective on including a student with a significant impairment. The five level problem solving method used in District 109 will be shared to give the audience a framework for addressing difficulties they may encounter. A question/answer time will be allotted.

A Validated Case Study of Facilitated Communication

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Importance

Recent evidence has been reported by a number of investigators which has implied that individuals previously diagnosed with significant developmental disabilities -- including profound mental retardation secondary to cerebral palsy, autism, and other related disorders -- may have remarkable literacy and intellectual abilities that have been masked by their disabilities (Biklen, 1990; 1992; Biklen & Schubert, 1991; Calculator & Singer, 1992; Cardinal, Hansen, & Wakeham, 1996; Crossley, 1992; Crossley & Remington-Gurney, 1992; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Vasquez, 1994; Weiss, Wagner, & Bauman, 1996). These competencies were reportedly demonstrated by means of "Facilitated Communication" (FC) - a method of communication in which a "facilitator" holds the hand, wrist, arm, or in some cases only touches the shoulder, of the individual who spells out his or her thoughts on a keyboard or alphabet board. A small number of individuals who have demonstrated this surprising literacy have been reported to become subsequently independent in their ability to express themselves through these augmentative methods (Karp, 1993; Karp, Biklen, & Chadwick, 1993). However, the majority of individuals who are believed to be valid communicators via facilitated communication require on-going physical assistance in their use of the keyboard. The need for physical support, combined with apparent unexpected and remarkable literacy, has resulted in much controversy around the true source of the communication; are the disabled individuals actually communicating or are their responses consciously or unconsciously being influenced by the person offering the physical support?

Several empirical studies have shown significant facilitator influence in many cases (c.f. Green & Shane, 1995; Jacobson, Mulick, & Schwartz, 1995; Rimland and Green, 1993; Shane, 1994). However, in a small number of cases, evidence indicated that FC may be a valid means of communication for some disabled individuals (Cardinal, Hansen, & Wakeham, 1996; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Karp, 1993; Queensland Report on Facilitated Communication, 1993; Rimland and Green, 1993; Sheehan, 1993; Sheehan & Matuozzi, 1994; Vasquez, 1994; Weiss, Wagner, & Bauman, 1996), and this evidence demands further exploration of this phenomenon. The following account offers evidence of valid facilitated communication in two of three independent information-passing procedures from a 13-year old boy diagnosed with autism.

Methods

Kenny was a 13-year 7-month old boy at the date of the first test trial. His developmental status independent of his performance with FC was characterized by a diagnosis of autism, severe mental retardation, and a history of seizures. His most recent formal psychological evaluation found a Full Scale IQ of 31 (36-month age equivalence) on the Stanford-Binet. Results on the Vineland Adaptive Behavior Scales ranged from an 8-month age equivalence on the "Socialization" sub-scale to a 25-month age equivalence on the "Daily Living Skills" sub-scale. These scores either held constant or improved slightly when the Vineland was re-administered 16-months later, and again when Kenny was 15-years and 9-months of age, but never exceeded an age-equivalence of 30-months on any sub-scale. Kenny's verbal production at the time of the FC testing procedures was almost entirely echolalic, perseverative, and/or self-stimulatory in nature (he would often repeat words such as "fishy-fishy" or "NBIS-NBIS" (the acronym of a local bank), with no apparent meaning attached to these utterances). He had fewer than 10 words which were occasionally used functionally (i.e., he would say "soup" when hungry, call out "daddy" when trying to gain adults' attention, etc.). These words were neither used frequently nor precisely. Prior to the introduction of FC, the only evidence of literacy was when he was inconsistently able to say aloud brand names of products when he saw the logo or labels, such as "Old Milwaukee", "Honda", "McDonald's", and others. However, his ability to identify these words seemed to decrease precipitously when they were typed or written independently of the actual label or logo.

The validation procedures involved: (I) reading a short story to the boy with the uninformed facilitator out of the room; (ii) a consolidation phase in which the boy was presented with questions about the story by the experimenter who originally read the story to him; and (iii) the test phase in which the boy answered questions about the story with physical support given by the uninformed facilitator. The second and third trials involved the presence of third party "referees," whose presence offered independent verification of the procedures and results. The third session was observed and filmed by a television production team from Medical News Network (a Cable TV news service pursuing a story about FC), offering clear documentation of the participants developmental status, experimental procedures, and results.

Results

Kenny was highly accurate in his responses to questions during the first and third trials with the physical support of an uninformed facilitator. During trial 1, there were three characters in the story and each were named precisely ("DADDDY, MA%TT, JIMMY"), as was the game played ("GBASEBALL"), the location of the game ("UINTHE HOUSE"), and events that took place during the game ("THEY BROKE A LAMP"). Results from Trial 3 showed similarly high levels of precision. Kenny named the characters in the story ("MO¢THER...T¢@WO BROITHERS") with one incorrect name ("BOB JIM" were named, the correct responses were '*Tom* and Jim'). All other responses were precisely accurate including the object of desire in the story ("A BEBE GGUN"), how the object was procured ("TRADED BAASEBALL CARDS"), and the subsequent events ("SHOT IT IN TH#E HOUSE", "BROKE A WINDOOW"). Only responses during trial 2 were inaccurate, unclear, or incorrect to the questions posed.

To fully appreciate the accuracy of these responses, it is useful to recognize that the

probability of "guessing" any correct answer (by the uninformed facilitator) is 1 divided by the number of possible responses(or 1/Number of Responses). Thus, to the question of "who was in the story". there could be literally hundreds of possible responses, with a corresponding probability of "1/hundreds". This is likewise the case with other questions such as "what game did they play (Trial 1)?" (i.e., 'Monopoly', 'Nintendo', 'football', 'chess', 'basketball', 'pool', 'darts', 'duck-duck-goose', 'baseball', etc.), or to the question "somebody wanted something real bad in the story. What did they want (Trial 3)?" (i.e., 'a girl friend', 'more money', 'an 'A' on their report card', 'a new car', 'something to eat/drink', 'a B-B gun', etc.). If we hypothetically assume that there could be 100 plausible answers to these questions, the a priori probability of "guessing" three correct answers is equal to $1/100 * 1/100 * 1/100 = P < .000001$.

Application

Kenny's performance during this study strongly indicated that he, not his uninformed facilitator, was the source of answers to questions posed to him, at least during Trials 1 and 3. Moreover, it was demonstrated in this study that Kenny was using at least simple inferential abilities to answer, not a form of hyperlexia (Goldberg, 1987), or a learned motor response. He also demonstrated evidence of a phonemic transformation and a high level of precision in spelling out his answers, indicative of a phonological system of spelling. Also, some of the responses during testing with an uninformed facilitator implied logical inferences, conjectured extrapolations on a story, and an abstracted ordering in his memory of story elements. These responses are remarkable in light of his performance without the use of facilitated communication (i.e., a Stanford-Binet IQ of 31).

It is tempting to offer conjecture about why this procedure or these individuals were able to reveal valid communication with FC. However, we find it far too premature to draw any such conclusions. Rather, we would like to highlight a small number of factors that may have been relevant, for others to consider. First, there were several conversations among family and professional staff working with Kenny regarding validation from the outset. Kenny was in a climate that urged for validation from his earliest use of FC, and experimentally controlled validation was a priority throughout. Second, Kenny and his facilitator had been working together for approximately 30-hours weekly for 15-months prior to the first experimental session. During this time Kenny was involved in a regular education curricula in which he allegedly took the typical numerous tests given to 6th and 7th graders. The facilitator reported that she often was facilitating Kenny with examination materials that was unfamiliar to her. It may be that these incidental situations offered repeated practice opportunities for pseudo-validation testing.

Third, and related to repeated practice, prior to the current protocol we set up a number of preliminary opportunities for Kenny to pass information between home and school that were initially unsuccessful. But, Kenny began showing valid, though anecdotal, evidence of information passing with repeated opportunities (see Weiss & Wagner, in press, for an expanded account of the events leading up to these validation procedures). No conclusions were drawn from a single testing. Rather, repeating test sessions was emphasized, and no apparent pressure was brought to bear in any one session. Practice with the information passing strategy may be necessary; a conclusion that is supported by Cardinal, et al. (1996).

Fourth, Kenny was always required to look at the keyboard whenever using FC. When he would look away, the facilitator stopped offering the physical support as a natural consequence, and redirected Kenny's attention back to the keyboard. By time we were conducting this protocol, Kenny rarely would look away from the keyboard while being facilitated. Fifth, the test probe information relied on stories with several names, places, and events. Hence, there was a wider scope of answers that could be rendered indicative of valid responding, without a requirement of any one particular answer. Moreover, there were story-lines to follow, rather than a series of disconnected and individual target responses.

Sixth, no distractor conditions were employed in which the facilitator and Kenny were receiving differing information, common in other procedures (c.f., Jacobson, Mulick, & Schwartz, 1995). The reason that we avoided a distractor-type procedure was that it would be dissimilar from the common use of FC. We believed it prudent and necessary to not tamper with the phenomenon as it was reported to exist; at least, not yet. Rather, we felt it necessary to begin with a protocol that allowed for a typical interaction between Kenny and the facilitator, with modifications such as distractor conditions to follow later.

Finally, we only used one facilitator during the test phases. Indeed, we were only interested in studying the team of Kenny and his facilitator in that we did not want to introduce uncontrolled error variance that may be associated with multiple facilitators. As our database of validated sessions grows, we will want to test both Kenny with a new facilitator, and Kenny's current facilitator with other individuals alleged to us FC.

Kenny's experience during this study strongly implied that he is at least one individual with whom FC appears to be a valid method of communication. However, the extent to which these data generalize, either to other instances of Kenny's communication or to other disabled persons, requires further study. That FC can exist does not imply that it is always operative. Witness the fact that in Trial 2, Kenny did not show valid communication. Therefore, had Trial 2 been the only trial administered, we would have concluded that FC was not a valid form of communication. Results from this study demonstrate that FC can be a valid form of communication, but it remains unclear to which variables are necessary for the phenomenon to appear. While this is not the only reported case of some form of validated communication using FC (Calculator & Singer, 1992; Cardinal, et al., 1996; Heckler, 1994; Intellectual Disabilities Review Panel, 1989; Queensland Report on Facilitated Communication, 1993; Rimland and Green, 1993; Sheehan, 1993; Sheehan & Matuozzi, 1994; Vasquez, 1994; Weiss, et al., 1996), the number of carefully documented case reports remains small. However, contrary to the widely held opinion that there is no valid support (c.f., Jacobson, et. al., 1995), it is reasonable to conclude from the data already available that the phenomenon of FC does exist in some fashion with as yet unspecified incidence, validity, or reliability. Further exploration of the FC phenomenon including in depth studies of each reported case, as well as close scrutiny of the facilitators who participated in validated cases, is paramount to our further understanding of this technique, the literacy potential for others, and the neurologic impairments of those who use it with apparent success.

Call for Proposals: Sixth Symposium on Literacy and Disabilities

High Tech Literacy

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Program strand: augmentative and alternative communication and other assistive technologies

Importance:

The importance of discussing methods to provide access to literacy activities for students with disabilities through technology relates directly to including students with diverse learning needs in inclusionary classroom settings. While many more students with disabilities are being included, the gap between the development of literacy skills for many of these students remains wide especially for students with augmentative communication needs. Students may be placed in the regular education classroom with access to technology and a teaching assistant; however this placement does not necessarily result in total participation in classroom literacy activities with peers. It often results in continued isolation, both in relation to the physical location of the student and his/her technology in the classroom as well as with regards to the types of educational activities in which the student is engaged. Many students continue to work in isolation with their teaching assistant away from the other students, on goals and activities that do not promote literacy skills and often deter the student's motivation and interest.

This presentation will focus on specific examples for increasing the written literacy skills of students with disabilities through the use of assistive technology. Examples will be demonstrated that emphasize a continuum of skills for a variety of ages and skill levels, and will include students with physical disabilities, communication disabilities, and learning disabilities. It is of specific interest to general and special education teachers, speech and language pathologists, administrative personnel, parents and support personnel. The examples presented will provide ideas and strategies for increasing the literacy skills of students through the use of assistive technology and will focus on correlating learning activities with standard curriculum materials. A direct relationship to literature and written expression will also be addressed through examples of the use of assistive technology.

Methods:

Several different strategies for developing customized files for increasing literacy through the use of assistive technology will be presented. A brief discussion of the development process utilizing standard curriculum and literature materials as a base for customization of files for individual learners will be addressed in the presentation. Of primary concern in developing assistive technology materials for use in promoting literacy are the needs of the individual user. For many students, especially older students, it is often critical to base the development of

materials on their interest rather than the curricular base presented in the middle and high school years. It is important for students with limited literacy abilities who are in the upper elementary grades, middle school or high school levels to have access to the same literary experiences as their peers. This is especially important when novels or other printed materials are popular with peers, such as the "Goosebump" book series. Given that knowledge of these books and their content may become incorporated into peer social interactions, the inclusion of such materials into literacy activities that are age-appropriate for students with disabilities is another strategy for selection and development of materials to promote literacy through assistive technology.

Several software programs will be highlighted through the course of the presentation, based upon the Macintosh platform. Comparable products for the Windows platform will be included in the presentation. These will include but are not limited to Intellitalk, Write OutLoud, MultiMedia Express, Intellipics, HyperStudio, ClickIt, Speaking Dynamically, Discover Create and Ke:nx Create, and Kid Pix. These programs are open-ended in nature and provide instructional staff and parents with a means to create customized files for individual needs. Additional commercial software programs that are available that can assist in the promotion of literacy will be highlighted in written resource materials provided to the participants as well as resources related to assistive technology.

Application:

Participants will leave the presentation with a packet of resources outlining the examples presented, along with graphics that represent overlays created for use in promoting literacy. Additionally, they will leave with ideas and strategies for targeting ways to promote literacy through assistive technology. Some participants may have access to only a few software programs demonstrated; however, the awareness of the participants will have been expanded to allow them to return to their homes and schools with information on resources for use in guiding their future purchases of assistive technology. For those with access to a majority of the tools demonstrated, the ideas shared during the presentation and in the resource handouts will prompt the development of additional customized files for use in literacy enhancement for students with disabilities. Due to the time constraints of the presentation, training on the use of each of the tools demonstrated will be limited. Some participants will leave the presentation with an awareness of the products available for developing literacy materials, while others who have had experience with these tools will leave with additional ideas for their use. Specific questions regarding the steps to complete some of the files demonstrated will be answered by the presentor based upon the audience level .

Of primary concern in creating customized materials using assistive technology by staff and parents alike is the amount of time required to learn to use technology tools and to apply them towards the development of customized files. A brief discussion of resources for increasing the technological skills of the participants will be included in the presentation. Local and national resources will be made available to participants to assist them in identifying ways that they may access training and technical support services. Finally, strategies for maximizing the use of system funds in purchasing the tools demonstrated will be addressed, to allow participants to return to their homes and schools with a mechanism for accessing technology that can promote the development of literacy related skills.

POETIC LITERACY:
Facilitated Poetry Writing For Students With Special Needs (Part 2)

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Importance

Basho said to know a tree you must go to a tree. If you really want to do poetry on Monday morning with your students, the best way to be prepared is by validating yourself as a poet today. In this workshop we address the needs of teachers and therapists who will benefit from experiencing the facilitated poetry writing process as a way of learning it. Participants will be invited to explore their own poetic nature. We teach reading by being literate human beings. We will teach poetry most authentically by bringing our students our own struggles and successes with poetry. Even if you don't create a poem today, you will at least bring your students back a story about having the courage to try something new. You might even go back with a story and a poem!

Educators can bring this to reading and writing venues and can use it to link emotional health and self-expression with a variety of poetic formats. Speech-language therapists will find this an invaluable context for concept development, vocabulary skills, association skills, use of metaphoric language, phonology development, and listening skills.

Methods

Using a set of specific techniques, participants learn strategies for reading poetry aloud. Following this immersion, participants are taken through the process of Facilitated Poetry Writing (FPW) and learn to become facilitators of poetry by writing their own poetry. We use immersion to make it clear that reading is one part of the cycle of language which includes speaking and writing

Part One

The read-aloud section of the workshop is based in the philosophy that people must be exposed to the excitement, passion, and drama of poetry before they can connect with their own muse. An overview of oral poetry reading strategies ensues. The overlapping domains of semantics, sound, paralinguistics, and dramatics are briefly discussed in terms of Pitch, Volume, and Rate and Poetic Intent. (Yes, all this in 5 minutes.) (You should see our synopsis of Western Civilization!)

To summarize, this would include:

Pitch- evoking melody; highs and lows; tonal quality; musical range;
Volume- evoking dynamics; louds and softs,which tend to be long/short stresses;
Rate- evoking tempo and rhythm with duration;
-duration on a word/syllable
-duration in between words/syllables
-overall speed of the reading.
Poetic Intent- the meaning that we find in the poem for us as individuals and how we express that and bring the poem to life.

Part Two

This section of the workshop consists of poetry readings which will introduce participants to a rich and varied body of accessible, quality poetry. It will also allow the presenters to model for them the oral presentation skills discussed in the opening of the workshop. Brief discussion follows each reading to discuss issues of interpretation, teaching students to find personal meaning in poetry, and stories from our own experiences of using these poems in educational settings with students carrying labels such as Cerebral Palsied, Autistic, Emotionally Disturbed, Mentally Retarded, and or having multiple disabling labels.

In fact, several of the poems presented have been written by these students, and speak directly about the experience of carrying these labels. The poem that follows was a collaborative work by two students, one labeled autistic and the other labeled emotionally disturbed. It was written for the occasion of a school Open House; thus, the title.

HOPEN HOUSE

autistic
cerebral palsied
emotionally handicapped
multipli-handicapped
NO!
A humanbeing not a retard
going, doing, feeling
frustrated, agitated,
killing
the feelings
(hate) no more
labels
just us

Part Three

The Facilitated Poetry Writing © (FPW) process is designed to explore a new vision of poetry writing as an art form which is as much a part of our lives as is talking and thinking.

Facilitators present an overview of the FPW process in the workshop. Emphasis is on the process, in which facilitators and participants learn and create together. We will take participants through this process and in doing so will teach them to do this work with their students.

Presenters engage participants in a brainstorming session to select a topic and, through the use of focusing questions, facilitate ever deeper and broader access to their linguistic, cognitive, and emotional schemæ. Topics are individually or co-created according to the needs and interests of the participants. Our intent in this workshop is to invite poet-participants to explore personal and poetic connections to their own experience of disability. We teach that in writing poetry the poet must write from their own passions, giving a voice to the whole experience of their lives.

Words and phrases from brainstorming are elaborated into stanzas which are then used to build a poetic statement which elaborates the chosen topic. Presenters act as facilitators and scribes. Strategies for validating each participant's voice are modeled.

Critique of the first draft is both modeled and experienced through the use of peer conferences and group share techniques.

A second draft is written, individually or collaboratively. At this juncture in the workshop, individual visions of the poem often emerge. These poems are shared.

Part Four

Synopsis of process and questions. We will review the techniques that we have used for facilitating the group poetry and discuss the role of the facilitator. Student scenarios, samples and strategies from experiences with students with a wide variety of disabling labels will be presented. Examples of poetry developed using Facilitated Communication and picture symbol communication boards will be shared and discussed.

Application

Participants will return to their classroom with poems to read which are specific to the lives of young men and women with developmental disabilities. They will also have been exposed to and have practiced the immersion strategies needed to read them well. Participants will return to their classrooms with an awareness about Found Poetry. They will view their classrooms with new eyes with which to see the poetic moments that have

doubtless been there all along. They will know poetry as a valuable genre for literacy and language development.

It would be enough if people were to go back to their classrooms seeing poetry as a viable genre which their students might enjoy. We assert that this workshop will provide the opportunity to go beyond viability, to make poetry an essential component of a literacy program, which will in turn increase motivation to read and to write.

"Let's Read a Story": Using Augmentative and Alternative Communication During Storybook Interactions

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Importance

Young children are often read stories as part of their daily routines. These story readings are an important component of language and literacy development. For young children who are not able to use speech to meet their communication needs, story reading experiences may be different than those of children who speak (Pierce & McWilliam, 1993; Light, Binger, & Kelford Smith, 1994). Children who use alternative and augmentative communication (AAC) systems may need adaptations so they can fully participate in storybook interactions.

Consequently, children who use AAC are increasingly provided with communication storyboards to increase their participation in storybook interactions. These storyboards provide children with a symbolic form of communication during storybook interactions. In addition to communication storyboards, communication partners can provide opportunities for communication and use instructional strategies that facilitate development of communication and language.

Instructional strategies that focus on the input provided to individuals with severe communication disorders are becoming more common in the field of AAC (Beukelman & Garrett, 1988; Goossens', 1989; Romski & Sevcik, 1992; Romski & Sevcik, 1993). Techniques that provide additional input are provided to a variety of individuals using AAC including adults with acquired language disorders, individuals with severe cognitive impairments, and young children who use AAC (Beukelman & Garrett, 1988; Goossens', 1989; Romski & Sevcik, 1992; Romski & Sevcik, 1993). One method of augmented input involves communication partners integrating the use of AAC devices and displays into their own spoken language communication (Romski & Sevcik, 1992; Goossens', 1989). This techniques allows young children to see graphic symbols used interactively by communication partners (Goossens', 1989).

Although previous research has demonstrated the potential benefits of communication storyboards for improving the storybook interactions of children with severe communication impairments (O'Rourke, Bedrosian, & Light, 1993; Kovach & Moore, 1993), to date there is limited information on the benefits of augmented input in storybook interactions with children.

This session will provide data on the use of communication boards and augmented input with children who have severe communication disorders. This information is important to children who are developing language and literacy as they are learning to use AAC systems. The session will be of interest to all individuals who read stories with children who use AAC including parents, educators and speech-language pathologists.

Methods

The session will present research findings of a study that investigated the effects of storyboards and augmented input on the storybook interactions of children with severe communication disorders. Four children participated in the study. All of the these children were able to identify a minimum of 80% of objects related to the stories presented in the study and demonstrated the ability to identify a black and white line drawing when presented with a verbal label. However, the children were not familiar with all of the black and white line drawings used in the storybook interactions.

The four children were individually read stories by a communication partner in three different conditions. In condition one, no communication storyboards were made available to the children. In condition two, communication storyboards with graphic line drawings were made available to the children. The line drawings consisted of objects and actions relevant to the story as well as vocabulary to direct the storybook interactions (e.g. "turn the page"). In the third condition, the children were provided a communication storyboard and the communication partner provided augmented input while reading the

story (e.g. the communication partner pointed to available graphic symbols while verbalizing the words in the story). During all three conditions, pausing was incorporated into storybook interactions to provide children with opportunities to communicate. The role of the communication partner was scripted to provide children opportunities to comment about the stories, answer questions about the stories, and direct the storybook interactions. Both nonobligatory and obligatory turns were provided to the children in all three conditions.

The children's correct responses to questions asked during the stories were recorded. In addition, communication attempts made during the story reading interactions were video recorded. Modalities of communication recorded included verbalizations, vocalizations, gestures, signs, pointing to book, and use of the communication storyboards. Results were examined in terms of the children's ability to correctly respond to questions about the stories, the number of communicative attempts that children made during the story reading interactions, and the use of multiple modalities during storybook interactions.

The session will report on the findings from the study and implications for clinical practice and future research.

Application

This research session will provide participants with information about the use of augmented input techniques during storybook interactions. Participants will also gain knowledge and practical strategies important for communication storyboards use with children who use AAC. Specifically, the session will discuss strategies for facilitating communication and language development during storybook interactions. This will include development and use of communication storyboards with graphic symbols. The session will also discuss the following issues: (1) interaction styles and instructional strategies that provide children with opportunity and motivation to use graphic symbols during storybook interactions, and (2) the importance of viewing AAC as a process that uses multiple modalities. Opportunities for discussion and questions will also be provided.

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Romski, M. A., & Sevcik, R. A. (1992). Developing augmented language in children with severe mental retardation. In S. Warren & J. Reichle (Eds.), Causes and effects in communication and language interventions (pp. 112-130). Baltimore: Brookes

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The Center for Literacy and Disability Studies

PUBLICATIONS LIST

(updated January 6, 1997)

Available from the CLDS resource library
Prices include postage and handling.

1a. Koppenhaver, D. A., & Yoder, D. E. (1988). Independent Reading Practice. Aug-Communique: N.C. Augmentative Communication Association Newsletter, 6 (3), 9-11.

Describes technique of repeated reading of slide-taped books and assessment procedure for children with severe speech and physical impairments. [Photocopy, $1.25.]

2a. Koppenhaver, D. A. (1990). Assessing Developmental Spelling. Aug-Communique: N.C. Augmentative Communication Association Newsletter, 8 (2), 4-5.

Provides rationale and outlines strategy for assessing nonspeaking children's awareness of letter-sound relationships. [Photocopy, $1.00]

3a. Koppenhaver, D. A., Pierce, P. L., Steelman, J. D., & Yoder, D. E. (1991). Enhancing Literacy Learning in Children and Adults. Unpublished manuscript.

Discusses assessment and instruction principles and strategies for preschoolers, school-aged children, and adults who use augmentative communication. [Photocopy, $14.75.]

4a. Coleman, P., Koppenhaver, D. A., & Yoder, D. E. (1991). Emerging Literacy Activities for Preschool Augmentative Communicators. Unpublished manuscript.

Reviews research in the emergent literacy of nondisabled young children and details five assessment and ten intervention strategies for working with young children who use AAC systems. [Photocopy, $8.25.]

5a. Koppenhaver, D. A. (1989). Writing as Problem-Solving: Lessons from a Silent Child. In S. Watson (ed.), Writing in Trust: A Tapestry of Teachers' Voices (pp. 79-84). Raleigh, NC: Southeastern Educational Improvement Laboratory.

Description of mainstream educator's attempt to understand the literacy learning difficulties of a school-aged child with severe speech and physical impairments. Describes use of a close procedure to estimate reading comprehension level and use of repeated readings strategy to enhance reading fluency. [Photocopy, $2.00.]

6a. First Carolina Literacy Symposium: Handouts. (1991, March).

Handouts include: "Literacy and Young Children with Severe Impairments" (P. J. McWiliam and P. P. Coleman), "Literacy and School-Aged Children with Severe Impairments" (D. A. Koppenhaver & D. E. Yoder), "High Tech and Literacy Learning" (J. D. Steelman), and "Linking Literacy and Augmentative Communication" (J. Light). Also 3 pp. of recommended readings. [Photocopy, $10.00. Limited quantities remain.]

7a. Second Carolina Literacy Symposium: Handouts. (1992, February).

Handouts include: "Emerging Literacy and AAC Communicators with Cognitive Impairments" (C. R. Musselwhite), "Adult Literacy," (R. Follansbee & P. Corley), "Critical Issues in Classroom Instruction," (D. A. Koppenhaver and D. E. Yoder), "Writing Strategies," (D. DeCoste), "Promoting Literacy for Adults in the ICF-MR Setting" (G. Hobbins), "Emerging Literacy and Preschoolers with SSPI," (P. P. Coleman & P. J. McWiliam), "Enhancing Written Language through the Use of Computers," (J. D. Steelman). [Photocopy, $13.00. Limited quantities remain.]

8a. Third Carolina Literacy Symposium: Handouts. (1993, March).

Handouts include: "The Emergence of Literacy in Preschool Children with Disabilities" by David Katims, "Literacy Development in AAC Users: Integrating Holistic and Analytic Approaches" by Beth Folly, "Strategies for Beginning Writers with Severe Speech and Physical Impairments" by Denise decussate and Jacquelyn More, "Let's Paint the Picture for Creativity, Communication and Independence" by Pati King-DeBaun, "Storytelling" by Sally Rogow, "Increasing Book Interactions in Visually Impaired Preschoolers" by Lynn Blumenthal, Johanne Paff, and Terry Blumenthal, "The Effect of Opportunities to Communicate Provided by Telecommunications on the Reading and Writing of Adult Augmentative Communicators Who Are Severely Disabled" by Terry Gandell, "Lights! Camera! Action! Incorporating Home-Made Videos and the Whole Language Approach into the Preschool Class, by Beth Waite and Sharon Cesnik, "Writing Strategies and Software for School Aged Children with Developmental Disabilities" by Jane Steelman, "Hypercard: The One-Minute Waltz" by Jane Steelman, "Creating and Writing Stories Using the Minspeak Application Program IEP+" by Joan Bruno, "Adapting the Classroom" by Carol Farrell and Lisa Raymond, "Teaching Single Word Vocabulary with Minspeak Using a Word Retrieval Therapy Approach" by Arlene Badman, "Applications of Assistive Technologies to Improve Literacy Skills in Children Who Use AAC" by David Koppenhaver and Maggie Sauer, "Thomas the Writer: A Case Study of a Child with Severe Physical, Speech, and Visual Impairments" by Doreen Blischak and Orit Hetzroni, "Facilitating Augmentative Communication" by Janis Bing, "Teaching AAC Students to Read and Write: One Teacher's Approach" by Cinda Axley, "Social Context of Literacy with Augmentative and Alternative Communicators" by Ovetta Harris, "Quick Tech Activities for: Literacy" by Peggi McNairn and Cindy Shioleno, "Literacy for Children with Severe and Profound Disabilities: How and Why?" by Karen Erickson, and "The Facilitation of Communication and Literacy Learning in Young AAC Users" by Tracy Kovach and Susan Moore. [Spiral bound copy, $35.00. Limited quantities remain.]

8ab. Fourth Symposium on Literacy and Developmental Disabilities. (1994, June).

Handouts include: symposium presenters list, "Computer Support for Writing Processes" abstract by Charles MacArthur; "Quick Tech: The Literacy Connection" abstract by Peggi McNairn and Cindy Shioleno; "Reading Instruction for School-Aged Students with Developmental Disabilities" by Karen Erickson and David Koppenhaver; "TLC for Preschoolers: Technology for Literacy and Communication" by Amy Staples and Patsy Pierce; "Some Questions (and a Few Answers) about Technology Use in Literacy Instruction for Children with Disabilities" abstract by David Koppenhaver and Karen Erickson; "Technology

to Enhance Literacy Learning in Children with Developmental Disabilities" abstract by Jane Steelman,;"AIM for Literacy: Access, Interaction, Modeling, and Mediation Strategies for Enhancing Emergent Literacy" abstract by Patsy Pierce; "Computers Are Cool, Writing Is Radical: Now I can Write Too" abstract by Amy Staples and Jane Steelman; "Emerging Literacy Development of Preschool Children with Down Syndrome" abstract by Jill Fitzgerald, Patsy Pierce, JoAnne Roberts, and Melanie Schuele; "Changing Classrooms" abstract by Donna Joy; "The American Sign Language (ASL) and Literacy Connection in School-Aged Deaf Children" abstract by Phillip Prinz and Michael Strong; "The Ukandu Interactive Story Series" abstract by Wendy Barnes; "The Use of Environmental Print in Reading Instruction with Students with Developmental Disabilities" abstract by Donna Boudreau; "A Description of a Transition to Work Program for Adolescents with Disabilities" abstract by Marge Dziwulski; "The Delivery of Literacy Services to Persons with Disabilities" abstract by Sarah Blackstone; "Schedules, Stories, and Snack Time" abstract by Karen Erickson; "Can an Electronic Device with Direct Phoneme Output Assist in Developing Literacy" abstract by Walt Woltosz; "Creating a Home Personal Computer Learning Center for Young Children with Developmental Disabilities: A Case Study" abstract by Christine Elizabeth; "Crossing the Bridge to Literacy" abstract by Sarah Baroody, Susan Schonberg, and Christine Toomey; "Imagine This, Imagine That" by William Peet and Libby Peet; "A Reader in the Making...A Case Study from India" by Reena Sen; "Enhancing Adult Literacy through Technology" abstract by Ann Neulicht, Amy Staples, Maggie Sauer, and Saroj Primlani; "I See What You Say" abstract by Carolyn Thompson and Cindy Johnson. [Photocopy, $12.75]

8ac. Fifth Symposium on Literacy and Developmental Disabilities. (1996, January).

Handouts include: abstracts of all presentations and more detailed outlines and information packets including Cunningham & Erickson, "Assessment to Help Use Teach Them All to Read and Write;" Allington & Koppenhaver, "Instruction to Help Them All Read and Write;" Kupperman, "The Syndrome of Hyperlexia;" Gillam, "Beyond the Printed Text: Promoting Meaning Making in Special Needs Learners;" DeCoste, "The Literacy Continuum: Assessment, Reading and Writing Strategies for Children and Adolescents with Cognitive Impairments;" Musselwhite, "Get that Technology Off the Shelf! Using IntelliKeys, PowerPad, Speaking Dynamically and Others to Promote Emergent Writing;" Cloninger, Daniels, & Mulley, "Literacy in Inclusive Settings;" Corley, "The 'Write Tools': Case Studies of Using Technology to Support Writing;" Feit & Hoberman, "IntelliSchool: Strategies for Integrating IntelliTools Products into the Curriculum;" Kraft & Sinteff, "(Lit her at sea): Tales of Student Voyages with DynaVox;" Hogan & Wolf, "Facilitated Poetry Writing: Guidelines for Facilitators;" Woltosz, "Literacy, Assistive Technology, Multimedia, and Windows 95;" Larkin, Gurry, & Canelli, "'i'm Hillary: Can We Talk?' Exploring Inclusion and Emergent Literacy Practices;" Pierce, "The Speech-LANGUAGE Pathologist and Literacy: It Takes 2 to Tango;" Steelman, "It's a Small World After All: Using Telecommunications;" Crosslin & Cummings, "Supporting a Child's Transition When the New Staff Says: 'Really, the Child's Just Fine...I Don't Know How...I Don't Have Time...It's Not My Job;" Murphy & Myers, "Communication, Language, and Emerging Literacy: A Case Study: Using the Macaw to Enable a Young Head Injured Girl;" Koenecke, "Literacy Intervention for Language Acquisition;" Staples & McLellan, "Including Children with Special Nees in Best Practice Literacy Instruction: Some Case Examples;" Balachandram, "Involving High School Students in the Teaching of Literacy Programs of Children with Disabilities;" Slater & Crockett, "Adapt Materials for ss Using Picture It;" King-DeBaun, "Babes in Bookland: Using Stories to Enhance Parent Child Interactions;" Mcllister, Preator, & Bagnato, "Using Precocious Reading Abilities in Interventions for Children with Autism;" Bloomfield & Ryan, "Interactive Materials for Augmentative Communication Users with Autism;" Bedrosian, Roberts, Raap, & Neynaber, "Facilitating Participatory Storybook Reading in Young Children Using AAC Systems." [Photcopy, $40.00.]

9a. Steelman, J. D. (1992). High Tech Literacy Learning: We've Only Just Begun. Unpublished manuscript .

Review and discussion of issues related to the use of computer technology and strategies to enhance literacy learning in children and adults with severe speech and physical impairments. [Photocopy, $6.75.]

10a. Koppenhaver, D.A. (1992, March). Early Written Language Learning and Instruction of AAC Users. Paper presented at the National Institute on Disability and Rehabilitation Research Consensus Validation Conference on Augmentative and Alternative Communication, Arlington, Virginia.

Brief review and discussion of major findings of: (1) emergent literacy research in nondisabled children and children who use AAC; (2) movement of children from emergent into conventional literacy; and (3) the impact of AAC systems on this transition. [Photocopy, $2.50.]

11a. Koppenhaver, D. A. (1992, March). Literacy Issues Related to AAC Intervention. Invited paper submitted as written testimony to the National Institute on Disability and Rehabilitation Research Consensus Validation Conference on Augmentative and Alternative Communication, Arlington, VA.

Review of what is known and needs to be known about literacy learning and use in AAC users.. Paper is organized around an interactive model of the reader-writer contract. Seven major issues are highlighted. [Photocopy, $4.75.]

12a. Steelman, J.D., Coleman, P.P., & Koppenhaver, D.A. (1992, August). Minspeak: A Tool for Developing Literacy. Proceedings of the Annual Minspeak Conference.

Presents ideas and strategies related to use of Minspeak in developing written modes of communication. [Available from Prentke Romich Company, 1022 Heyl Road, Wooster, OH 44691 or photocopy, $4.50.]

13a. Koppenhaver, D.A., & Pierce, P.L. (1992, October). Literacy and AAC: Communicating Every Which Way We Can. Paper presented at the 13th Annual Southeast Augmentative Communications Conference, Birmingham, Alabama.

Presents emergent and conventional literacy intervention and assessment strategies and issues with reference to a contextual model of literacy use emphasizing the multiple sources of potential literacy learning difficulties in children who use AAC systems. [Available in Proceedings of the 13th Annual Southeast Augmentative Conference from Pam Elder, SEAAC, 2430 11th Avenue North, Birmingham, Alabama 35234 or photocopy from CLDS, $9.00.]

14a. Koppenhaver, D. A., Coleman, P., Steelman, J. D., & Yoder, D. F. (1992). The Emergence of Literacy Research in AAC: Methodological Issues and Research Priorities. Paper written for the International Society for Augmentative and Alternative Communication Research Symposium, Philadelphia, Pennsylvania.

Review of nature and methods of research in literacy and AAC. Discusses principal limitations and suggests changes in future studies. [Photocopy, $4.00.]

15a. Koppenhaver, D. A., Yoder, D. E., Pierce, P. L., Staples, A., Stuart, C., Erickson, K. A. (1995). Project WRITE (Writing and Reading Interventions through Technology, Educational Media, and Materials): The Preliminary Phase.

The report from Year 1/Phase 1 of the Project WRITE. Presents and discusses the findings from research as it relates to the primary purposes of: (a) deriving a theory of literacy learning in school settings for children with developmental disabilities; and (b) describing the role of AAC and assistive technology in facilitating or impeding literacy learning. [Photocopy, $12.50]

16a. Koppenhaver, D. A., & Pierce, P. L. (1994). Written Language Development Research in AAC. Paper written for the International Society for Augmentative and Alternative Communication Research Symposium, Maastricht, The Netherlands.

Addresses four questions in regards to AAC users: what is known about written language development; how their written language development compares to nondisabled individuals; what we need to learn about their written language development; and what research designs and methods might lead to richer understanding of written language development in AAC. [Photocopy, $3.00]

17a. Koppenhaver, D.A. & Yoder, D.E. (1990, August). Classroom Interaction, Literacy Acquisition, and Nonspeaking Children with Physical Impairments. Paper presented at the biennial meeting of the ISAAC, Stockholm, Sweden.

Report of microethnographic study of the nature of teacher-student interaction during the production of written compositions. Subjects were three normally intelligent 12-14 year-old boys with severe speech and physical impairments and low literacy skills and their teachers. [Photocopy, $4.75.]

18a. Koppenhaver, D. A., Pierce, P. L., Steelman, J. D., Staples, A. H., Erickson, K. A., & Yoder, D. E. (1994, June). Literacy Issues in Augmentative and Alternative Communication (AAC). Chapel Hill, NC: Center for Literacy and Disability Studies.

Syllabus, overheads, and readings from two-week annual summer course on literacy and AAC offered by the Carolina Literacy Center. 555 pp. [Sold out.]

19a. Dziwulski, M. (1994). Developing Literacy Skills for Persons with Developmental Disabilities: Some Considerations. Chapel Hill, NC: University of North Carolina, Clinical Center for the Study of Development and Learning.

Fundamental principles, assessment, and intervention strategies for promoting emergent and conventional literacy in individuals with developmental disabilities. Includes additional resources and recommended readings. 47 pp. [Bound copy, $10,00, supplies extremely limited]

20a. Staples, A., Heying, K., & McLellan, J. (1995). Project Co:Writer: A study of the effects of word prediction on writing achievements with learning disabilities. Chapel Hill, NC: Center for Literacy and Disability Studies, University of North Carolina at Chapel Hill.

Final report of a study of the impact of Co:Writer software on the writing quality and quantity for 10 elementary school students with learning disabilities. [Photocopy, $6.00]

21a. Pierce, P. L. (1994). Technology Integration into Early Childhood Curricula: Where We've Been, Where We Are, Where We Should Go. Manuscript submitted for publication.

Literature review and synthesis on use of television, computers, and assistive technology with young children. [Photocopy, $16.50.]

22a. Pierce, P. L. (ed.). (1993). Baby Power: A Guide for Families to Use Assistive Technology with Their Infants and Toddlers. Raleigh, NC: Dept. of Human Resources, Div. of DD/MR/SA & Div. of Children and Youth.

A reader-friendly guide to using adaptive equipment when feeding, playing, talking, and reading with infants and toddlers with special needs. Also contains chapters on positioning, mobility, computer use, and family-centered early intervention. [Photocopy, $23.00.]

23a. Erickson, K. A. (1994). Who Are Adults with Developmental Disabilities? Manuscript submitted for publication.

Briefly defines developmental disabilities and discusses legislation as it relates to literacy instruction for adults with disabilities. [Photocopy, $1.00.]

24a. Staples, A. H. (1994). The Center for Literacy and Disability Studies. Manuscript submitted for publication.

Provides an overview of the Center's mission, goals, services, and projects. [Photocopy, $1.50.]

25a. Erickson, K.A. (1996) Adapting a VoicePrint for Switch Access. Directions for making a switch accessible speech output device. Materials available at Walmart and Radioshack. [Photocopy, $1.00]

26a. Koppenhaver, D. A., Coleman, P., Steelman, J. D., & Yoder, D. E. (1991). Enhancing Literacy Learning in Children and Adults. Unpublished manuscript.

Introduction to literacy and a constructive and interactive process. Introductory principles and methods of assessment and instruction for preschoolers, school-aged children, and adults who use AAC are described. [Photocopy, $14.00.]

27a. Johnson, S., & Pierce, P. L. The COMM-BINDER: Communication Booklet to Interact and Develop Emergent Reading. Unpublished directions.

Directions for making an inexpensive, programmable voice-output device with multiple messages for use in literacy activities. Materials available from Radio Shack and discount stores. [Photocopy, $1.00.]

28a. Steelman, J. D., & Schuler, J. (1994). The Gingerbread Man. Interactive Hyper-Book.

Interactive Hyper-Book adaptation of the classic children's tale for the Macintosh. Animation, voice output, text highlighting, and plain backgrounds facilitate beginning readers' attention to text and interest in reading. (Diskette, $24.95.]

29a. Staples, A., & Koppenhaver, D. (1995). Project TILLT: Technology, Interaction, Literacy Learning, and Teaching. Final Report. Unpublished manuscript.

Report summarizing the development and field-testing of a software designed to enable teachers and parents to easily create literacy materials of personal interest and appropriate difficulty for children with disabilities. Software and scanner enable pictures of personal interest to be inserted as picture prompts for discussion and text creation. Software enables reading with and without voice feedback, highlighting of words or sentences as they are read aloud by computer, and revision and editing. Users guide included in report. Software available from the Cent for Literacy and Disability Studies. [Photocopy, $12.30]

30a. Williams, B. (1996). Increasing Literacy: The Greatest Crippler of People with Developmental Disabilities. Videotape.

Keynote lecture delivered at the 5th Symposium on Literacy and Developmental Disabilities by Bob Williams, Commissioner of the Administration on Developmental Disabilities. Speaks from the dual perspective of policymaker and individual with severe speech and physical impairments about the power of literacy to convince others of the individual's capabilities as well as to demonstrate for the individual the power s/he has with literacy. [Videotape, $24.00]

31a. Erickson, K. A., & Koppenhaver, D. A. (1996). The "Write Talk-nology" for Inclusion of a Child with Multiple Disabilites. Manuscript submitted for publication.

Brief case study description of child with severe speech and physical impairments who uses a Dynavox for his face-to-face and written communication needs. Paper describes instructional and technological supports provided to enhance literacy learning in inclusive 4th grade classroom. [Photocopy, $5.00]

32a. Harrison, M. F., & Koppenhaver, D. A. (1996). Teacher Perceptions of Early Literacy Successes and Difficulties in Preschoolers with Hearing Loss. Manuscript submitted for publication.

Report on open-ended responses to two questions from a more extensive national survey of teacher's emergent literacy beliefs and practices in preschool classrooms serving children with hearing loss. Greatest difficulties were largely attributed to within-child or within-family sources, while greatest successes were almost identical to successful practices for typically developing children. The study confirms and expands upon findings of existing case study reports of preschoolers with hearing loss. [Photocopy, $7.00]

33a. Erickson, K. A., & Koppenhaver, D. A. (1996). Should AAC Be Taught as a Separate Curriculum? To appear in the ASHA Division 12 Newsletter.

Provides a brief theoretical and practical rationale for teaching AAC within a balanced literacy curriculum rather than as a separate curriculum. [Photocopy, $1.50]

Available from Academic Libraries or Publisher

1b. Koppenhaver, D. A., Coleman, P., Kalman, S. L., & Yoder, D. E. (1991). The Implications of Emergent Literacy Research for Children with Developmental Disabilities. American Journal of Speech Language Pathology, 1 (1), 38-44.

Reviews research in the emergent literacy of nondisabled children and the home and preschool environments of children with developmental disabilities. Draws implications for parents,. practitioners, and researchers.

2b. Coleman, P. P. (1991). Literacy Lost: A Qualitative Analysis of Literacy Experiences and Young Children with Severe Speech and Physical Impairments. Unpublished doctoral dissertation, University of North Carolina at Chapel Hill.

Reports final results of qualitative study of literacy learning opportunities and experiences provided to preschool-aged children with severe speech and physical impairments in home and preschool settings. Reprints available from Dissertation Abstracts International or inter-library loan.

3b. Koppenhaver, D. A. (1991). A Descriptive Analysis of the Literacy Instruction Provided to Children with Severe Speech and Physical Impairments. Unpublished doctoral dissertation, University of North Carolina at Chapel Hill.

Reports final results of quantitative and qualitative analysis of literacy instruction observed during a year-long study in the classrooms of three children with severe speech and physical impairments. Reprints available from Dissertation Abstracts International or inter-library loan.

4b. Koppenhaver, D. A., & Yoder, D. E. (1992). Literacy Issues in Persons with Severe Speech and Physical Impairments. In R. Gaylord-Ross (Ed.), Research and Issues in Special Education (pp. 156-201). New York: Columbia University, Teachers College Press.

Comprehensive review of the literature. Organized into sections on the extent and causes of literacy learning difficulties, explanations of literacy learning success, effective instructional strategies, principle lines of research, and recommendations for future research. [Available in academic libraries or from Teachers College Press, 1234 Amsterdam Ave., New York, NY 10027.]

5b. Koppenhaver, D. A., & Yoder, D. E. (1992). Literacy Learning of Children with Severe Speech and Physical Impairments in School Settings. Seminars in Speech and Language, 13 (2), 143-153.

Review of studies of literacy learning in school-aged children with severe speech and physical impairments. Particular attention is addressed to home and school environments in which literacy learning occurs. Recommendations for school administrators and special educators conclude the paper. [Available in academic libraries or from Thieme Medical Publishers, 381 Park Ave. S., New York, NY 10016. Reprint available from the CLDS, $4.00.]

6b. Koppenhaver, D. A., & Yoder, D. E. (1993). Classroom Literacy Instruction for Children with Severe Speech and Physical Impairments (SSPI): What is and What Might Be. Topics in Language Disorders , 13 (2), 1-15.

Discussion of the nature of classroom literacy instruction as well as assessment and intervention strategies designed to make instruction more successful and time-efficient. [Available in academic libraries or from Aspen Publishers, 7201 McKinney Circle, Frederick, MD 21701.]

7b. Pierce, P. L., & McWilliam, P. J. (1993). Emerging Literacy and Children with SSPI: Issues and Possible Intervention Strategies. Topics In Language Disorders , 13 (2), 47-57.

Details assessment and intervention issues and strategies drawn from current research in emergent literacy and early intervention. [Available in academic libraries or from Aspen Publishers, 7201 McKinney Circle, Frederick, MD 21701.]

8b. Steelman, J.D., Pierce, P.L., & Koppenhaver, D.A. (1993). The Role of Computers in Promoting Literacy in Children with Severe Speech and Physical Impairment. Topics in Language Disorders , 13 (2), 76-91.

Software selection and computer board instruction ideas for children with SSPI with reference to models of emergent and conventional literacy learning and characteristics of children with SSPI. [Available in academic libraries or from Aspen Publishers, 7201 McKinney Circle, Frederick, MD 21701.]

9b. Yoder, D.E. & Koppenhaver, D.A. (Issue Eds.), (1993). Topics in Language Disorders , 13 (2).

Entire issue devoted to literacy learning and persons with SSPI. Articles on classroom literacy instruction, phonological awareness, parent and teacher expectations, emergent literacy, graphics, and computers. [Available in academic libraries or from Aspen Publishers, 7201 McKinney Circle, Frederick, MD 21701.]

10b. Koppenhaver, D.A., Steelman, J.D., Pierce, P.L., Yoder, D.E., & Staples, A. (1993). Developing Augmentative and Alternative Communication Technology in Order to Develop Literacy. Technology and Disability, 2 (3), Summer 1993, 32-42.

Presents a review of the literature on emergent literacy in nondisabled populations, summarizes what is known about the literacy learning of AAC users, and explores the impact (both current and potential) of high technology on the literacy learning of individuals who use AAC systems. [Available in academic libraries or from LeGwin Associates, 4 Brattle St., Cambridge, MA 02138.]

11b. Pierce, P.L., & Kublin, K. (1993) . Literacy Training. Expanding Vocational Potential Through Computers. Team Rehab Report, 4 (5), 13-17.

Case study of 15 year-old with severe spastic cerebral palsy. Documents growth in employability and independence when provided access to assistive technology as well as literacy and computer training. [Available in academic libraries or from Miramar Publishing Co., 6133 Bristol Parkway, Culver City, CA 90230.]

12b. Koppenhaver, D.A., Pierce, P.L., Steelman, J.D., & Yoder, D.E. (1994). Contexts of Early Literacy Intervention for Children with Developmental Disabilities. In M. E. Fey, J. Windsor, and S. F. Warren (Eds.), Language Intervention in the Early School Years (pp. 241-274). Baltimore: Paul H. Brookes.

Review of research pertaining to literacy learning in young, school-aged children with a range of developmental disabilities. Organized with reference to a model of literacy use within multiple contexts. Intervention studies and directions for future research are highlighted. [Available in academic libraries or from Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-9945.]

13b. Erickson, K.A., & Koppenhaver, D.A. (1995). Developing a Literacy Program for Children with Severe Disabilities. The Reading Teacher, 48 (8), 676-684.

Description of development of literacy program and uses of assistive technology to improve literacy skills of school-aged children with severe disabilities. Written for mainstream teachers. [Available in academic libraries or from the International Reading Association, 800 Barksdale Rd., P.O. Box 8139, Newark, DE 19714-8139.]

14b. Erickson, K.A. (1995). Literacy and Inclusion for a student with severe speech and physical impairments. Unpublished doctoral dissertation, University of North Carolina at Chapel Hill.

Reports final results of a qualitative case study of literacy instruction and assessment for 11-year-old student with severe cerebral palsy and speech impairments in a regular fourth grade classroom. Reprints available from Dissertation Abstracts International or inter-library loan.

15b. Erickson, K. A., and Staples, A. (1994). A Sound Decision. TeamRehab Report, 5 (8), 20-23

Case study description of an 11 year-old AAC user and the process of selecting an AAC device to meet both her face-to-face and written communication needs. [Available in academic libraries or from Miramar Publishing Co., 6133 Bristol Parkway, Culver City, CA 90230.]

16b. Erickson, K. A. (1994). Helping to Promote Literacy in Augmentative and Alternative Communication Users. More Parent Articles. Tucson, AZ: Communication Skill Builders.

A basic discussion of the importance of modeling, interaction, and access in the promotion of literacy for young AAC users. [Available from Communication Skill Builders, 3830 E. Bellevue, P.O. Box 42050, Tucson, AZ 85733.]

17b. Watson, L., Layton, T., Pierce, P., & Abraham, L. (1994). Facilitating Emergent Literacy in a Language Preschool. Language, Speech, and Hearing Services in the Schools, 25, 136-145.

A practical guide to developing emergent literacy skills in children with communication impairments. [Available from academic libraries or from LSHSS, American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852-3279.]

18b. Steelman, J. D., Pierce, P. L., Alger, M. J., Shannon, J., Koppenhaver, D. A., & Yoder, D. A. (1992-93, Winter). Developing an Emergent Literacy Curriculum for Children with Developmental Disabilities. The Clinical Connection, pp. 10-15.

Description of the development of a preschool literacy-centered program for children with severe and multiple disabilities. Overview of the curriculum, learning activities, and assessments. Brief case study descriptions of two children in the program. [Available in academic libraries or from The Clinical Connection, 708 Pendleton St., Alexandria, VA 22314.]

19b. Koppenhaver, D. A., Evans, D. A., & Yoder, D. E. (1991). Childhood Reading and Writing Experiences of Literate Adults with Severe Speech and Motor Impairments. Augmentative and Alternative Communication, 7 (1), 20-33.

Retrospective survey of 22 literate adults with severe speech and physical impairments. Describes home and school environments and learning activities the survey respondents recall from their childhood experiences. [Available in academic libraries or from Decker Periodicals Inc., P. O. Box 785, Lewiston, NY 14092-0785. Reprint available from the CLDS, $4.00.]

20b. Koppenhaver, D. A., & Yoder, D. E. (1989). Study of a Spelling Strategy for Physically Disabled Augmentative Communication Users. Communication Outlook, 10 (3), 10-12.

Describes independent study strategy taught to two school-aged children with severe speech and physical impairments and presents evidence of effectiveness. Discusses importance of teaching words needed for written communication. [Available in academic libraries or from Communication Outlook, Artificial Language Laboratory, Michigan State University, 405 Computer Center, East Lansing, MI 48824-1042. Photocopy available from the CLDS, $1.25.]

21b. Erickson, K. A., Koppenhaver, D. A., & Yoder, D. E. (1994). Literacy and Adults with Developmental Disabilities (NCAL Tech. Rep. No. 94-15). National Center on Adult Literacy , University of Pennsylvania, Philadelphia.

Review and synthesis of literacy research with adolescents and adults with autism, mental retardation, and cerebral palsy. Discusses current social and legal influences on literacy research and practice. Points out research limitations and suggests directions for future research. [Bound report] [Copies may be purchased NCAL at 3910 Chestnut St., Philadelphia, PA 19104-3111. Phone: (215) 898-2100.]

22b. Koppenhaver, D.A., Pierce, P.L., & Yoder, D.E. AAC, FC, and the ABCs: Issues and Relationships. American Journal of Speech-Language Pathology, 4 (4), 5-14.

Discussion of literacy and AAC issues relevant to facilitated communication intervention. Clarification of research limitations and how research has yet to resolve controversy surrounding facilitated communication. Description of literacy activities and behaviors of seven autistic children in a summer school program using no facilitated communication. [Available in academic libraries or from the American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, MD 20852-3279.]

23b. Erickson, K. A., Koppenhaver, D. A., Yoder, D. E., & Nance, J. (in press). Integrated Communication and Literacy Instruction for a Child with Multiple Disabilities. Focus on Autism and Other Developmental Disabilities.

More detailed case study of child described in publication 31a. Careful description of literacy assessment process, implementation and integration of Dynavox training and use within literacy activities, and literacy instructional emphases. Some student writing samples included. [Available in academic libraries or from PRO-ED Journals, 8700 Shoal Creek Blvd., Austin, TX 78757-6897. Phone: (512) 451-3246.]

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