Enhancing Outcomes in Early Literacy for Young Children With Disabilities: Strategies for Success

Susan S. Johnston, Andrea P. McDonnell, and Leanne S. Hawken

Emerging literacy has been defined as the “reading and writing knowledge and behavior of children who are not yet conventionally literate” (Justice & Kaderavek, 2002, p. 8). This article provides readers with strategies for meeting the emerging literacy needs of young children with disabilities. Ideas for creating a literacy-rich environment as well as ways to adapt literacy-related materials and activities for children with delays/disabilities are presented and discussed.

Keywords: strategy(ies); preschool; modifications; accommodations; special education; curriculum; literacy

More than one in three children experience significant difficulties in learning to read, and there is a strong correlation between the skills with which children enter school and their later academic performance (Whitehurst & Lonigan, 1998). In 1998, the International Reading Association (IRA) and the National Association for the Education of Young Children (NAYEC) released a position statement on learning to read and write. Among other things, the statement recognized the importance of emerging literacy development. Furthermore, it emphasized that “failing to give children literacy experiences until they are school-age can severely limit the reading and writing levels they ultimately attain” (IRA & NAYEC, 1998, p. 30).
Emerging literacy has been defined as the “reading and writing knowledge and behavior of children who are not yet conventionally literate” (Justice & Kaderavek, 2002, p. 8). The importance of emerging literacy is underscored by the understanding that the prevention of reading failure begins in preschool when children are learning critical emerging literacy skills for reading success including phonological awareness, print awareness, letter recognition, and early writing skills (Linn, 2001). In the early childhood years, these skills are acquired through active and meaningful activities, experiences, and opportunities. Creating high-quality activities, experiences, and opportunities to promote the acquisition of emerging literacy skills is important for all children, including children with developmental delays or disabilities.

Preschool literacy experiences should be intentionally built into the entire daily schedule and all interest areas in the classroom. Specific curriculum has been developed to support teachers as they create literacy learning opportunities within the structure of comprehensive, integrated programs (Heroman & Jones, 2004; Notari-Syverson, O’Connor, & Vadasy, 1998), and teachers who work with preschool-aged children are encouraged to create a strong foundation for literacy learning by utilizing curriculum that includes a focus on literacy. The purpose of this article is to provide specific strategies for supporting the emerging literacy development of young children with disabilities. First, ideas for creating a literacy-rich environment will be provided. Then, suggestions for adapting literacy-related materials and activities for children with delays/disabilities will be presented. The ideas and strategies offered are based on a review of emerging literacy research, policy, and practice literature (Justice & Pullen, 2003; Snow, Burns, & Griffin, 1998; Whitehurst & Lonigan, 1998) and were included as part of a survey tool used to examine Head Start teachers’ views and practices related to emerging literacy instruction (for a complete review, see Hawken, Johnston, & McDonnell, 2005; McDonnell, Hawken, & Johnston, 2006).

Creating a Literacy-Rich Environment

Teachers who create a literacy-rich environment can increase by 3 to 10 times the amount of time that children spend on reading and writing behaviors (Harst, Woodward, & Burke, 1984). A literacy-rich environment provides opportunities for children to acquire skills related to book knowledge/print awareness, phonological awareness, alphabet knowledge, and early writing skills.

Book Knowledge/Appreciation and Print Awareness

Book knowledge and appreciation includes skills and behaviors such as (a) an increasing knowledge and interest in books; (b) the ability to retell, predict, and dictate stories; and (c) engagement in activities related to books such as acting out stories or drawing pictures about stories (Head Start, 2000; Justice & Pullen, 2003). Through storybook reading and exposure to print, children also develop print awareness skills (Justice & Kaderavek, 2002). Print awareness includes the ability to understand that print, rather than pictures, carries meaning and that reading occurs from left to right and top to bottom (IRA & NAEYC, 1998). Examples of ways to improve book knowledge and print awareness include

2. Showing children that text in books begins at the top left corner of the page and is read from left to right.
3. Pointing to print while reading aloud to teach children that print, not pictures, tells the story.
4. Asking children to retell or act out stories that they have read.
5. Asking children to use props to help with retelling.
6. Rereading stories to children.

Phonological Awareness

Phonological awareness is the ability to hear and manipulate the sounds in spoken words (Chard & Dickson, 1999). During the preschool years, children are learning about the sound structure of the language and are building the necessary phonological awareness skills for reading success (Justice & Pullen, 2003). Studies indicate that young children can be taught phonological awareness and that improvement in phonological awareness relates to better reading outcomes (Lundberg, Frost, & Petersen, 1998; Yeh, 2003). Strategies for improving phonological awareness skills in young children include

1. Reading nursery rhymes.
2. Playing rhythm games.
3. Creating opportunities for children to practice letter sounds during read aloud time.
4. Identifying the initial sounds in words (e.g., f in fish or c in cat).
5. Helping children to identify syllable units (e.g., Fri-day).
6. Assisting children to blend sounds together to form words (e.g., c-a-t = cat, or f-i-sh = fish).
7. Segmenting words into individual phonemes (e.g., dog = d-o-g, mom = m-o-m).

Alphabet Knowledge

Alphabet knowledge includes the ability to identify letters and understand that “letters of the alphabet are a special category of visual graphics that can be individually named” (Head Start, 2003, p. 23). The current expectation is that by the end of preschool, children know at
least 10 letters and are beginning to associate the sounds with letters (Head Start, 2000). Some of the same strategies for increasing book knowledge and print awareness have been implemented to increase alphabet knowledge, including providing access to high-quality books, referencing print during reading, and enriching the environment with print.

Additional strategies for increasing alphabet knowledge include

1. Encouraging play with alphabet puzzles/magnetic letters.
2. Reading alphabet books.
3. Using flannel boards with letters/words.
4. Helping children make letter collages (e.g., cut and paste pictures that start with the letter b).
5. Systematically introducing new letters.
6. Posting a written task list (e.g., pass out cups at snack, line leader, etc.).
7. Encouraging children in the dramatic play area to use literacy-related props which include print (e.g., letter for post office, phone books, menus for restaurant).
8. Playing games that teach letter/word recognition (e.g., letter lotto).

**Early Writing**

In preschool, children learn that writing is a form of communication, and their writing skills typically progress from scribbling and tracing to copying and/or writing letters of familiar words such as the letters in their name (Head Start, 2000). Research indicates that having children engage in writing activities reinforces their acquisition of letter knowledge and learning the sound structure of the language (Chomsky, 1979; Clarke, 1988). Examples of strategies for improving early writing skills include

2. Presenting opportunities to use a variety of writing tools (e.g., pencils, pens, markers, crayons, whiteboard, etc.).
3. Taking dictations from children.
4. Encouraging children to write in journals.
6. Practicing tracing letters/words.
7. Making books.
8. Creating opportunities for children to write and/or receive letters/postcards in class.

In summary, creating a literacy-rich environment includes providing opportunities for children to acquire skills related to book knowledge/print awareness, phonological awareness, alphabet knowledge, and early writing skills. Results of a survey of Head Start teachers provided evidence that teachers are using a variety of these strategies for creating a literacy-rich environment. However, results also revealed that some strategies (e.g., repeated book reading, strategies that address the development of phonological awareness) may be underutilized (Hawken et al., 2005). Appendix A provides a strategy checklist that can be used as teachers create a literacy-rich environment.

Creating a literacy-rich environment is important in the quest to support emerging literacy development for young children with disabilities. However, creating a literacy-rich environment alone may not be sufficient. It may also be necessary to modify and/or adapt instruction to support emerging literacy development.

**Adapting Instruction to Support Emerging Literacy Development**

Many children with disabilities are at risk of becoming poor readers or nonreaders (Snow et al., 1998). Although the disabilities themselves may create barriers to learning to read and write fluently, there is also evidence that children with certain types of disabilities may have more limited access to literacy opportunities (Craig, 1996; Day, McDonnell, & Heathfield, 2005; Ezell & Justice, 2005; Fitzgerald, Roberts, Pierce, & Schuele, 1995). Thus, it is important to consider ways to adapt instruction to ensure that children with specific disabilities have access to literacy opportunities.

**Children With Communication Delays/Disorders**

Children with communication delays/disorders experience difficulty in acquiring language and literacy skills.
at the expected rate during the preschool and early elementary years (Catts, 1993; Watson, Layton, Pierce, & Abraham, 1994). Many of the recommendations for supporting early literacy development for children with communication delays are identical to the previously discussed strategies for creating a literacy-rich environment. However, additional recommendations include

1. Having children listen to a book on tape and follow along with the book.
2. Using gestures, movements, or facial expression to demonstrate meaning (e.g., demonstrate stirring when introducing the word *stir* in a recipe).
3. Embedding language learning into classroom routines (e.g., choral responding during calendar, following a daily schedule, etc.).
4. Using visual aids to illustrate oral or written language (e.g., show a measuring cup when reading “one cup sugar” from a recipe).
5. Changing the pace of wording when key information is given.
6. Using peer-support strategies (e.g., pair the child with a communication delay/disorder with a child who does not have a delay/disorder).
7. Acting out stories read in class.
8. Repeating vocabulary and language patterns across activities (e.g., space theme repeated in story reading, dramatization, and art projects).
9. Reading aloud predictable books with repeated refrains (e.g., “If you give a mouse a . . .”).

Children With Motor Delays

Koppenhaver, Coleman, Kalman, and Yoder (1991) asserted that age, physical disability, and cognitive ability should not limit an individual’s participation in literacy activities. However, research suggests that persons with severe speech and physical impairments (SSPI) such as cerebral palsy have much greater difficulty than their peers in developing oral and written language skills (Berninger & Gans, 1986a, 1986b; Smith, 1989). One factor that contributes to these literacy challenges relates to the amount and quality of language and literacy experiences (Koppenhaver, Evans, & Yoder, 1991; Light & Smith, 1993; Watson et al., 1994). Providing frequent, high-quality language and literacy experiences can be particularly challenging for children who have SSPI. Important strategies for providing these high quality experiences include

1. Positioning the child for optimal performance during activities.
2. Stabilizing emerging literacy materials with cups, clamps, and/or Velcro.
3. Providing alternative methods of communication (e.g., picture icons, voice output communication aids).
4. Providing electric switches to access toys, computers, etc.
5. Providing adapted writing/coloring utensils and books.
6. Positioning items on easels.

Children With Hearing Impairments

Children with hearing impairments may have limited access to early language and literacy interactions (Nielsen & Luetke-Stahlman, 2002; Paul, 1998). Many of the recommendations for supporting early literacy development for children with hearing impairments are identical to the previously discussed strategies for creating a literacy-rich environment and for supporting the development of children with communication delays/disorders. However, additional recommended strategies include

1. Incorporating the use of technology that provides amplification (e.g., hearing aids, FM systems).
2. Providing visual cues for speech and story reading (e.g., child at eye level, use of gestures and expression).
3. Positioning the student so that he or she can see sign language (when applicable), text, pictures, and adult’s mouth while he or she is reading.
4. Using books that include sign language, printed words, and pictures.

Children With Visual Impairments

Children with visual impairments are less likely to have access to environmental print and written materials, to choose books for shared reading, to engage in pretend reading, to retell stories, to dictate stories, or to make comments and ask questions during story reading (Craig, 1996; Rex, Koenig, Wormsley, & Baker, 1995; Swenson, 1988). Additionally, children with visual impairments are less likely to be aware of the extent to which children and adults in their environment engage in literacy-related activities which may decrease the frequency of incidental learning opportunities (Day et al., 2005). Recommended strategies for assisting young children with visual impairments to participate in emerging literacy experiences include

1. Drawing students’ attention to environmental Braille.
2. Using Braille books or books with Braille added to print.
3. Using tactile books or books adapted to provide
tactile cues (e.g., textures added to commercial
books, memory books with real objects from field
trips).
4. Encouraging the use of a Braillewriter, slate and stylus
for “scribbling,” and early Braille writing.
5. Increasing or decreasing lighting intensity for indi-
vidual needs.
6. Positioning materials and using other strategies to
help child see materials (e.g., book stands, light box,
markers).

In summary, enhancing the engagement of children
with disabilities in emergent literacy activities may require
the use of specific strategies for adapting instruction.
Appendix B provides a strategy checklist that can be used as
teachers adapt instruction to support early literacy develop-
ment for children with delays and/or disabilities. Appendix
C provides additional resources for supporting emerging
literacy development in young children with disabilities.

In 2001, 30% of prekindergarten children who attended
public elementary schools were on individual education
plans (IEP) (U.S. Department of Education, 2001). Further-
more, results of a survey of Head Start teachers indicated
that 21.8% of the children in their classrooms have disabili-
ties and/or receive special education services (McDonnell et
al., 2006). This highlights the need for teachers to be aware
of strategies for supporting the emerging literacy develop-
ment of young children with disabilities. In an effort to
enhance outcomes in early literacy for all children, including
children with disabilities, readers are encouraged to examine
their own practices to determine the extent to which they
utilize the strategies presented in this article.

Appendix A
Strategy Checklist for Creating
a Literacy-Rich Environment

Child’s Name: _________________
Date: _________________________
Date of Birth: ________________

1) Child participates in activities that promote book
knowledge/appreciation and print awareness, such as:
  □ Practicing holding books correctly and turning
    pages
  □ Adult showing that text in books begins at top
    left corner of page and is read from left to right
  □ Adult pointing to print while reading aloud to
    teach child that print, not pictures, tells the story
  □ Retelling or acting out stories with puppets, cos-
    tumes, and other props

2) Child participates in activities that promote early
writing, such as:
  □ Using templates to help form letters
  □ Using a variety of writing tools
    (e.g., pencils, pens, markers, crayons, whiteboard, etc.)
  □ Adult taking dictations from child
  □ Writing in journals
  □ Practicing invented spelling
  □ Tracing letters/words
  □ Making his/her own books
  □ Writing and/or receiving letters/postcards in
class
  □ Using letter stamps or letter sponges
  □ Practicing name writing
  □ Other (please specify): ________________

3) Child participates in activities that promote alphabet
knowledge, such as:
  □ Playing with alphabet puzzles/magnetic letters
  □ Reading alphabet books
  □ Using flannel boards with letters/words
  □ Making letter collages (e.g., cut and paste
    pictures that start with the letter “B”)
  □ Adult introducing new letters
  □ Adult posting a written task list (e.g., pass out
    cups at snack, line leader, etc.)
  □ Using a dramatic play area that has literacy-
    related props which include print (e.g., letter for
    post office, phone books, menus for restaurant)
  □ Playing games that teach letter/word recognition
    (e.g., letter lotto)
  □ Other (please specify): ________________

4) Child participate in activities that promote phonological
awareness, such as:
  □ Adult reading nursery rhymes
  □ Playing rhythm games
  □ Practicing letter sounds during read aloud time
  □ Identifying initial sounds in words (e.g., “F” in
    “fish,” or “C” in “cat”)
  □ Identifying syllable units (e.g., Fri-day)
  □ Blending sounds together to form words (e.g.,
    c-a-t = cat, or f-i-sh = fish)
  □ Segmenting words into individual phonemes
    (e.g., dog = d-o-g, mom = m-o-m)
  □ Other (please specify): ________________
Appendix B
Strategy Checklist for Adaptations and/or Accommodations

Checklist for Adapting Instruction to Support Early Literacy Development for Children With Delays and/or Disabilities

Child’s Name: __________________________
Date: __________________________
Date of Birth: __________________________

1) This student may benefit from adaptations/accommodations to support his/her (check all that apply):

☐ Communication Delay/Disorder (if yes, see item 2 below)
☐ Motor Delay/Disorder (if yes, see item 3 below)
☐ Visual Impairment (if yes, see item 4 below)
☐ Hearing Impairment (if yes, see item 5 below)

2) Adaptations are provided for the child with communication delay/disorder through (check all that apply):

☐ Having child listen to a book on tape and follow along with the book
☐ Using gestures, movements, or facial expression to demonstrate meaning (e.g., demonstrate stirring when introducing the word “stir” in a recipe
☐ Embedding language learning into classroom routines (e.g., choral responding during calendar, following a daily schedule, etc.)
☐ Using visual aids to illustrate oral or written language (e.g., show a cup when reading “one cup sugar” from a recipe)
☐ Changing pace of wording when key information is given
☐ Using peer support strategies (e.g., pair student with communication delay/disorder with another child who has normal communication development)
☐ Acting out stories read in class
☐ Repeating vocabulary and language patterns across activities (e.g., space theme repeated in story reading, dramatization, and art projects)
☐ Reading aloud predictable books with repeated refrains (e.g., “If you give a mouse a . . . ”)
☐ Other (please specify): __________________________

3) Adaptations are provided for the child with motor delay/disorder through (check all that apply):

☐ Positioning the child for optimal performance during activities
☐ Stabilizing emerging literacy materials with cups, clamps, and/or Velcro
☐ Providing alternative methods of communication (e.g., picture icons, voice output communication aids)
☐ Providing electric switches to access toys, computers, etc.
☐ Providing adapted writing/coloring utensils and books
☐ Positioning items on easels
☐ Other (please specify): __________________________

4) Adaptations are provided for the child with visual impairments through (check all that apply):

☐ Drawing student’s attention to environmental Braille
☐ Using Braille books or books with Braille added to print
☐ Using tactile books or books adapted to provide tactile cues (e.g., textures added to commercial books, memory books with real objects from field trips)
☐ Using a Braillewriter, slate and stylus for “scribbling” and early Braille writing
☐ Increasing or decreasing lighting intensity for individual needs
☐ Positioning materials and using other strategies to help child see materials (e.g., book stands, light box, markers)
☐ Other (please specify): __________________________

5) Adaptations are provided for the child with hearing impairments through (check all that apply):

☐ Using amplification (e.g., hearing aid, FM system)
☐ Providing visual cues for speech and story reading (e.g., child at eye level, use of gestures and expression)
☐ Reading aloud so the student can see sign language (when applicable), story pictures, and adult’s mouth
☐ Positioning student so that he/she has optimal seating for learning
☐ Using books that include sign language, printed words, and pictures
☐ Other (please specify): __________________________

Vol. 43, No. 4, March 2008  215
Appendix C
Selected Readings in Supporting Emerging Literacy Development in Young Children With Disabilities

Resources for All Young Children

Resources for Children With Disabilities

REFERENCES

ABOUT THE AUTHORS
Susan S. Johnston is an associate professor in the Department of Special Education at the University of Utah. She received her PhD from the University of Minnesota. Her current interests include supporting the participation of students with disabilities in natural environments, emergent literacy instruction, and augmentative and alternative communication. Andrea P. McDonnell is an associate professor in the Department of Special Education at the University of Utah. She received her PhD from the University of Utah. Her areas of interest include intervention in natural contexts, emergent literacy instruction, family–professional partnerships, and interdisciplinary personnel preparation. Leanne S. Hawken is an assistant professor in the Department of Special Education at the University of Utah. She received her PhD from the University of Oregon. Her research interests include positive behavior support and the link between early literacy and problem behavior. Address: Susan S. Johnston, Department of Special Education, University of Utah, 1705 E. Campus Center Dr. Rm 221, Salt Lake City, UT 84112; e-mail: johnst_s@ed.utah.edu.


Copyright of Intervention in School & Clinic is the property of PRO-ED and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.