

Early Childhood Development

A MULTICULTURAL PERSPECTIVE

Fifth Edition

Jeffrey Trawick-Smith

EASTERN CONNECTICUT STATE UNIVERSITY

Merrill
Upper Saddle River, New Jersey
Columbus, Ohio

education, not its improvement. They predict that, as written, the bill will cause good teachers to leave high-risk schools and will cause schools to focus too narrowly on test scores rather than broader educational goals. (c) The NEA argues that there should be less reliance on “one size fits all” tests that focus only on reading and math to determine progress. They believe that multiple methods of assessment should be encouraged and funded by the bill so that a more accurate picture of school progress is obtained. Similarly, they propose that multiple forms of evidence about schools and school districts be gathered and used to support improvements. (d) The NEA suggests that the criteria in NCLB for measuring “adequate yearly progress” are unrealistic. Large numbers of schools and school districts are certain to fail, they predict, even those that are high achieving or steadily improving. Reasonable goals for improvement should replace the bill’s existing requirements.

Another professional organization, FairTest (<http://www.fairtest.org>), organizes advocacy around one element of NCLB: its heavy reliance on testing. Through publications and lobbying, this group urges that the bill be modified so that sweeping decisions about schools and teachers are no longer based on single, narrowly focused academic tests. The group argues that children spend too much school time taking or preparing to take tests. FairTest invites parents and professionals to sign a petition, which is posted on its Website, urging for a modification to NCLB.

Professionals can study the issues surrounding NCLB, formulate positions on modifying and/or strengthening the bill, and share their views publicly in letters to the editor or to their legislators. Through advocacy, this monumental education reform act can be made more effective in meeting young children’s educational needs.

CLASSROOM ADAPTATIONS: PRIMARY-GRADE CHILDREN WITH COGNITIVE DISABILITIES

Since 1975, with the enactment of Public Law 94–142, the Education for All Handicapped Children Act, students with special needs have been integrated into regular classrooms in the public schools. The trend in recent years has been toward even more inclusive classrooms. Even children with severe disabilities are often placed in regular classroom settings (Simpson, deBoer-Ott, Smith-Myles, 2003; Turnbull & Turnbull, 2001). Primary-grade teachers may work with children with physical challenges, such as sensory or orthopedic impairments, and with children having social and emotional disturbances and autism. It is likely that teachers will have students who face various cognitive challenges.

Approximately 1% of elementary students have mental retardation (Umansky, 2008a). Speech and language disorders affect approximately 1% to 2% of school-age children; however, in most cases the speech or language challenge is related to another, primary disorder. Children with mental retardation and autism, for example, often receive services from speech and language pathologists (Rice & Schuele, 1995).

learning disabilities (LD):

Cognitive disabilities characterized by impairment in some specific aspect of learning, such as writing, speaking, or mathematics, and sometimes including perceptual and attention deficits.

Learning Disabilities

The most common yet least understood cognitive disorders among school-age children are **learning disabilities (LD)**. Approximately 3% to 4% of children have this condition, although the exact number is difficult to determine because of disagreement about how the disorder is to be defined and identified. One of the most challenging tasks of teachers and psychologists is to accurately identify children with LD.

Learning disabilities are generally described as impairments in some specific aspect or aspects of learning, such as writing, speaking, or mathematics. A general cognitive delay is not a characteristic, however. In fact, children with LD may be extremely competent in some areas of learning but have difficulty in other areas. For example, a child with LD may be poor in math yet competent in reading.

The prevalent theory is that learning disabilities are caused by neurological impairments (Sousa, 2007). However, persuasive arguments have been offered that environmental factors play a role (Harlaar, Spinath, Dale, & Plomin, 2005; Margai & Henry, 2003). Although researchers have yet to agree on the cause of LD, most concur that certain characteristics are common among children with the disorder. Several of these characteristics are described in Table 15-4.

Academic Difficulties. Children with LD usually have difficulties in one or more academic areas. A child may show poor reading comprehension or see letters reversed or transposed in written text (sometimes referred to as *dyslexia*). Another child may show mathematics achievement well below his or her grade level. Sometimes a child is delayed in one or several areas and at grade level or even above in others.

Perceptual-Motor Difficulties. Children with learning disabilities sometimes have perceptual challenges. They may have difficulty accurately interpreting auditory or visual stimuli (Wright, Bowen, & Zecker, 2000). They may not accurately hear the instructions for a science activity, or they may misinterpret a graph in a math lesson. They may become puzzled about direction, confusing left and right, for example, or may show no regular use of either the left or the right hand. Children with LD are sometimes awkward and show poor motor coordination. Their lack of physical competence may cause them to avoid outdoor motor play with peers. These motor difficulties affect school achievement as well. In the words of Umansky and Hooper (2008), "To pay attention to what others say, as well as to one's own thoughts, one's body must cooperate. The bodies of children with learning disabilities do not cooperate with them" (p. 224).

Characteristic	Description
Poor academic achievement	Children with LD often have difficulty in one or several subject areas. Their performance is often uneven; for example, they may excel in math but struggle with writing.
Perceptual-motor difficulties	Children with LD often have trouble interpreting sensory stimuli and distinguishing left from right. They may exhibit a lack of motor coordination.
Speech and language delays	Children with LD often show delays in language, including slow speech and poor word retrieval.
Faulty memory and logic	Children with LD often have trouble remembering or thinking through problems in school.
Hyperactivity/attention deficits	Some children with LD show extreme degrees of activity in school. They may have great difficulty attending to classroom tasks.

TABLE 15-4
Some Common
Characteristics of
Children with
Learning
Disabilities

Language and Speech Delays. Some children with LD have language or speech delays. One child might speak very slowly, another in long, loquacious, rambling sentences. Yet another child with LD might show difficulty in retrieving words. For example, in trying to name a ball, such a child might say, “The... the... you know... that... what’s it called?... the... thing.”

Faulty Memory or Thinking. Children with LD sometimes have trouble remembering or paying attention in class, organizing their work, or following tasks or instructions in order. Sometimes teachers misinterpret these difficulties and claim the child “just doesn’t listen” or “never follows directions.” On occasion, children with LD become distracted by one small part of a whole and are therefore unable to see the entire field or the big picture. For example, a child looking at a topographical globe of the world might center on the bumps on a particular mountain range and attend to nothing else.

Some children with LD have difficulty with change and become upset or angry if routines are disrupted. A child might become surprisingly upset, for example, when discovering one morning that his cubby or desk has been moved to another location.

Hyperactivity/Attention Deficits. Children with LD are sometimes extremely active and have much difficulty paying attention. Some children are so active that they disrupt the activities of other students in the class. They may have trouble sitting for even brief periods and may be unable to attend to even the simplest of instructions.

Some experts believe that LD and **attention-deficit/hyperactivity disorder (ADHD)**, described in Chapter 14, are essentially the same disability because the two conditions so regularly accompany one another. However, research has shown that ADHD can exist with or without LD (Hesslinger, Thiel, van Elst, Hennig, & Ebert, 2002). Some children display a full range of LD characteristics; others only show ADHD-related behaviors.

Some characteristics of ADHD are common among younger children. Preschoolers often are wiggly and inattentive, show difficulty following directions, and use less mature syntax and grammar. How does one determine whether a school-age child is simply exhibiting immature behavior or displaying symptoms of a real disorder? Furthermore, some LD characteristics may be indicators of other disorders, such as underachievement, emotional disturbance, and even mental retardation (S. M. Robinson & Deshler, 1995). Whether a child has LD or some other disorder or is simply immature must be determined by careful observation and assessment.

If a child’s challenges are many and severe, a condition such as mental retardation might be suspected. If they are less severe and more specific, LD is a possibility. If the challenges do not greatly affect school success or social relationships, immaturity could be the cause.

attention-deficit/hyperactivity disorder (ADHD):

A disorder that is characterized by high activity level, impulsiveness, and an inability to pay attention and that often leads to poor peer relations and school performance.

gifted and talented: A term used to describe children who display a superior intellect and/or talents that are advanced for their chronological age and who are often extremely competent in language and able to grasp complex ideas quickly.

Children Who Are Gifted and Talented

Children are said to be **gifted and talented** if they display a superior intellect and/or talents that are advanced for their chronological age. They often are extremely competent in language and may grasp complex ideas quickly. They may not benefit from tedious, step-by-step lessons that laboriously break learning down into chunks of information and may not require drill-and-practice strategies to master concepts. This means that much of a typical school day is unproductive for children who are gifted and talented (McCoach & Siegel, 2003; L. K. Silverman, 1995).

One trait of children who are gifted and talented is a unique learning style. The following story illustrates the idiosyncratic pattern of development for one young child:

A 5-year-old growing up in southern India has not spoken. He appears alert and interested in the world around him and shows affection toward his family members, but he does not speak. Not one word. Of course, his parents grow worried.

They take him to a clinic where he is examined by a physician. Nothing appears to be wrong physically. His parents try various techniques to encourage him to talk. They offer rewards and demand that he speak before they will meet his needs. They try speaking in just their native language. (Theirs is a bilingual home, and they hope that simplifying the linguistic environment will help.) None of these strategies work.

Then, one day, the child begins to speak: not just one or two words but in long, sophisticated sentences. To the surprise and delight of his parents, he speaks eloquently and fluently in both his native language and English. By the end of his sixth year, he can read and write in both languages.

Children who are gifted and talented face many challenges. They are very much in need of special support in school. They do not always get along well with peers; often they seek the companionship of older children or adults (Gross, 2003). Children who are gifted and talented tend to be highly sensitive and somewhat introverted (L. K. Silverman, 1995). They are not always good students; in fact, underachievement is common.

A number of approaches to meeting the needs of children who are gifted and talented have been proposed. Acceleration of the content and pacing of the curriculum is one promising method. Early entrance into kindergarten and skipping grades are extreme examples. This strategy appears to work well, especially for girls (Neihart, 2007). Because children who are gifted and talented seek the company of older peers, skipping even two or more grade levels has been found to be effective.

Developing special gifted classes before, during, or after school is another strategy. Unfortunately, such programs are often limited (many take place only twice per week) or are eliminated altogether during periods of tight budget constraints. Providing enrichment in the regular classroom is the most prevalent (and least costly!) approach. In this method, teachers provide special experiences to challenge the thinking of children who are gifted and talented in the regular classroom. A problem with this approach is that some teachers confuse enrichment with "MOTS," meaning "more of the same" (L. K. Silverman, 1995, p. 400). Children who are gifted and talented are simply asked to do *more* worksheets or *more* math problems. Such strategies represent a misunderstanding of the needs of these children.

A growing number of children are now identified as both gifted and learning disabled. One out of six children who are gifted may have learning disabilities (Little, 2005). They may show specific reading, math, or perceptual challenges. Eliminating rote memory tasks and timed tests—standard fare in most classrooms—and integrating computer technology into the curriculum are strategies that are believed to support the academic achievement of children who are both gifted and learning disabled (L. K. Silverman, 1995).

Concerns have arisen about the identification of children who are gifted and talented because gifted classrooms are often composed of middle-class Euro-American students and not representative of the cultural composition of the community (L. K. Silverman, 1995). Children of color who are recruited into gifted and talented programs are less likely to

remain in these classrooms over time (Moore, Ford, & Milner, 2005). They may not fit in as well with peers of predominantly middle-class backgrounds and do not always conform to the behavioral and learning expectations of teachers.

One reason children of color are underrepresented in gifted programs is because they do not always perform well on traditional assessments of giftedness. For example, an African American child may not perform efficiently on memory or vocabulary tasks because the content of the tasks is not relevant to her life. A Latino child may not score well on an IQ test because he comes from a field-sensitive culture. Teachers and school psychologists should consider using alternate means to determine giftedness among children of diverse cultural backgrounds. Children who show a high degree of competence in movement and the performing arts on the playground or in the neighborhood could be gifted. A child who displays exceptional story- or joke-telling ability may be gifted as well. L. K. Silverman (1995) proposes that children of diverse cultural backgrounds be assessed in the community, not in school. Observations of interactions at church, in the community center, or around the home or apartment may be more useful in identifying children who are gifted and talented from historically underrepresented groups. New, non-verbal, culturally sensitive methods of assessment have been found to more accurately identify African American and Latino gifted children (Naglieri & Ford, 2003).

Meeting Diverse Cognitive Needs in One Classroom

In a single primary classroom, a teacher might work with children who have severe cognitive impairments and those with highly advanced abilities. How can the needs of students with mental retardation and learning disabilities and those with advanced cognitive abilities be met in one class of 20 children? Several strategies are suggested in the literature (Howard et al., 2004, Ormrod, 2007; Umansky & Hooper, 2008):

1. **Graded challenges.** In Chapter 13, **graded challenges** were recommended as a way to encourage greater social interaction. These may also be used to meet diverse cognitive needs. Recall that graded challenges are activity choices—built into any project or instructional material—that are of different difficulty levels. In a math center, for example, activities that are of varying degrees of difficulty are provided. Some involve simple counting, others require addition and subtraction, and still others entail higher level math operations. Children are drawn (or guided) to activities that match their cognitive abilities. Graded challenges work best in classrooms with learning centers and group projects. Whole-group teaching is exceedingly difficult in classrooms of diverse learners!
2. **Cooperative learning and partnering.** In **cooperative learning and partnering**, teachers can plan projects in which children work in pairs or groups. At least some of the time, children should be assigned to these groups by the teacher so that more competent students are matched with those who have cognitive disabilities. More advanced children can then guide those needing assistance. Care should be taken to assign group members who are socially compatible. A very prosocial, gifted, and talented student would make an excellent partner for a child with Down syndrome.
3. **Visual and auditory cues.** Many activities in the primary years require an ability to read. A project based on a children's book or a cooking activity with a written recipe are examples. Children with cognitive impairments will have difficulty with these activities. Teachers can include visual or auditory cues for these children: a recorded

graded challenges: The provision of play and learning materials in a classroom that represent varying degrees of difficulty so that children of all abilities can find something meaningful to do.

cooperative learning and partnering: Classroom strategies in which children work in pairs or groups so that more competent students may be matched with those who have cognitive disabilities.

version of the book or pictures on the recipe—cups and teaspoons and ingredient labels—to guide them in their cooking. More competent partners can be asked to read the text to less able readers as well.

4. **Activities addressing multiple intelligences.** Cognitive disabilities may affect some areas of learning but not others. A child may struggle with reading but be a very competent musician. Even gifted and talented children may not be competent in some areas. They may excel in verbal abilities but have great difficulty with math. Teachers can plan activities that address all areas of learning so that each child has an opportunity to show his or her unique abilities. Gardner's (2006) multiple intelligences, presented in Table 15-1, serve as a handy guide. Teachers might try to plan at least several activities per week that address each of these intelligences.
5. **Flexible scheduling.** Children of diverse abilities take more or less time in learning concepts. Some will finish activities quickly and be ready to move on but will have to wait while other children catch up. Other children will take a long time to finish and may never complete projects or assignments. Teachers can address this pacing problem by adopting **flexible scheduling**—a strategy in which some children are allowed to take as long as they need on a learning task, and others are able to move ahead to more advanced activities if they finish early. Teachers can simply extend a learning period, for example, so that children can complete a science experiment they are working on. They can plan a variety of higher-level activities to keep on hand for children who finish early.
6. **Questions of different cognitive levels.** Questions are powerful teaching tools for primary-grade teachers. Higher level, open-ended questions stimulate advanced thinking (e.g., "Why did the oil and water separate do you think?"). These **questions of different cognitive levels** are ideal for many children—particularly those who are gifted. The more thought-provoking the question, the better! For children with cognitive disabilities, however, such questions are very challenging. Less complex questions would be more appropriate (e.g., "Where is the oil? Can you point to it?"). In planning, a teacher can write out questions that are of many different difficulty levels. These can be asked within the same activity. High level questions can be alternated with lower level ones. Care can be taken to let less able children answer the easier questions; more challenging ones can be directed to cognitively more advanced students.

flexible scheduling: A classroom strategy in which some children are allowed to take as long as they need on a learning task, and others are able to move ahead to more advanced activities if they finish early.

questions of different cognitive levels: Questions that teachers ask that are of many different difficulty levels so that challenging, open-ended questions are alternated with lower level, simple-answer questions.

CHILD GUIDANCE: *Helping Children Invent Their Own Solutions to Problems*

Based on Piaget's work, many primary-grade teachers encourage children to find answers to problems on their own. In a math activity, for example, a teacher might say, "I want you to count how many marbles you have, then divide them into three equal groups." During a science lesson, a teacher might state, "I have trays for all the different animal classifications—mammals, reptiles, and so on. I want you to put these pictures of animals into their correct trays." Such activities allow children to think, interact with peers, and learn important concepts. But do they go far enough?

Constance Kamii (1989) argues that in at least some activities, teachers should not only challenge children to find an

answer but also encourage them to invent their own way to solve the problem. How can this be done? A teacher can simply alter the instructions or pose questions in a slightly different way. A teacher might say, "I want you to divide up your marbles so that each of you has the same amount." Here, children are not told to count. That gives away the solution. They are encouraged to solve the problem any way they wish. They may choose to simply guess, use a one-to-one correspondence strategy, or count. They may argue about the best way to divide the marbles. In the end, their solution will be more meaningful and will lead to more complex thinking and social interaction.

(continued)

In a science activity, the teacher might simply instruct children to “put the animals that are alike together.” After they have done this, the teacher might ask them, “Why did you group the animals like you did?” In this case, children are able to come up with their own solutions—that is, their own categories—rather than ones the teacher suggests.

To challenge thinking even further, the teacher can ask, at the end of such activities, “Can you think of *another* way to divide the marbles?” or “Can you use *another* way to group the animals?” The emphasis here is on Piaget’s cognitive processes—categorizing, for example—not just getting a right answer.

SUMMARY

The primary years, from ages 6 to 8, are marked by rapid cognitive growth. Most children of this age enter the concrete operational stage of development, in which they are able to solve more complex problems and acquire new abilities in language and literacy. For this reason, most children around the world begin formal schooling during this developmental period. There are a variety of perspectives on the intellectual development of primary-grade children. Some believe that innate abilities may be measured by IQ tests. Others, such as Howard Gardner, propose that there are multiple intelligences, including musical, spatial, and even interpersonal, that are not always appreciated in school. Piaget viewed intelligence as the acquisition of specific thinking processes. For children in his concrete operational stage of cognitive development, these processes include reversibility and causality. His work has influenced the primary-grade curriculum development in all subject areas.

Piaget’s view of cognitive development has been criticized as underestimating primary-age children’s thinking and for failing to

appreciate cultural differences in learning. Vygotsky’s theory emphasizes the role of culture and language more fully. He argued that verbalizations—both the child’s and those of others—are now internalized and help guide learning.

Metacognition—the ability to think about and regulate learning processes—contributes to cognitive development in the primary years. Children are now able to consciously control their learning processes and can use such strategies as rehearsal, labeling and organization, and paying attention.

School success is influenced by factors other than cognitive development; cultural elements play an important role. Clashes in cognitive style, the poor quality of urban schools, and family attitudes toward education all affect learning outcomes. Cognitive disabilities and giftedness also influence school performance. Children with special needs can be successful in school if teachers adapt classroom activities, groups, and schedules.

RESEARCH INTO PRACTICE

CRITICAL CONCEPT 1

Children’s success in school is related, in part, to general intelligence. One measure of intelligence is the intelligence quotient (IQ), which is determined by a score on a standardized test. Concerns have been raised about IQ as an adequate measure of intellectual functioning, however. Some researchers have found that IQ tests measure only one narrow type of intelligence and fail to appreciate others. Others have argued that IQ tests favor children of Euro-American backgrounds. IQ test bias has been a persistent concern in American education.

Application #1 Use extreme caution in interpreting IQ scores, particularly those for children from historically underrepresented groups. Be aware that IQ tests measure only a narrow range of intellectual abilities and are subject to error. Important educational decisions about children should never be based solely on the results of a single IQ score.

Application #2 Advocate for more culturally sensitive methods of assessing intellectual competence. These may

include recently developed culture-free tests and nontest observational methods. Qualitative observation of children’s performance across a range of developmental areas—music, movement, spatial ability, and social competence, for example—will give a broader picture of intellectual functioning.

Application #3 Plan experiences that enhance multiple intelligences, not solely linguistic or mathematical intelligence. Initiate activities that integrate movement, music, art, and social and interpersonal expression to address those intelligences sometimes neglected in schools.

CRITICAL CONCEPT 2

Piaget has looked at intelligence differently, describing intellectual processes rather than quantifying intelligence with numbers. He has focused as much on how children learn as on what they know. He found that unique thought processes—assimilation and accommodation, decentration, reversibility, and causal thinking—emerge in the

primary years. These abilities allow children to acquire new knowledge in math, social studies, science, and other academic areas.

Application #1 Rely on Piaget's descriptions of primary children's thinking to understand and evaluate intellectual development. By asking children to think out loud or explain how they solved problems, you can assess children's acquisition of such mental processes as decentration, reversibility, and causal thinking.

Application #2 Apply Piaget's ideas on the acquisition of map space and time concepts in designing activities and materials in the social studies. Based on Piaget's work, plan map-drawing or map-interpreting experiences that lead to early understanding of geography. Assist children in thinking about the long ago and far away by using literature, old photographs, and classroom visits by grandparents.

Application #3 Apply Piaget's ideas on the acquisition of number, seriation, and transitive reasoning to plan a developmentally appropriate mathematics curriculum. From Piaget's view, providing opportunities for children to make autonomous judgments about amounts, distances, lengths, order, and relationships among objects and events is most important in math learning in the primary grades.

Application #4 Apply Piaget's ideas on classification and understanding natural causes to the planning of a primary-grade science curriculum. Based on Piaget's work, provide opportunities for children to observe and determine the causes of natural phenomena and to categorize objects in a classroom museum.

Application #5 Adhere to Piaget's most basic tenet of learning in the primary years: that children construct knowledge through action on concrete objects. Highly abstract, academic lessons are still inappropriate for children at this age.

CRITICAL CONCEPT 3

There is great variation in children's cognitive development in the primary years. Children of some cultures will be more advanced than Piaget would have predicted, others less so. Such differences may be explained by the diverse life experiences and competencies that are valued by families of different backgrounds.

Application #1 Understand and appreciate cultural differences in such general cognitive abilities as conservation, understanding of space, or mathematical reasoning. Use caution in assessment to ensure that differences in how children think are not misinterpreted as deficits.

Application #2 Plan experiences that represent a range of cognitive abilities so that children of diverse backgrounds are challenged but never overwhelmed.

CRITICAL CONCEPT 4

Vygotsky has shown that children's learning is enhanced when their teachers or peers guide their problem solving within the zone of proximal development. This zone is a point in a learning experience where a task is just beyond a child's level of understanding. With hints, questions, or modeling, children in this zone can be prompted to accomplish the task on their own.

Application #1 Be cautious not to give children too much help in solving problems. Watch for times when your students are struggling with a challenging problem but show signs they can solve it on their own with just a little help. In these situations, ask guiding questions, give hints, provide demonstrations, provide additional materials, or in other ways enable children to work through the task independently.

Application #2 Play cooperative learning activities to encourage children to assist one another in learning within the zone of proximal development. Assign small groups of children tasks that require much collaboration and discussion. Structure these groups so that they include children who are more or less competent in a particular subject area. Facilitate interactions between "expert" and "novice" learners to promote interactions within the zone of proximal development.

CRITICAL CONCEPT 5

Memory improves during the primary years. One ability that enhances memory at this age is metacognition: the awareness of and ability to regulate one's own thought processes. Children begin to control their own thinking; they can choose to attend to some stimuli and not others, for example, and can rehearse information and skills they wish to retain. Memory and metacognitive strategies will vary among children of different cultures.

Application #1 Initiate memory games in the classroom to help children extend their short- and long-term memories. Examples include the traditional card game "Concentration" and the "Who's Missing?" game, in which children try to guess which classmate has secretly left the room.

Application #2 Suggest strategies that children might use to learn and remember. Hints for remembering, such as "Pay close attention" and "Say these words over to yourself several times," can be understood and used by children of this age.

Application #3 Learn the memory and learning strategies that are most commonly used within a child's family and culture. Students of some cultures may better remember facts if they are incorporated into songs, chants, stories,