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## Notes From the Field

### Ability, Disability, and Picture Books

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This article addresses selecting materials for children who have deficits or strengths in their use of certain learning modes. The seven types of intelligence Howard Gardner (1983) describes in his book *Frames of Mind* are used as a basis/or discussion. Each intelligence is viewed on a continuum from strength to deficit. An individual child can have both strengths and deficits in different intelligences. Loss of vision most obviously affects a child's use of picture books, but severe hearing impairments, dyslexia, and mental retardation—as well as other disabilities—all interfere. A child with a disability needs help to find an alternative technique to compensate for a blocked learning mode. Most picture books discussed in this article can be used effectively with any child depending on developmental level and personal interest. Many of the books support more than one intelligence.

Cushla, a New Zealand child, was born with multiple disabilities. Doctors assumed she was mentally retarded. Over several years, her disabilities were diagnosed and dealt with. Her parents read to her and showed her picture books, which she grew to love. When she was almost 4, her mother heard her say to her doll, "Now, I can read to Looby Lou, 'cause she's tired and sad, and she needs a cuddle, a bottle, and a book" (Butler, 1974, p. 102). Cushla needed carefully selected picture books, but she was not mentally retarded.

This article addresses selecting materials for children with limitations or special strengths in specific learning modes. All books selected for them should meet the same criteria for quality literature as books selected for other children.

Howard Gardner's (1983) *Frames of Mind* makes a strong case for seven types of intelligence: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and internal and external personal intelligence. Each can be viewed on a continuum from strength to deficit. A child can be strong in one intelligence and have a deficit in another. Christy Brown, with severe motor impairments and strong linguistic and artistic skills, is a well-known example. There is no apparent correlation between or among the intelligences. Picture books can support a child's development in all of them (Pollette, 1992). Many children with disabilities need picture books that are carefully selected with attention to their available learning modes (Walling & Karrenbrock, 1993).

Disabilities in children are developmental in nature. They interfere with the usual pattern of development and limit ability to adapt in the area of the

disability. A child with severe hearing loss cannot easily compensate if the storyteller is at a distance. Some children use adaptive technologies to access picture books and to respond during story time. Loss of vision most obviously affects use of picture books, but severe hearing impairments, dyslexia, mental retardation, and other disabilities interfere as well. Children who have difficulty using books because of low vision, deafness, or dyslexia are often labeled "print-impaired" or "reading-disabled."

Children who are developmentally advanced in one intelligence may use certain materials at a younger age. Children who are developmentally delayed may use the same materials when they are older than their age-mates.

Only one book is described for each of the following categories. Additional examples may be found on my Web page: <http://www.libsci.sc.edu/ltnda/walling.htm>

### *Linguistic Intelligence*

This "ability to use language to convince other individuals of a course of action, ... to use [language] to help one remember information, ... convey basic concepts, [and] ... reflect upon language" (Gardner, 1983, p. 78) is highly prized in today's society.

*For strong linguistic skills.* Stories should introduce new, fascinating words, respect the child as an intelligent, learning person, and demonstrate "a playful, joyful sense of fun with words" (Halstead, 1994, p. 162).

Base (1986), *Animalia*. Each letter in this ABC book starts with a tongue-tangling alliterative phrase based on that letter. Visual images with names that begin with the letter clutter the pages. Identifying some images is a challenge. Different typefaces and different size print may present difficulties, but a child who likes to play with words or who is fascinated by visual detail can take pleasure in exploring the book.

*For linguistic deficits.* A child with a linguistic deficit may have difficulty understanding words and/or expressing ideas verbally. The child may be labeled dyslexic, autistic, mentally retarded, brain-injured, or hearing-impaired. Visual, auditory, and/or tactile reinforcement can improve understanding (Hunsucker, 1995). Taking plenty of time also improves understanding. Luckow (1972) says stories need underlying themes of unity, a oneness of mood, plot, character, and harmony between picture and story or between picture and detail. The book's theme should be apparent on every page. "Colorful, tongue-tickling" phrases stimulate language, although they may lead to perseveration. Rhythmical speech and sound patterns aid understanding. The best stories for these children, according to Luckow, include a hero who is the only main character or part of a group operating as one. Large, simple print with good contrast and only a few words per page is best.

Burton (1988), *Tail Toes Eyes Ears Nose*. Each right-hand page pictures correctly labeled body parts for a particular animal. On the left half of the

next double-page spread, the complete animal is shown. Thus names of parts of animals are reinforced, associated with specific animals. The print is large, and the typeface is simple in design.

### *Logical-Mathematical Intelligence*

"Beginning with observations and objects in the material world, the individual moves toward increasingly abstract formal systems, whose inter-connections become matters of logic rather than of empirical observation" (Gardner, 1983, p. 135).

*For strong logical-mathematical skills.* Books that challenge children at high levels of abstract and logical thinking may fascinate children with strengths in this intelligence.

Tafari (1986), *Who's Counting?* This counting book presents a challenge for many children. What is counted is not always the most obvious thing in the picture. There is a mismatch between picture and text for the number 6. The words say "6 piglets," but the illustrated pigs are full-grown. On the last double-page spread, all the numerals from 1 to 10 appear, but not in the expected order. Print is large with clear, bright watercolor illustrations outlined in black.

*For deficits in logical-mathematical development.* Children with deficits in this area may be labeled learning-disabled, attention-deficit-disordered, autistic, mentally retarded, brain-injured, or hearing impaired. Their disabilities may involve cognition and/or perception. Picture books for them should be similar to those for children with visual deficits, with some exceptions. If the disability is severe, illustrations must be realistic and have some kind of organization. Luckow's (1972) advice that the story have a unifying theme fits here. Rhythmical sound patterns may be less confusing. The best stories include a hero who is the only main character or part of a group that operates as one. The book's paper should be high quality, nonglare. Large print with good contrast and few words per page are needed. Multimedia materials of a concrete nature support observation, thinking skills, and analysis.

Rockwell (1985), *First Comes Spring*. Each season is described in words and pictures on a series of three double-page spreads. On the first double-page spread in each series, we learn what is happening around the house and what Bear Child wears today. On the second, we discover what season has arrived, and we see bears of all ages carrying out activities typical of the season. The third shows bears at typical seasonal activities, this time with activities labeled. After the fourth series of double-page spreads (winter), the last page asks: "What will happen when winter is over?" The book helps children develop skills of elaboration, forecasting, sequencing, and recognizing patterns. The pictures, which are sometimes quite small, are outlined in black. The print too is sometimes small and difficult to read because of poor contrast with the background.

### *Musical (Auditory) Intelligence*

Musical intelligence demands an awareness and understanding that "patterned elements must appear in sounds; and they are finally and firmly put together in certain ways not by virtue of formal consideration, but because they have expressive power and effects" (Gardner, 1983, p. 127). In picture books, musical intelligence becomes important in understanding rhythm, rhyme, and sounds of words.

*For strengths in musical (auditory) intelligence:* Children with strong skills in musical or auditory intelligence take special pleasure in poetry, riddles, and word plays.

Hoberman (1978), *A House Is a House for Me*. All kinds of things have houses, and all kinds of things are houses. Through humor, rhymes, alliteration, creativity, and imagination, the reader plays with words and ideas. The print is medium-sized with good contrast. Illustrations are bright. Some are small on cluttered pages.

*For deficits in musical (auditory) development.* Children with musical or auditory deficits may be labeled learning-disabled, attention-deficit-disordered, autistic, brain-injured, or hearing-impaired. Some need muted background noise to focus. Visual and tactile materials reinforce meaning. Some use adaptive technology like amplifiers. Others communicate using speech reading or sign language. Many enjoy rhythms, rhymes, and sounds even if deficits limit their understanding. A child with a severe hearing impairment can enjoy sound vibrations.

Evans (1992), *Hunky Dory Ate It*. The page illustrating "Julie Fry made a pie" is followed by a page showing a dog eating mud pie: "Hunky Dory ate it." Rollicking rhymes and large, cheerful pictures outlined in black take Hunky Dory through a day eating delicious things like cake and not so delicious things like mud pies. Children enjoy repeating "Hunky Dory ate it" and appreciate the necessary trip to the veterinarian at the end.

### *Spatial (Visual) Intelligence*

Spatial intelligence demands "the capacities to perceive the visual world accurately, to perform transformations and modifications upon one's initial perceptions, and to be able to re-create aspects of one's visual experience, even in the absence of relevant physical stimuli" (Gardner, 1983, p. 173). Children of the television age are especially attuned to visual information. To understand it, one must look closely, discriminate and communicate visually, classify and compare perspective, size, shape, texture, pattern, color, shadings, light, and points of view. Symbolic awareness, visual and sequential memory, form consistency, and the ability to derive meanings are also critical.

*For strong spatial (visual) skills.* Illustrations should be vibrant, original, and non-stereotypical. They should complement and enhance the story line and encourage the child to return for repeated looks. Some illustrations

should require mental exercise. They might be abstract or provide only some details, requiring the child to use imagination to complete the picture. Children with spatial or visual strengths may seek highly complex visual images, preferring pictures that others would consider cluttered. Some children with dyslexia (West, 1991), autism, and other disabilities have strong visual skills and are attracted to highly complex visual images.

Anno (1970), *Topsy-Turvies: Pictures to Stretch the Imagination*. Optical illusions and visual puzzles in this wordless picture book raise questions like What's right side up? What's upside down? Highly complex pictures are bright and clear with good contrast.

*For visual deficits.* Children with spatial or visual deficits may be labeled learning-disabled, attention-deficit-disordered, autistic, mentally retarded, brain-injured, visually impaired, or print impaired. They need clearly outlined visual images. Illustrations can be either black and white or colored. They should be uncluttered. They need organization and a unifying theme; and good contrast and bold outlines to distinguish pictures from the background. Unusual perspectives or incomplete pictures may confuse. Backgrounds should contrast without glare. Pages should include only a few pictures and words and have plenty of white space. Auditory and tactile materials reinforce meaning.

Children with visual deficits generally need a typeface that is at least 18 point. Letter shapes should be simple and easily distinguished, and the print should be bold on a contrasting background. Uncluttered pages with well-defined borders should provide adequate white space between letters and lines. Lines of print should be parallel to the bottom of the page with only a few lines per page. The book's design should include a visually pleasing balance of text and illustration. It should be easy to sort out visual and linguistic details. Paper should be of high quality, without glare.

Lenski (1951), *Papa Small*. A week in the life of the Small family: Papa Small, Mama Small, and their children. Most of us would probably find this story dull and the illustrations stilted, but it was a favorite of Cushla, the child mentioned above. Illustrations are black, gray, white, and bright blue, with figures outlined in black. People look like caricatures. The print is large with good contrast. It is always difficult to predict which book will appeal to an individual child. It is best to experiment and observe reactions.

### *Bodily-Kinesthetic Intelligence*

Bodily-kinesthetic intelligence is "the ability to use one's body in highly differentiated and skilled ways, for expressive as well as goal-directed purposes ... the capacity to work skillfully with objects, both those that involve the fine motor movements of one's fingers and hands and those that exploit gross motor movements of the body" (Gardner, 1983, p. 206), including nonverbal language, touch, shapes, texture, taste, movement, and dexterity.

*For strong bodily-kinesthetic skills or deficits in the skills.* Most children delight in materials that involve them physically through touch or movement. Children with deficits in this intelligence may be labeled learning-disabled, attention-deficit-disordered, autistic, brain-injured, or physically disabled. Some may be frightened or confused by certain textures; some use tactile material that is brought to them or touched to their skin. Through adaptive technology, many learn to move and manipulate objects. The following book, with adaptation, could be used with children regardless of ability or disability.

Carle (1997), *From Head to Toe*. Animals move parts of their bodies and challenge the child to move too. "I am a buffalo and I raise my shoulders. Can you do it?" "I can do it!" Most children, even those with motor disabilities, can participate in and enjoy most of the movements if they are adapted. If the book is read aloud, the reader can select movements in which all can participate.

### *Personal Intelligence (Directed Toward Others)*

Gardner (1983) identifies two personal intelligences. One involves "the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions" (p. 239). Empathy, friendship, the quality of relationships with others, the ability to work with others, kindness, appreciation of other cultures, and peer acceptance or rejection are all important.

*For strengths in personal intelligence (directed toward others).* Children with strengths in this area are likely to seek out materials about subtleties of relationships. The story should "depict characters, whether animal or human, who display real emotions, feelings, and relationships the child will recognize" (Halstead, 1994, p. 162).

Hinton (1995), *Big David, Little David*. Nick has just started school. A little boy named David in his class looks just like Nick's dad, whose name is also David. Is Little David really Dad? Mom and Dad tease rather than help when Nick asks. When his parents visit school. Nick sees Big David and Little David at the same time and knows they are different people. He discovers a way to tease back. The book is full of creativity, imagination, and playfulness on the part of Nick and his parents.

*For deficits in personal intelligence (directed toward others).* Children with deficits in this intelligence may be labeled learning-disabled, attention-deficit-disordered, autistic, brain-injured, mentally retarded, or behavior-disordered. Many children with disabilities have deficits in their social skills because they have few opportunities to practice those skills. Children with strengths in any of the various intelligences may have deficits in social skills because they have spent little time with their age-mates. Children with deficits in this intelligence need materials that demonstrate successful and appropriate social interactions in a variety of settings.

Carlson (1990), *Arnie and the New Kid*. Philip is the "new kid" who uses a wheelchair. Arnie teases him. One day Arnie breaks his leg, and Philip befriends him. Arnie's cast comes off, and Philip is afraid their friendship will end. When Arnie is invited to play baseball, he says, "...as long as I can bring my coach." Drawings are bright and outlined in black. The print is fairly small, and there are often many words on a page. Many are on colored backgrounds with little contrast.

### *Personal (Directed Toward Self) Intelligence*

Gardner's (1983) second personal intelligence focuses on personal worth, honesty, integrity, justice, importance of the individual, dealing with fears, dealing with loss, dealing with disappointment, and dealing with money. He says, "the core capacity at work here is access to one's own feeling life" (p.239).

*For strengths in personal intelligence (directed toward self).* Children who are strong in this intelligence may want materials that focus on the subtleties of personal feelings and values.

Curtis (1993), *When I Was Little: A Four-Year-Old's Memoir of Her Youth*. A four-year-old looks back at how she was different when she was little. The story and illustrations support self-awareness.

*For deficits in personal intelligence (directed toward self).* Children with deficits in this intelligence may be labeled learning-disabled, attention-deficit-disordered, autistic, brain-injured, mentally retarded, or behavior-disordered. They need materials that help them recognize and understand their feelings and the appropriate management of those feelings.

Hutchins (1993). *Titch*. The story of Titch and his big brother and sister explores relationships with others, but it carries a special message about the value of oneself. It is Titch, the little brother, who plants the little seed that grows bigger than them all.

### *References*

- Anno, Mitsumasa. (1970). *Topsy-turvies: Pictures to stretch the imagination*. New York: Weatherhill.
- Base, Graeme. (1986). *Animalia*. New York: Abrams.
- Burton, Marilee Robin. (1988). *Tail toes eyes ears nose*. New York: HarperCollins.
- Butler, Dorothy. (1974). *Cushla and her books*. Boston, MA: Horn Book.
- Carle, Eric. (1997). *From head to toe*. New York: HarperCollins.
- Carlson, Nancy. (1990). *Arnie and the new kid*. New York: Viking.
- Curtis, Jamie Lee. (1993). *When I was little: A four-year-old's memoir of her youth*. Illustrated by Laura Correll. New York: HarperCollins.
- Evans, Katie. (1992). *Hunky Dory ate it*. Illustrated by Janet Morgan Stoeke. New York: Dutton.
- Gardner, Howard. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Halstead, Judith Wynn. (1994). *Some of my best friends are books: Guiding gifted readers from preschool to high school*. Dayton, OH: Ohio Psychology Press.
- Hinton, S.E. (1995). *Big David, little David*. Illustrated by Alan Daniel. New York: Doubleday.
- Hoberman, Mary Ann. (1978). *A house is a house for me*. Illustrated by Betty Fraser. New York: Scholastic.

- Hunsucker, Coy. (1995). Sharing literature with children. In Linda Lucas Walling and Marilyn M. Irwin (Eds.), *Information services for people with developmental disabilities* (pp. 155-168). Westport, CN: Greenwood.
- Hutchins, Pat. (1993). *Titch*. New York: Aladdin.
- Lenski, Lois. (1951). *Papa Small*. New York: Oxford University Press.
- Luckow, Jed P. (1972). Selecting picture storybooks for young children with learning disabilities. *Teaching Exceptional Children*, 4,161-64.
- Pollette, Nancy. (1992). *Brain power through picture books*. Jefferson, NC: McFarland.
- Rockwell, Anne. (1985). *First comes spring*. New York: HarperCollins.
- Tafari, Nancy. (1986). *Who's counting?* New York: Greenwillow.
- Walling, Linda Lucas, & Karrenbrock, Marilyn H. (1993). *Disabilities, children, and libraries*. Englewood, CO: Libraries Unlimited.
- West, Thomas. (1991). *In the mind's eye*. Buffalo, NY: Prometheus.

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