

# SCHOLASTIC *BIG DAY FOR PREK*<sup>TM</sup>



RESEARCH FOUNDATION PAPER

# Scholastic *Big Day for PreK*<sup>™</sup>

## Research Foundation Paper

### Table of Contents

Introduction .....	2
Program Overview .....	6
Research Foundations .....	9
Home-School Connection .....	10
Social-Emotional Development .....	12
Language and Literacy .....	14
Oral Language & Vocabulary .....	14
Alphabet Knowledge & Phonological Awareness .....	18
Emergent Reading & Writing .....	20
Mathematics, Science, and Technology .....	22
Mathematics Education .....	22
Science Education .....	24
Technology .....	26
Social Studies and Fine Art .....	28
Health, Physical Development, and Safety .....	30
Differentiated Instruction .....	32
Responsive Instruction .....	32
Children With Special Needs .....	34
English Language Learners .....	36
Early Childhood Assessment .....	38
Professional Development .....	40
Conclusion .....	42
References .....	43

## INTRODUCTION

### **The Importance of Early Childhood Education**

Children's experiences in their first years have a profound impact on the course of the rest of their lives. Young children set out as avid explorers seeking to understand the world and their place in it. Research shows not only the dynamic learning potential of children when they are in responsive, nurturing, stimulating environments, but also the detrimental effect on children when they are deprived of these opportunities.

In the past 25 years in the United States, the role of early childhood programs in providing crucial early learning experiences has grown, by choice and by necessity. In 2005, over half (57%) of children aged 3 to 5 attended center-based early childhood programs (U.S. Department of Education, 2007).

These early childhood programs play a critical role in preparing students for kindergarten. Studies show that achievement gaps between poor and non-poor children already exist at entry into kindergarten (Rhode Island KIDS COUNT, 2005). Thus many states are devoting increased attention to improving school readiness by investing in and articulating standards for quality early childhood education programs (Barnett, Epstein, Friedman, Boyd, & Hustedt, 2008; Rhode Island KIDS COUNT, 2005; Texas Education Agency, 2008). In the focus on school readiness, certain domains have emerged as critical indicators of young children's preparation for kindergarten.

Research affirms the role of social and emotional development in young children's readiness for kindergarten (National Research Council, 2008). Children learn best when they have developed the behaviors and attitudes that will enable them to function productively and collaboratively in school and society. Furthermore, experts agree that children are best prepared for school when early education emphasizes the development of the whole child, systematically fostering learning in domains such as social studies, creative arts, and physical development in addition to the domains described above (National Research Council, 2001).

One of the most prominent areas of focus in preparing children for kindergarten is language and literacy development. Extensive research confirms that in order to help prepare young children to be successful readers, early childhood educators must engage young children in complex conversations that support their oral language development, expose them to rich experiences with a wide variety of books and print, and provide focused attention on the building blocks of early literacy, such as alphabet knowledge, phonological awareness, and vocabulary acquisition.

Another area that has received increasing attention as a key ingredient of school readiness is education in Science, Mathematics, Technology, and Engineering—referred to as the STEM fields. In recent years public concern has grown over increasing the supply of young people pursuing careers in these fields, and over improving American students' performance relative to other countries on international tests of these skills (Viadero, 2010). Many states have launched efforts to bolster STEM education, and in 2009 President Obama announced a national call to invest in STEM education, starting in preschool. At the same time, evidence is emerging that young children are able to engage in more complex scientific and mathematical thinking than previously thought (National Research Council, 2005).

Although the focus on school readiness has placed greater emphasis on academics in early childhood, increasing attention is also being paid to the importance of play for young children (Miller & Almon, 2009). Purposeful play promotes active engagement in learning and allows children to practice key language, literacy, mathematics, science, and other skills in context. Through both child-initiated and teacher-guided play, children can develop critical social interaction skills, extend and apply their understanding of the world around them, and exercise critical cognitive skills such as asking questions, problem-solving, and decision-making (Miller & Almon, 2009; Stewart, 2009).

### **The Students in the Early Childhood Classroom**

While the years between ages 3 and 5 are a time of incredible growth for the vast majority of children, each child takes an individual path within the course of learning and development (Strickland & Riley-Ayers, 2006). Even more than in K–12 education, children in this age group vary widely in their physical, social, emotional, cognitive, and linguistic development, as well as in their interests, temperaments, and dispositions toward learning. Children also differ in their social and cultural backgrounds and in the areas of knowledge that they bring to school. Thus it is crucial for early childhood education to attend to and celebrate the diversity of each child's own culture and language, family background, experiences, interests, and any special needs. This requires linking instruction with ongoing assessment in order to respond effectively to individual strengths and needs. It also requires demonstrating respect for each child's home culture and community by building positive home–school connections (National Association for the Education of Young Children [NAEYC], 1995; Strickland & Riley-Ayers, 2006).

One important area of variation within the early childhood population is in English proficiency. While approximately 10 percent of the PreK–12 public school population in 2005–2006 was estimated to be

## **Introduction (cont.)**

Limited English Proficient (National Clearing House for English Language Acquisition, n.d.), the largest concentration of English language learners in U.S. schools is in early education. This disproportionate representation is due to the fact that the majority of English language learners who attend public schools since entry develop English proficiency by the third grade (National Research Council, 2008). The majority of these English language learners in U.S. schools are from Spanish-speaking homes; approximately four out of five English language learners speak Spanish as their first language (National Research Council, 2008). These statistics underscore the importance of equity of Spanish resources and of supporting English acquisition in early childhood curricula.

The early childhood care population encompasses children from all socioeconomic backgrounds. In 2005, 47 percent of children in center-based early childhood programs were from families living below the poverty line (U.S. Department of Education, 2007). For children from lower socioeconomic backgrounds, whose chances of thriving in school are threatened by a host of poverty-related medical, sociological, and physiological problems, quality early education can actually serve a protective role and help set them on the path to greater academic success (Berliner, 2009; National Research Council, 2001).

Many early childhood programs include children with special needs. The U.S. Department of Education reports that nearly 6 percent of children ages 3 to 5 were served under the Individuals with Disabilities Education Act (IDEA) in 2007 (U.S. Department of Education, 2007a). Forty-six percent of these children had a primary disability of speech and language impairment, with another 39 percent reported as having a primary disability of developmental delay (U.S. Department of Education, 2007b). Evidence shows that early identification of and intervention for such challenges can help prevent or mitigate later language and learning difficulties (Coleman, Roth, & West, 2009).

## **Scholastic *Big Day for PreK***

The social and educational trends and demographics described above speak to both the tremendous need and opportunity for high-quality, research-based early childhood education. In response, Scholastic has developed a program that reflects the best research and practices on how young children learn and grow: *Big Day for PreK*.

*Big Day for PreK* is a comprehensive early childhood education program that builds upon children's

curiosity and interest, and encourages them to explore, play, and learn about the world around them. Development of *Big Day for PreK* was informed by a team of expert researchers and practitioners, led by Dr. Anne Cunningham, an early childhood researcher and professor at the University of California, Berkeley whose areas of expertise include the cognitive and motivational processes underlying reading ability and the interplay of context, development, and literacy instruction.

Grounded in responsive, integrated instruction, *Big Day for PreK* prepares preschool-aged children for kindergarten and beyond through intentional and engaging learning opportunities that build the necessary foundations in essential learning domains. *Big Day for PreK* provides a comprehensive curriculum for full- or half-day, an extensive collection of classic and contemporary children’s literature and nonfiction text in a variety of formats, intensive language and early literacy development, technology that connects children, teachers, and families, and 100% equity in English and Spanish.

### **Program Authors**

#### **Anne Cunningham, Ph.D. (Senior Author)**

*Professor, Cognition and Development; University of California, Berkeley, Berkeley, CA*

Dr. Cunningham is nationally recognized for her research on literacy and development in early childhood. She examines the cognitive and motivational processes underlying reading ability and the interplay of context, development, and literacy instruction. Dr. Cunningham has served on several early childhood expert panels including the National Early Literacy Panel. Her expertise informed the entire program with specific emphasis on phonological awareness, alphabet knowledge, assessment, and professional development for the *Big Day for PreK* curriculum.

#### **Nicole Andrews, Ed.D.**

*Assistant Professor, Early Childhood Mathematics; University of Houston, Houston, TX*

Dr. Andrews’ research has primarily focused on children’s mathematics, specifically spatial ability in young children. Additionally, she focuses on the professional development of pre-service and in service teachers. Dr. Andrews’ expertise in early childhood mathematics informed the development of the mathematics domain of the *Big Day for PreK* curriculum.

#### **María Elena Argüelles, Ph.D.**

*Researcher and Educational Consultant, Miami, FL*

Dr. Argüelles specializes in the areas of early reading instruction and reading instruction for English language learners. Dr. Argüelles has worked for the Central Reading First Regional Technical Assistance Center at the University of Texas, Austin, and as a reviewer for the Florida Center for Reading Research. Her insights into instruction for English language learners contributed to the development of support for those students in the *Big Day for PreK* curriculum.

#### **Julie Washington, Ph.D.**

*Professor, Language and Literacy Initiative; Georgia State University, Atlanta, GA*

Dr. Washington’s research addresses language and literacy development in diverse populations. With preschoolers, her work has focused on understanding and improving the emergent literacy skills necessary to support later reading proficiency in high-risk groups. Her insights informed the development of the oral language, vocabulary, and emergent reading domains of the *Big Day for PreK* curriculum.

## PROGRAM OVERVIEW

*Big Day for PreK's* approach to learning is grounded in cognitive research and builds on young children's knowledge of and curiosity about the world around them. The comprehensive curriculum is designed to ensure that children acquire new knowledge, skills, and understanding each day through hands-on experience, purposeful play, and teacher-led instruction. *Big Day for PreK* learning experiences integrate all domains, including social-emotional development, oral language, literacy, mathematics, science, social studies, art, and physical development.

### **Comprehensive Instructional Scope and Sequence**

The central organizing features of the *Big Day for PreK* curriculum are the **Big Experiences**—Circle Time and Story Time lessons—that occur three times each day. These Big Experiences integrate learning domains and provide an anchor for conversation, play, and learning. In the Teaching Guides, each Big Experience is accompanied by three suggested Make Learning Bigger activities that provide opportunities to solidify and extend learning and provide responsive instruction.

During each Big Experience, the Teaching Guides direct teachers to observe children's facility with skills that have been shown to be most predictive of kindergarten readiness. For children who need additional practice or intervention, the Teaching Guides provide suggestions for **One-to-One Follow-up** linked to the day's observations. These targeted activities provide an opportunity for teachers to individualize instruction according to students' needs and to closely monitor their progress toward key benchmarks.

In addition to Big Experiences, time for Small Group Instruction and Learning Centers is built into each day of the program. **Small Group Instruction** targets essential literacy and mathematical skills, allowing teachers to provide focused instruction, guidance, and feedback in key skills and reteach if necessary using alternative procedures or modalities.

Daily **Learning Centers** time provides children the opportunity for intentional play, social interaction, and independent exploration. The Teaching Guides provide instructions for setting up eight different centers: Blocks & Building, Creativity, Dramatic Play, Math, Reading & Listening, Science, Technology, and Writing. The activities at each center change depending on the monthly theme and the particular focus of each week.

The *Big Day for PreK* curriculum is divided into eight engaging themes, each about one month long. Early in the year, the themes focus on concepts in children’s more immediate world, and they broaden over the course of the year as children understand more and more about the world around them. The eight themes integrate learning across content areas:

- 1) Ready for School!
- 2) My Family
- 3) Our Community
- 4) Awesome Animals!
- 5) Imagine It, Make It
- 6) Growing Up Healthy
- 7) Nature All Around Us
- 8) Moving On

Each theme is linked with a Social-Emotional focus and a Knowledge focus that identifies the learning objectives and key understandings for that month. Within each theme, four weekly subtopics build children’s knowledge in theme-specific concepts, language, and skills. Throughout, flexible content allows teachers to incorporate their own favorite themes into the classroom.

### **Meaningful Conversations That Build Oral Language and Vocabulary**

Oral language development is at the heart of *Big Day for PreK* instruction. Throughout the day, instruction is grounded in meaningful conversations that build oral language and vocabulary for both English language learners and native English-speaking children. *Big Day for PreK* teachers create a rich literacy environment that fosters vocabulary development, and they engage children in instructional routines designed to foster vocabulary acquisition using theme words, story words, content-area words, and academic language.

*Big Day for PreK* provides many resources to help teachers maintain focus on language and vocabulary throughout the day. In the Teaching Guides, language support features model ways for teachers to prompt conversation and help children explore language use. During read-alouds, BookStix, or preprinted sticky notes, help teachers engage in dialogic reading and stimulate conversation about books. Math Mats provide teachers with sample language and key mathematics vocabulary.



## **Program Overview (cont.)**

### **A Wide Variety of Children’s Literature and Nonfiction**

*Big Day for PreK* builds the foundation for learning to read and loving to read through exposure to a wide variety of classic and contemporary fiction and nonfiction books. Each day, children participate in whole-group read-alouds or shared reading with the teacher, and independent reading in Learning Centers. Children can enjoy eBooks through BookFlix®, an online resource offering theme-related fiction and nonfiction literature pairs. BookFlix stories can be projected onto a screen or whiteboard for whole-group read-alouds, enjoyed independently by children in the Technology Center, or accessed from any Internet connection, including computers in children’s homes.

### **Innovative Technology**

*Big Day for PreK* incorporates new technology that supports teachers and connects families with the learning in the classroom. *Big Day for PreK* Teacher Space is a classroom planning and management tool for teachers. *Big Day for PreK* Family Space is a bilingual communication tool in both English and Spanish through which families can gain information about their child’s learning and about ways to extend learning at home. Families have unlimited access to BookFlix from home or any computer that has an Internet connection.

### **Home–School Connection**

Built on the recognition that families are critical partners in children’s learning, *Big Day for PreK* establishes a strong connection between school and home and between teachers and the community. The Teaching Guides help teachers with strategies to engage families early in the year, and maintain communication and a positive relationship throughout the year. Also included in the Teaching Guides are suggestions for engaging the community through activities such as field trips and classroom visitors.

### **Complete Equity in English and Spanish**

Every component in the *Big Day for PreK* English/Spanish edition comes in both English and Spanish, offering comprehensive support for bilingual and dual-language classrooms. The English/Spanish Teaching Guides offer side-by-side mirrored instruction. All books, assessment tools, downloadable resources, classroom materials, and family resources are available in both English and Spanish.

## RESEARCH FOUNDATIONS

Scholastic *Big Day for PreK* is informed by an extensive body of research on best practices for providing high-quality early childhood education to children from ages 3 to 5. For each curriculum and instructional element of the program listed below, this section presents information about relevant research and expert opinion, alongside descriptions of how these research foundations have been translated into the program design and curriculum.

### **Curriculum and Instructional Elements of Scholastic *Big Day for PreK***

- Home–School Connection
- Social-Emotional Development
- Language and Literacy
  - ✓ Oral Language and Vocabulary
  - ✓ Alphabet Knowledge and Phonological Awareness
  - ✓ Emergent Reading and Writing
- Mathematics, Science, and Technology
  - ✓ Mathematics Education
  - ✓ Science Education
  - ✓ Technology
- Social Studies and Fine Art
- Health, Physical Development, and Safety
- Differentiated Instruction
  - ✓ Responsive Instruction
  - ✓ Children with Special Needs
  - ✓ English Language Learners
- Early Childhood Assessment
- Professional Development

## Home–School Connection

### RESEARCH & EXPERT OPINION

- ◆ Research shows that young children experience greater school readiness and later academic success when their families are meaningfully engaged in their early learning (Halgunseth, Peterson, Stark, & Moodie, 2009; Meidel & Reynolds, 1999). Positive home–school connections have been linked to improved academic motivation and social-emotional skills in children of all ethnic and socioeconomic backgrounds (Halgunseth et al., 2009).
- ◆ It is important to find opportunities to engage children’s primary caregivers in their early education in both formal and informal ways, and to create joint pathways of communication between families and schools (Strickland & Riley-Ayers, 2006; White, Taylor, & Moss, 1992). For students whose home environment differs linguistically or culturally from the school environment, research suggests that efforts to create positive home–school connections lead to greater student engagement, motivation, and class participation (August & Shanahan, 2006).
- ◆ Family–school connections can also help parents understand their children’s particular strengths as learners and specific methods to support their learning at home (Frede, 1998). Quality early childhood programs should provide resources to help families extend learning experiences at home and in the community (Halgunseth et al., 2009).
- ◆ Research shows that families can have an important impact on preschoolers’ early literacy skills; shared reading of books in the home during preschool years has been linked with emergent literacy skills, language development, and later reading success (Arnold, Zeljo, Doctoroff, & Ortiz, 2008; Strickland & Riley-Ayers, 2006; Yarosz & Barnett, 2001). Early childhood education programs should help educate parents about the importance of reading with their children (Yarosz & Barnett, 2001).
- ◆ For English language learners, research shows that it is important for preschool teachers to encourage caregivers to maintain their home language with children, as continued language development in the first language will support acquisition of the new language (Tabors & Snow, 1994; Trumbull & Pacheco, 2005).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

A core principle of Scholastic *Big Day for PreK* is that teachers, families, and other caring adults need to work together to help children build a strong foundation in literacy and learning. Each theme includes tips for promoting two-way communication between home and school. Home to school suggestions provide ways for families and other caring adults to participate in the learning that students are doing at school—for example, by sending in related materials or engaging in activities and conversations with their child at home. The school to home suggestions help teachers keep families informed about what is happening in the classroom and help children apply their learning in their families and communities. The Teaching Guides provide further suggestions for engaging families and other caring adults throughout the year, from welcoming them with an open house and orientation in the beginning of the year, to encouraging classroom visits, holding parent-teacher conferences, and hosting special workshops to show families how they can build children’s literacy at home.

An important tool for maintaining the home-school connection in *Big Day for PreK* is the *Big Day* Family Space, a secure website that families can log in to from any computer with an Internet connection. In Family Space—available in both English and Spanish—families can stay informed about what their child’s class is learning each week. Using the downloadable list of Kindergarten Readiness Indicators, families can understand and monitor their child’s development throughout the year. The Teaching Guides provide suggestions for how teachers can help families use the list of milestones to support their children along the path to readiness. For families without access to computers at home, *Big Day for PreK* teachers will work with the community and library to provide them access to online resources and provide alternative communication strategies in traditional print if necessary.

Family Space provides suggestions for theme-related books in both English and Spanish to pick up at the library or bookstore, as well as Downloadable Books for parents and caregivers to read with their children. Families can also print out hundreds of downloadable, bilingual resources to help their children build mathematics and literacy skills, including Learn Together Downloadables, Clifford Literacy Activities, Clifford Mathematics Activities, and ABC Take-Home Books. In addition, children can log on and play online games to build literacy and develop social-emotional skills.

The Family Space also includes access to BookFlix®, an online literacy resource that provides children and their families access to literature and related activities. For each *Big Day for PreK* theme, there are four readings available on BookFlix (each available in English or Spanish)—two fiction and two related nonfiction. The animated fictional storybooks provide audiovisual support to build and strengthen literacy skills and make learning fun, while the nonfiction eBooks help build background and introduce content-area learning. Each book comes with a read-aloud feature, so that children can hear the book read aloud (with or without captioning), and the nonfiction eBooks contain key content vocabulary words that are highlighted in yellow and can be clicked to hear a definition.

Along with each BookFlix reading pair, families can access a variety of related activities, in English or Spanish. They can play interactive educational games related to the pair, learn more about the storybook author, or explore carefully selected, age-appropriate Web links related to the reading pair topic. The BookFlix and related activities, as well as the Family Space, provide families with rich resources for supporting and extending children’s social-emotional, literacy, and mathematics learning in the home.

## Social-Emotional Development

### RESEARCH & EXPERT OPINION

- ◆ It is essential for early childhood programs to attend to the whole child, as social-emotional development is significantly linked with cognitive and academic development (Cohen, 2001; Raver, 2002). “Emotional development and behavioral self-regulation are as important to early development as learning to read” (Raver, 2002).
- ◆ Executive function skills include “the ability to focus and ignore distractions, retain and use new information, plan actions and revise plans as needed, and inhibit impulsive behavior” (National Scientific Council on the Developing Child, 2008). In studies of self-regulation such as the well-known “Marshmallow Test” (Mischel, 1996), the ability of preschoolers to control their impulses significantly predicted social outcomes and academic achievement—including SAT scores—decades later (Mischel, DeSmet, & Kross, 2006; Tough, 2009). Executive function skills begin developing in early childhood, and emerging research suggests that focused attention to helping children develop these skills can help improve both executive function and more academic skills (National Scientific Council on the Developing Child, 2008; Tough, 2009).
- ◆ Children develop emotionally by becoming more aware of their own feelings and needs, and they develop socially by becoming more aware of the emotions of others (Shonkoff & Phillips, 2000).
- ◆ A playful learning environment and opportunities to engage in play contribute to children’s development of social-emotional skills. “Research shows that children who engage in complex forms of sociodramatic play have greater language skills than nonplayers, better social skills, more empathy, more imagination, and more of the subtle capacity to know what others mean. They are less aggressive and show more self-control and higher levels of thinking” (Miller & Almon, 2009).
- ◆ Research shows that it is important for teachers to build positive relationships with students and create an emotionally warm and safe environment that provides children with the security to explore and to enjoy learning (National Research Council, 2001).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* builds children’s awareness of their own and others’ feelings and needs, promotes social competence skills, and fosters improved self-control through an integrated learning approach that emphasizes meaningful play. The program provides teachers with the support and resources necessary to ensure that children can be productive learners in the classroom and beyond. Each day, children have multiple, guided opportunities to collaborate in groups, resolve conflicts, and form friendships, as well as to develop self-regulation, planning, and organizational skills that aid learning. The promotion of social-emotional development is integrated into the curriculum throughout the day and in varying contexts. Each *Big Day for PreK* theme includes a month-long focus on a relevant social-emotional area: Cooperation, Kindness, Responsibility, Respect, Attention, Initiative, Self-Awareness, Curiosity, and Persistence. One Big Experience each week provides an engaging, whole-group activity based on that month’s social-emotional focus. The social-emotional theme is also reinforced daily through Make Learning Bigger activities that connect the theme with learning in the content areas. Throughout the program, teachers are guided to help students develop the language and vocabulary associated with social-emotional development (e.g., labeling feelings with words). For example, teachers can use puppets to help children role-play and practice positive social behaviors.

*Big Day for PreK* literature has been carefully selected to reinforce key social-emotional competencies during Story Time. Books can provide models of target behaviors and serve as a starting place for discussion and activity. During read-alouds, teachers use dialogic reading to encourage children to reflect upon and connect the book’s message to their own experiences.

*Big Day for PreK* incorporates routines that provide children with clear steps to follow as they develop self-concept, self-control, social competence, and social awareness skills. The routines also serve as classroom management tools. The five routines are outlined on the Be Big in the Classroom routines poster to help guide both children and teachers: Ready, Set, Listen! (Active Listening); Keep Trying! (Persistence); Ways to Solve a Problem (Conflict Resolution); Ways to Calm Down (Regulating Emotions); and Ways to Share (Cooperation and Sharing).

The structured routines and instruction in social-emotional skills help children to develop executive functions, including planning, organizing, sustaining attention, resisting impulses, and self-control. Executive functions are important for behaviors—such as cooperating in groups, completing tasks, and persistence when facing a challenge—that children will need for success in school and in the 21<sup>st</sup> century workplace and community.

Learning Centers provide another important opportunity for students to practice and explore the Social-Emotional focus during independent play. The Learning Talk sections in the Teaching Guides provide models to help teachers reinforce social-emotional development during interactions with children in the Learning Centers. As children play and interact in the Learning Centers, teachers can observe their behavior and take advantage of teachable moments to reinforce key social-emotional skills.

Throughout the *Professional Handbook*, teachers will find a feature called “The Optimistic Classroom” that provides suggestions, tips, and activities to help encourage self-regulation, resilience, and hopefulness in children. Developed in collaboration with The Hawn Foundation and informed by key findings in neuroscience and child development, these suggestions aim to help all children live happy and healthy lives both in and out of the PreK classroom and to reach their potential—socially, emotionally, and academically.

## Language and Literacy

### Oral Language & Vocabulary

#### RESEARCH & EXPERT OPINION

- ◆ Studies show that children’s early language and literacy skills, including oral language and vocabulary, are strongly linked to their later reading performance and overall school achievement (Cunningham & Stanovich, 1997; Graves, 2009; Hart & Risley, 1995; Kamhi & Catts, 2002; National Institute of Child Health and Human Development [NICHD] Early Child Care Research Network, 2005; Phythian-Sence & Wagner, 2007; Storch & Whitehurst, 2002).
- ◆ Oral language skills include expressive (speaking) and receptive (listening) vocabulary, semantics (knowledge of word meanings), morphology (knowledge of word formation rules) and syntax (knowledge of sentence structure), and narrative discourse skills (the ability to tell or retell a story) (NICHD Early Child Care Research Network, 2005; Owens, 2004).
- ◆ To develop their oral language skills, children need a language- and conversation-rich environment in which teachers encourage them to engage in meaningful language interactions throughout the day (Albert Shanker Institute, 2009; Snow et al., 1995). It is also important for teachers to provide strong language models in the classroom. This is particularly important for children whose home language or dialect differs from the language environment of the school (Craig & Washington, 2004; Washington & Thomas-Tate, 2009).
- ◆ Reading aloud and discussing books are among the most effective ways to facilitate oral language development in a classroom setting (Justice, Kaderavek, Fan, Hunt, & Sofka, 2009; Kaderavek & Justice, 2002; National Early Literacy Panel, 2008; Teale, 2003).
- ◆ The dialogic reading approach provides a structured way for children to engage in discussion about books and practice oral language skills during read-alouds. (Whitehurst et al., 1988; Whitehurst et al., 1994; Zevenbergen & Whitehurst, 2003). During these shared-reading experiences the adult becomes an active listener while the models and feedback provided to the child result in more sophisticated language used overall. Children from low-income backgrounds and English language learners experience significant growth in their oral language skills using dialogic book reading (Lonigan & Whitehurst, 1998; National Early Literacy Panel, 2008; Valdez-Menchaca & Whitehurst, 1992).



## RESEARCH & EXPERT OPINION – continued

- ◆ Early vocabulary acquisition is a key component of later literacy success (Beck, McKeown, & Kucan, 2002; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; NICHD Early Child Care Research Network, 2005). This link between vocabulary and reading proficiency is likely due to the fact that learning new words also entails learning underlying concepts and building knowledge networks, which in turn aids in reading comprehension (Graves, 2009; Vellutino, Fletcher, Snowling, & Scanlon, 2004).
- ◆ Research suggests that effective early vocabulary instruction should include systematic, explicit introduction of new words along with rich opportunities for use; guided practice; systematic review of words; and regular progress-monitoring to inform instruction (Neuman & Dwyer, 2009).
- ◆ Evidence suggests that systematic, rich explanation of new words in context, such as during reading, enhances the vocabulary acquisition of both native English speakers and English language learners (Collins, 2005). In addition, both native English speakers and English language learners benefit when teachers systematically model conversational and academic language and encourage children to use this language in context (Albert Shanker Institute, 2009; Mohr & Mohr, 2007).







## Oral Language & Vocabulary – continued

### SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

In *Big Day for PreK*, oral language and vocabulary development activities are integrated throughout the day and across the curriculum to provide children with opportunities to explore and develop language for a broad range of purposes—including language related to the month’s theme, knowledge focus, and social-emotional focus. *Big Day for PreK* offers total equity in Spanish and English, so that teachers can provide comprehensive support for language and vocabulary development in bilingual and dual-language classrooms.

*Big Day for PreK* guides teachers to explicitly introduce many new words with multiple repetitions each week. Each Big Experience (excluding those that introduce alphabet letters and weekly review days) includes vocabulary words from one of the following categories:

- **Theme Words:** Words that are critical for understanding the knowledge focus of the theme and the Be Big Ideas of the weekly subthemes.
- **Story Words:** Words from the big books and read-aloud books, including rare words and words that reinforce the knowledge and social-emotional goals of the month.
- **Math Words:** Words that children need to explore and communicate about mathematics concepts.
- **Science Words:** Words that children need to explore and communicate about science content and inquiry.
- **Social Studies Words:** Words that children need to explore and communicate about social studies concepts and knowledge.

*Big Day for PreK* also places importance on new words that are likely to be used more frequently in the classroom than in children’s home culture and are necessary to be successful in school (e.g., words for greeting, directions, asking for help), as well as cognates, words that have similar sounds and spellings in Spanish and English that help English language learners work to bridge their two languages. Words from these categories appear in the Language Support and Bridge to English features on the lesson pages.

Teachers engage students in daily explicit instruction and activities to teach and practice vocabulary words and the targeted conversation, listening, and syntax skills. Explicit instruction and modeling of new words and language in context can be particularly beneficial to children whose home language or community dialect is different from the language of the school. All children have the opportunity to broaden their knowledge while building their vocabulary.

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS – continued

During read-alouds, *Big Day for PreK* uses a dialogic reading approach that encourages conversational interactions and gives children opportunities to experiment with and explore language. BookStix, preprinted sticky notes, can be affixed to the backs of the read-alouds and big books, to provide dialogic reading prompts that promote language and engage children in conversation. The stickers also offer prompts to use, reinforce, and elaborate on new words.

Other activities during the Big Experiences provide further opportunities for language development. For example, teachers can use the Big Wall Charts to help students demonstrate knowledge of new words and develop language as they listen, follow directions, describe, retell, role-play, and tell stories in relation to the pictures on the charts. Teachers support children's language development by using responsive interaction routines to encourage participation and elicit language through modeling, restating, and expanding responses. Language support features in the Teaching Guides model prompts and classroom conversation for teachers throughout the day.

Children's developing language skills are consistently reinforced during whole-class time, in small groups, and during Learning Centers, giving children many opportunities to use their developing language capabilities in diverse contexts. For example, Learning Centers provide play opportunities for children to interact, practice new words, and have conversations with each other and adults in the classroom. Math Mats include prompts for using new mathematics words and the *Songs and Fingerplays* book often includes selections that use Theme Words. Children are also encouraged and prompted to practice language skills during play time. The assessment tools provide information on how to observe and record children's language use in order to monitor progress, and include a language development checklist to monitor students 3 to 4 times per year.

Exposure to language in their home environment can have a powerful effect on children's language abilities. The *Big Day* Family Space, available in both Spanish or English, provides theme-based ideas for families to promote language at home. Families and children can view the theme-related fiction and nonfiction books together on BookFlix and use them as a starting point for conversation. The nonfiction eBooks include highlighted vocabulary words that children can learn and discuss with their families. Teachers can also print out downloadables for students to take home that feature the week's vocabulary words and suggestions for reinforcing the words at home with engaging family activities.



## Alphabet Knowledge & Phonological Awareness

### RESEARCH & EXPERT OPINION

- ◆ Phonological awareness and alphabetic knowledge have been identified as essential elements in literacy development (Burns, Griffin, & Snow, 1999; National Early Literacy Panel, 2008).
- ◆ Phonological awareness, or the ability to perceive and manipulate phonemes, is a strong predictor of later reading success (Adams, 1990, 2001; National Early Literacy Panel, 2008; Stanovich, 1993; Vellutino, Scanlon, & Sipay et al., 1996). Knowledge of phonemes and their correspondence with letters and spellings determine children’s ability to eventually read words fluently and comprehend text (Adams & Bruck, 1995; Scarborough, 2002; Wagner, 2008). Phonological awareness may be reinforced through activities such as identifying picture names beginning with the same sounds and blending sound units into words (Adams et al., 1996; Cunningham, 1990; Schatschneider et al., 1999).
- ◆ Research shows that literacy skills transfer across languages, even those that use different alphabetic systems (Goldenberg, 2008). Studies show relatively high transfer between English and Spanish (Denton, Hasbrouck, Weaver, & Riccio, 2000; Goldenberg). For Spanish-speaking children, the development of Spanish phonological awareness has been shown to aid development of English phonological awareness and support learning to read English words (Denton et al., 2000).
- ◆ Children’s knowledge of the alphabet in kindergarten has been found to be predictive of reading achievement later in school (National Early Literacy Panel, 2008; U.S. Department of Health and Human Services, 2003). Alphabet knowledge is critical to mastering phonics (Chard & Osborn, 1999); children must be able to recognize and name alphabet letters accurately and fluently in order to understand and apply the alphabetic principle, or “the understanding that there are systematic and predictable relationships between written letters and spoken sounds” (Texas Education Agency, 2002). Thus an important goal for pre- and beginning readers is ensuring that children have a firm grasp of both the sounds of the English language (phonemes) and their corresponding symbols (letters), in addition to the ability to segment and blend them to make words. Direct instruction in alphabetic coding and sound/symbol relationships (phonics) has been found to facilitate reading acquisition (Lyon & Moats, 1997; National Reading Panel, 2000; Rayner et al., 2000).
- ◆ In order to learn the alphabetic principle, children benefit from 1) explicit instruction in individual letter–sound relationships, 2) daily opportunities to practice new letter–sound relationships, 3) opportunities to review previously taught relationships, and 4) opportunities to apply growing knowledge of letter–sound relationships to the reading of simple phonetically spelled words (Lyon & Moats, 1997; National Reading Panel, 2002; Texas Education Agency, 2002).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* provides daily, engaging lessons for the whole class and small groups that teach alphabet knowledge and phonological awareness. Children learn upper- and lowercase letters in alphabetical order while building on their knowledge of the letters in their names and environmental print. One small-group lesson each week focuses on letter formation and writing. Flexible lessons for teachers who prefer to teach the letters in a different order are available from the *Big Day for PreK* Teacher Space.

Phonological awareness is integrated into every day's Big Experiences. In daily teacher-led small groups, phonological awareness activities provide further instruction, modeling, and practice. Many Transition Time activities also reinforce phonological awareness in active, engaging ways as children prepare to move between activities.

Learning Centers provide additional opportunities to reinforce phonological awareness and alphabet knowledge. Learning Center activities help children explore letter knowledge through play, environmental print, and authentic reading and writing connections. The Learning Centers for each theme include an ABC Place that allows for active exploration of ABCs in varied contexts, from the sensory table to the Math Center. Children can use letter manipulatives in the ABC Place and Writing Center to practice recognizing and naming letters.

The *Songs and Fingerplays* book includes English and Spanish songs and fingerplays to reinforce letter knowledge, including the Alphabet Song. These songs and rhymes also reinforce phonological awareness skills through language and sound play.

*Big Day for PreK* includes many materials to provide visual support for phonological awareness and letter knowledge. For example, Letter Cards show a letter and picture on one side to teach letter–sound correspondences and both forms of the letter on the other side to practice naming letters with automaticity. Each theme includes an alphabet book—one in English and one in Spanish—to support letter recognition, letter naming, and letter–sound knowledge. Letter–sound knowledge may be practiced and reinforced at home using downloadable alphabet minibooks. In addition, Letter Magnets are provided for use during instruction and individual exploration during Learning Center time.

Each new letter is introduced in Circle Time using the Letter Vest, a child-size vest that has clear pockets that hold alphabet letters. The Teaching Guides suggest having a Letter Helper, such as a child whose name starts with the targeted letter, model the vest to display the upper and lowercase versions of the letter to the class during teacher-led instruction. Use of the Letter Vest helps to engage and motivate children as they develop alphabet knowledge.



## Emergent Reading & Writing

### RESEARCH & EXPERT OPINION

- ◆ A language-rich environment is essential for young children's development as readers and writers. Children must hear a new word several times before incorporating it into their receptive (listening) vocabulary, and even more times before using it in their speaking and writing (Albert Shanker Institute, 2009).
- ◆ Studies have firmly established that shared picture book reading plays a critical role in the development of oral language, vocabulary, and narrative skills and is linked to later reading success (Neuman, Copple, & Bredekamp, 2000; Zevenbergen and Whitehurst, 2003). However, simply reading aloud to children does not by itself impact children's reading abilities; dialogue about and beyond the book is critical (Dickinson & Tabors, 2001; Whitehurst & Lonigan, 1998).
- ◆ Dialogic reading is a way of creating a dialogue between reader and listeners. A key technique used in dialogic reading is a short interaction in which the adult actively involves the child in telling the story, called the PEER sequence. The adult prompts children to say something about the book; evaluates the response; expands on the response by rephrasing and adding to it; and repeats the prompt to check understanding (Whitehurst, 1992). Studies show that dialogic reading using the PEER sequence has a positive effect on preschoolers' emergent literacy skills such as engagement in stories, understanding of plot, and expressive vocabulary (Crain-Thoreson & Dale, 1999; Zevenbergen and Whitehurst, 2003).
- ◆ In addition to exposure to narrative text, young children benefit from experiences with informational texts, which feed their natural curiosity about the world, contribute to the development of vocabulary and world knowledge, and help children learn that literacy is a means of obtaining and conveying information (Duke, 2003).
- ◆ The process of learning to write goes through six stages: drawing; scribbling; writing letter-like forms; writing units or letter strings; invented spelling; and conventional spelling (Bennett-Armistead, Duke, & Moses, 2005).
- ◆ Early childhood teachers can support children's writing development through strategies such as having children dictate as the teacher writes; modeling phonetic spelling during shared writing; encouraging children to write words to accompany their drawings; supporting all writing attempts; and asking children to "read" their words when they finish writing to emphasize the connection between written and oral communication (Albert Shanker Institute, 2009).
- ◆ Play can be critical to supporting writing development because it allows children to engage in writing for different purposes and for pleasure; it provides additional opportunities to practice fine motor skills, and it generates ideas for writing compositions (Neuman & Roskos, 2007). Teachers can provide both formal and informal opportunities for writing by setting up a writing center with a variety of writing tools and materials, and encouraging children to write for a wide range of purposes and contexts throughout the day (Albert Shanker Institute, 2009; Church, 2007).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

*Big Day for PreK* provides daily opportunities to build children’s emergent reading and writing skills across all content areas by sharing engaging stories and informational texts. The program includes a diverse collection of literature, with total equity in English and Spanish. This library encompasses many different types of books—including big books, lap books, little books, eBooks, audiobooks, and take-home books—and a variety of genres—including fiction, nonfiction, rhyming books, poetry, realistic fiction, alphabet books, and content-area books. Teachers read aloud to children daily and revisit books often for multiple purposes, such as introducing new topics and exploring content-area connections.

During read-alouds, *Big Day for PreK* uses a dialogic reading approach to promote children’s active participation in the story. Books that are used in read-alouds and shared reading come with a preprinted sticky note, called BookStix, that can be affixed to the back of the book. BookStix guide teachers in using dialogic reading prompts to engage children in discussion around and retelling of the book. These interactions help develop students’ language, vocabulary, comprehension of texts, and enjoyment of reading.

*Big Day for PreK* encourages teachers to foster engagement with books in other activities throughout the day. For example, Learning Centers can include theme-related books to promote literacy across different content areas. Audiobooks and multiple “Little Book” copies of the Theme Big Books can be used in the reading and listening center to help children build comprehension of stories and increase their comfort with book handling. In the Technology Center, students can access BookFlix multimedia eBooks to further extend their literacy experience.

*Big Day for PreK* provides daily opportunities for children to develop and strengthen emergent writing skills. The program’s emphasis on oral language development helps children build the receptive and expressive language that serves as the foundation for beginning to write. The *Big Day for PreK* environment is rich with print; teachers are encouraged to use labels and signs around the room to build students’ understanding of the various purposes of written text. The *Big Day for PreK* Teaching Guides include writing-based lessons to engage children in different types of writing, including teacher-modeled writing; shared writing, in which students and teachers collaborate; interactive writing, in which children participate in writing one or more letters or whole words; and independent writing, in which children “write” on their own using drawings, scribbles, and letters as they are able. Children often draw in response to books, science investigations, math activities, etc., and then dictate to their teachers single words, sentences, or even stories to go with their drawings.

Once a week, small-group lessons focus on letter formation. This time to learn, practice, and review the formation of letters familiarizes students with the written letters and helps to develop their fine motor skills.

Learning Centers provide additional opportunities for students to engage in emergent writing activities. They can dictate captions and labels for their work, explore different types of writing utensils, learn about different purposes for writing, and incorporate writing into their role-plays. Teaching Guides provide theme-related activities for the Writing Center, as well as Writing Connections for use in every Center.

# Mathematics, Science, and Technology



## Mathematics Education

### RESEARCH & EXPERT OPINION

- ◆ “Quality preschool mathematics . . . invites children to experience mathematics as they play in, describe, and think about their world” (Sarama & Clements, 2008).
- ◆ Current research shows that teaching mathematics to young learners is important to their cognitive development and later academic success (Duncan et. al, 2007; National Research Council, 2001, 2009). Recent studies reveal that young children are capable of quite complex mathematical thinking, especially when supported by appropriately challenging, coherent, and sustained instruction (National Research Council, 2005).
- ◆ Children’s play offers rich possibilities for the development of mathematics understanding (Anderson, Anderson, & Thauberger, 2008; Sarama & Clements, 2008).
- ◆ Mathematical activities can provide an academic context for children to develop social-emotional and literacy skills (National Research Council, 2009).
- ◆ Four critical strands have been shown to be early predictors of later mathematics success—and academic success in general. The strands are number sense, geometry and spatial sense, measurement, and classification and patterns (National Research Council, 2009). In particular, number sense and geometry are two of the most important areas of mathematics instruction for young children (Sarama & Clements, 2008).
- ◆ Experts in early childhood mathematics agree that the following mathematics processes should be integrated throughout mathematics instruction: communicating, connecting, representing, reasoning, and problem-solving (Sarama & Clements, 2008).
- ◆ Preschool teachers should help children develop a mathematics vocabulary and build their mathematics understanding by talking explicitly about mathematics concepts, using a variety of words to describe the concept (Anderson, Anderson, & Thauberger, 2008).
- ◆ Current research indicates that 4-year-old children are able to understand and successfully replicate using three-dimensional block representations as seen in pictures (Andrews, 2010).



## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK*'s approach to mathematics education builds upon children's natural interest, curiosity, and enthusiasm for understanding their world, and sets the foundation that they will need for later success in mathematics. The program focuses on the four strands of mathematics that have been shown to be early predictors of later success:

- Number Sense
- Geometry and Spatial Sense
- Measurement
- Classification and Patterns

During each *Big Day for PreK* theme, children spend one week focusing on each of the four critical strands. This way, children have multiple opportunities to learn and practice skills within each strand throughout the year. In addition to the four strands, there are also instructional activities to help children form foundational addition and subtraction skills.

Scholastic *Big Day for PreK* integrates five process skills throughout the curriculum and across the mathematics strands: problem-solving, reasoning and proof, representation, communication, and making connections. Developing these processes over time is an important achievement in mathematics and beyond, involving lifelong skills that children need to acquire knowledge and be successful in all areas of their lives.

Mathematics instruction occurs daily, either during whole-group Big Experience lessons or Small Group instruction. The whole-group lessons teach and review mathematics concepts, skills, and vocabulary. Teachers connect mathematics to children's lives and use the Make Learning Bigger ideas to connect mathematics to other domains.

The small-group activities give children hands-on, teacher-guided practice. During these lessons, the teacher models the week's targeted mathematics skills and helps the children practice. Each lesson includes an opportunity for the teacher to observe children and provide additional reinforcement. When necessary, the teacher may provide additional reinforcement and practice during the second Learning Centers time in a full-day schedule.

*Big Day for PreK* includes a variety of materials that teachers and children can use to build foundational Math Mats knowledge and skills. Teachers can use Math Mats in whole and small groups as a visual and interactive tool to introduce, teach, model, and practice mathematics skills. When working with the Math Mats, teachers gradually release responsibility to the students so that by the end of each week children can perform the Math Mat activity independently and fluently. "Math Talk" appears at the bottom of the mat as an example of the language and vocabulary for the teacher to use while teaching the focus skills. A downloadable version of each Math Mat, available on the Teacher Space, allows each child to have his or her own copy to promote independence at the end of each week.

*Big Day for PreK* also includes a wide selection of mathematics manipulatives to engage children in active exploration of mathematics skills with concrete objects during Small Group instruction and Learning Centers. Manipulatives include magnetic numbers, snap cubes, number cards, pattern blocks, attribute blocks, and bear counters.





## Science Education

### RESEARCH & EXPERT OPINION

- ◆ Children have a natural sense of wonder and curiosity about the world around them (Eshach & Fried, 2005; Brenneman, Stevenson-Boyd, & Frede, 2009). An effective early childhood science program builds on children's prior experiences and curiosity, asks them to think about and discuss their ideas, and provides both structured and informal opportunities for exploration (National Research Council, 2001).
- ◆ Research increasingly affirms that young children have the ability to understand scientific concepts and reason scientifically (Eshach & Fried, 2005; National Research Council, 2001). Research has shown that, at an early age, children can engage in abstract reasoning and develop their hypotheses and theories about the world (National Research Council, 2001).
- ◆ A quality preschool environment helps children learn the practice of scientific inquiry (Albert Shanker Institute, 2009). Teachers can support children in engaging in the practices of science, such as developing questions and theories, experimenting with materials, discussing a range of scientific phenomena, and reflecting on and communicating what they learned. Students can be encouraged to ask questions and reason about solutions as they explore (Brenneman, Stevenson-Boyd, & Frede, 2009).
- ◆ Science education in early childhood should also help children develop knowledge of foundational science concepts (Eshach & Fried, 2005). Children develop deeper knowledge when they engage in multiple experiences exploring the same concept. Understanding of key concepts can also be strengthened by integrating science exploration with mathematics and literacy learning (Albert Shanker Institute, 2009).
- ◆ Exposure to scientific language provides the foundation for the development of later scientific concepts (Eshach & Fried, 2005). Science read-alouds are an important tool for introducing new science concepts and vocabulary (Neuman & Roskos, 2007). Beyond shared reading, high-quality early childhood science education exposes children to new science words in a variety of meaningful contexts, and encourages them to communicate plans and thinking (Brenneman, Stevenson-Boyd, & Frede, 2009).
- ◆ It is important to include a designated science area in the early childhood classroom, to highlight the importance of scientific exploration, and to make science activity available to children whenever they want to engage in it. In addition, science-related materials can be incorporated throughout the classroom, and children can be encouraged to engage in scientific investigation and science “talk” during their play in other areas, such as the block area or the dramatic play area (Neuman & Roskos, 2007).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* provides science education that builds on preschoolers' natural curiosity about their world. Children are guided to actively explore ideas and discover new knowledge through hands-on science activities and experiments. In addition, science activities are integrated into the curriculum to help children discover how science relates to all parts of their lives. The *Big Day for PreK* approach to science is designed to help children develop a scientific way of thinking through inquiry and to cultivate curiosity and a desire to seek answers and share new ideas.

Each week, children engage in a Big Experience that actively engages them in science exploration related to the theme. Literature-based science lessons use engaging fiction and nonfiction books to launch the investigation and build science knowledge along with literacy. In addition, *Big Day for PreK* includes three science-based monthly themes: Awesome Animals!, Growing Up Healthy, and Nature All Around Us. During these themes, the science topic is integrated across the curriculum and throughout the day.

During Learning Centers time, students can engage in further science exploration at the Science Center. This center offers theme-relevant materials for exploration, observation, and guided activities. The Teaching Guides provide instructions for setting up the Science Center and guiding explorations each week.

*Big Day for PreK* includes a variety of science-related materials that teachers can use to introduce and explore science topics in whole- and small-group settings and during Learning Centers. For example, two Science Posters per theme (available in Spanish and English) provide engaging visuals to support instruction of science concepts. The teacher can use the posters to present science topics and engage children in discussion using key science vocabulary. The program also includes a variety of science manipulatives that students can explore and learn to use, including magnifying glasses, a balance set, and healthy food magnets.





## Technology

### RESEARCH & EXPERT OPINION

- ◆ “The early childhood setting is critical in the development of children, so opportunities to use, explore and become proficient with computers are essential, particularly for those who do not have access to computers in the home environment” (Zevenbergen, 2007). The National Association for the Education of Young Children (NAEYC) recommends that computers should be integrated into the daily routine in early childhood programs (NAEYC, 1996).
- ◆ Today’s preschoolers are “digital natives” (Prensky, 2005/2006) who have grown up surrounded by digital technologies—such as high-tech toys, video games, computers, and MP3 players—that become part of their worldview (Zevenbergen, 2007). Technology use in the early childhood classroom is most effective when it reflects and builds upon the way children use these tools—or see others use them—in out-of-school contexts (Zevenbergen, 2007).
- ◆ Research shows that computer activities can enhance young children’s learning, yielding positive effects on cognitive, language and literacy, and school readiness skills (National Research Council, 2001; Primavera, Wiederlight, & DiGiacomo, 2001). Computer activities are most effective as a learning tool when they are linked with educational goals and relevant off-computer activities (National Research Council, 2001).
- ◆ Technology can also enhance children’s social skills. Research shows that children prefer to work with one or two partners at the computer, that they seek help from each other, and that they engage in increased communication and cooperation when working together at the computer (NAEYC, 1996; Yelland, 2005; Zevenbergen, 2007).
- ◆ Technology can be beneficial to young children with special needs. It can provide a safe arena to practice new skills with support, enable students to feel a sense of control and independence, and improve children’s self-esteem as they engage in the same activities as the general student population (NAEYC, 1996; National Research Council, 2001; Yelland, 2005).
- ◆ Computers can be equalizing for English language learners, who can practice new language skills in a private, nonjudgmental setting and experience success doing the same work as their English-speaking peers (Primavera et al., 2001).
- ◆ Viewing stories on television has been found to help develop preschoolers’ narrative comprehension skills, such as making inferences about characters’ feelings and story events, making predictions about plot, and identifying the theme of the story (Piotrowski & Linebarger, 2007).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

In *Big Day for PreK*, children have daily opportunities to use technology to practice literacy skills and extend their learning. One of the Learning Centers is the Technology Center, where children can independently access BookFlix. On the BookFlix site, children can click on any of the theme-related reading pairs in English or Spanish; each pair consists of a fictional video storybook and a nonfiction eBook. A read-aloud feature allows children to listen to the books with headphones, with or without captions. They can click on highlighted vocabulary words in the nonfiction books to hear a definition. Children can further extend their learning by playing literacy games or exploring links to carefully selected, theme-related websites.

To support children's comfort with and independent use of the technology, the Teaching Guides provide suggestions for familiarizing children with the names and functions of different technology tools, such as headphones, monitor, and keyboard. The Teaching Guides also include regular Make Learning Bigger features related to technology, suggesting activities to help children learn how to use technology to access and present information.

Technology also supports the home-school connection. The *Big Day for PreK* Family Space provides families access to the learning that is happening in the classroom. On Family Space, parents and caregivers can see what children are learning each week, and read messages from the teacher. They can provide crucial at-home support for their child's literacy, mathematics, and social-emotional learning by accessing BookFlix, downloading books to read together, playing online games, or accessing suggestions for literacy-building activities to do with their child. Family Space plays a critical role in helping *Big Day for PreK* families partner with teachers to support children's learning and growth, and offers a wide range of learning resources to families who may not otherwise have the materials in their home to engage in literacy activities with their children.

*Big Day for PreK* Teacher Space is the learning management system for *Big Day for PreK*. Teachers can use the customizable lesson planner to plan daily and weekly lessons and tailor them to fit their own schedules and learning objectives. The Teacher Space provides access to BookFlix and to downloadable activities and resources related to lessons, letters for home communication, and certificates to recognize children's achievements. Through the page, teachers can also write messages to families that will appear on Family Space, to keep caregivers informed about what children are learning.

Teachers can use *Big Day for PreK* Teacher Space to support instruction. The Assessment and Reporting tools allow teachers to record informal observations, print Scholastic Early Childhood Inventory (SECI) materials, enter assessment results, and view and print reports at the class or child level. Teachers can also access the Scholastic RED® online early childhood professional development course through Teacher Space.

## Social Studies and Fine Art

### RESEARCH & EXPERT OPINION

- ◆ Young children have a natural inclination to explore the world around them and make sense of their experiences (Lally, 2000; Semlak, 2000). Quality early childhood curricula build on children’s curiosity and interest and support the development of the whole child, including integrated learning across domains such as social studies, music, arts and crafts, and physical activities (National Research Council, 2001; NAEYC & The National Association of Early Childhood Specialists in State Departments of Education [NAECS/SDE], 2002).
- ◆ Children deepen their understanding of the world around them by engaging in concrete experiences, exploration, play, and conversation (Landry, 2005; NAEYC & NAECS/SDE, 2002). Especially for children who may not be exposed to a wide variety of experiences outside of school, a quality early education program can help address some general knowledge gaps and improve their understanding of essential concepts about the world (Landry, 2005).
- ◆ Introducing social studies concepts in the early childhood/elementary years is essential for laying the foundation of knowledge, attitudes, and skills that young people will need to become active, responsible citizens of the 21<sup>st</sup> century (National Council for the Social Studies, 1988). The goals of early childhood/elementary social studies include:
  - **Building knowledge**—including developing an appreciation for children’s historical heritage, exploring geography, beginning to understand and appreciate diversity of cultures, and exploring how people and institutions function within groups;
  - **Developing skills**—including map and globe skills such as locational and directional terms; thinking skills such as hypothesizing, comparing, and problem-solving; and interpersonal skills such as seeing others’ points of view and accepting responsibility; and
  - **Developing attitudes**—including beginning to “understand democratic norms and values (justice, equality, etc.)—especially in terms of the smaller social entities of the family, classroom, and community” (National Council for the Social Studies, 1988).
- ◆ Engaging in creative arts through multiple, hands-on experiences with a variety of materials and through different modalities allows children to make meaning of and communicate their thoughts and feelings, and to learn and grow in the process (Drew & Rankin, 2005; Task Force on Children’s Learning and the Arts & Goldhawk, 1998).
- ◆ Arts activities in a quality preschool program are integrated across other domains; emphasize process over product; are grounded in children’s own experiences, knowledge, and play; encourage imagination; introduce children to age-appropriate performance, presentation, and audience roles; connect to and build on children’s literature; and foster language and literacy development (Task Force on Children’s Learning and the Arts & Goldhawk, 1998).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

*Big Day for PreK* social studies and arts education is built on the understanding that young children have a natural desire to explore and make sense of the world around them, and to learn and create through multiple modes. Social studies and arts activities can help build key cognitive and social skills as children engage in problem-solving, planning and decision-making, working independently, and cooperating with others.

*Big Day for PreK* social studies education connects to children's interests to build their knowledge of people, events, and culture; citizenship; geography; economics; and community. This education helps them form the foundation they need to become productive 21<sup>st</sup> century citizens. Weekly Big Experiences introduce children to social studies concepts and content vocabulary related to the theme, using engaging books to launch the social studies topics and build content knowledge. Teachers can also use Big Wall Charts to help children build social studies knowledge and vocabulary by describing, retelling, role-playing, and storytelling about the pictures on the charts.

In the Dramatic Play Center, children can both explore central social studies themes and engage in dramatic play as they act out family and community roles, cooperate with others, resolve conflicts, and practice storytelling. The Teaching Guides provide instructions for setting up the Dramatic Play Center and facilitating play each week.

In *Big Day for PreK*, fine arts and music education draw on children's inclination to engage in hands-on exploration and to express themselves through multiple means. Art, movement, and music are integrated with the monthly theme and into other content areas throughout the day. The Teaching Guides provide guidelines for setting up activities in the Creativity and Writing Centers that allow children to experiment and create with a variety of art materials, and to begin to gain control of fine motor muscles and practice eye-hand coordination. Many of the Learning Centers, from Blocks & Building to Science and more, also incorporate activities designed to allow children to express themselves through movement and dramatic play.

Arts and movement are also included in whole-group lessons in *Big Day for PreK*. At least two Make Learning Bigger activities each week have a fine arts focus, and each day a class activity focuses on music and/or movement. The *Songs and Fingerplays* book and CDs provide an additional resource that the teacher can use to incorporate music, rhythm, and movement into instruction, transitions, and informal learning times. Through these lessons and activities, children begin to appreciate different types of music and learn to experiment with music concepts, volume, tempo, and sound.



## Health, Physical Development, and Safety

### RESEARCH & EXPERT OPINION

- ◆ The rapid increase in overweight, obesity, and lack of physical activity in the United States over the last two decades have become national concerns (Goodway & Robinson, 2006; U.S. Department of Health and Human Services, 2001). The problems are especially pronounced among low-income children and adults (Hodges, 2003). Early childhood is a crucial time for developing children’s motor skills, supporting proper nutrition, and encouraging a love of being physically active, which can help ameliorate risk factors for becoming obese or undernourished (Goodway, 2006; Hodges, 2003; Landry, 2005).
- ◆ A child who has healthier nutrition and physical activity patterns is better prepared to learn and succeed in school than a less healthy child (Landry, 2005). Research shows a connection between healthy behaviors—such as physical activity and eating breakfast—and educational outcomes. In fact, evidence suggests that disparities between socioeconomic groups in such healthy behaviors contribute to the educational achievement gap (Basch, 2010).
- ◆ The National Association for Sport and Physical Education states that “All children from birth to age 5 should engage daily in physical activity that promotes movement skillfulness and foundations of health-related fitness” (National Association for Sport and Physical Education, 2002). Engaging children in physical activity not only lays the foundation for healthy living, but also promotes physical and mental health (Sanders, 2002). Children need opportunities to develop both gross movement skills—such as running, walking, jumping, throwing, and balancing—and fine motor skills—such as drawing, writing, cutting, buttoning, and folding (Neuman & Roskos, 2007). Teachers can support physical development in the preschool classroom with skilled observation of children’s strengths and needs, and practice of fine and gross motor skills integrated throughout the preschool curriculum (Landry, 2005; Murphy, 2008).
- ◆ The U.S. Department of Health and Human Services recommends that schools provide age-appropriate instruction in health education to help children “develop the knowledge, attitudes, skills, and behaviors to adopt, maintain, and enjoy healthy eating habits....” (U.S. Department of Health and Human Services, 2001). Teachers can promote healthful food choices through instruction that is behavior-oriented, rather than just information-focused (Davis, Gance-Cleveland, Hassink, Johnson, Paradis, & Resnicow, 2007). Conversations about healthful eating, healthy habits, and good hygiene can be incorporated throughout the day and provide opportunities to introduce and practice health-related vocabulary (Neuman & Roskos, 2007).
- ◆ Unintentional injuries, such as those caused by a fire or a vehicle crash, are the leading cause of death and disability for children ages 1 to 14 in the United States. The five most common unintentional injury risks are falls, bicycle-related injuries, motor vehicle occupancy injuries, fire and burn injuries, and poisonings (Safe Kids USA, 2009). Educating children and adults about safety and injury prevention can help reduce the risks of such injuries. Teachers can introduce safety concepts and vocabulary to children and discuss basic rules about safety both inside and outside the school (Neuman & Roskos, 2007).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* is designed to develop students' gross and fine motor skills, as well as to introduce them to basic principles of safe and healthy living. Big Experiences in *Big Day for PreK* provide many opportunities to engage children in gross and fine motor movement during learning. For example, when exploring animal habitats and life cycles, children transition between activities by moving like their favorite animal (pretending to slither, fly, or climb); in learning about fire safety, children learn the important safety practice of stop, drop, and roll—and they also practice it repeatedly, building gross motor skills. Teachers reinforce these activities by explicitly teaching children about the benefits of physical fitness.

During Small Group lessons and Learning Centers, children have many opportunities to engage in movement, as they role-play, play games, and reinforce understanding through kinesthetic activities. Teachers also promote movement daily through guided games during outdoor and indoor play. Children refine fine motor skills as they work with mathematics manipulatives, practice letter formation, experiment with tweezers and eyedroppers in the Science Center, or button-up clothes in the Dramatic Play Center. The Teaching Guides provide suggestions for modifying gross and fine motor activities for students with different physical abilities.

*Big Day for PreK* introduces important health routines at the start of the school year. The Teaching Guides provide explicit suggestions for helping children learn the procedure for and importance of routines such as handwashing. Throughout the year, children learn to identify how to choose healthy foods, stay safe in various situations, and communicate their needs and questions. These healthy living, healthy eating, and safety concepts are reinforced through a variety of types of books that reflect these critical themes.

Theme 6, Growing Up Healthy, focuses specifically on learning about the body, including four subthemes: My Senses; Taking Care of Myself; Eating Well; and Staying Safe. A complete PreK curriculum of health is presented during this theme, and the key concepts are reinforced throughout the program.





# Differentiated Instruction

## Responsive Instruction

### RESEARCH & EXPERT OPINION

- ◆ Children vary widely in how well any curriculum will serve them. Skillful early childhood teachers adjust instruction as necessary to be responsive to individual student needs (Strickland & Riley-Ayers, 2006).
- ◆ There is increasing awareness that Response to Intervention (RTI), a framework for using data to allocate instructional services and intervention in response to students' needs, can be adapted for use at the preschool level. PreK RTI approaches reflect evidence showing that early intervention is important to help all children be successful, and can be critical in preventing or mitigating later language and learning difficulties (Coleman, Roth, & West, 2009). As with RTI for school-aged children, the essential components of PreK RTI include: ongoing assessment and progress-monitoring, high-quality classroom instruction, tiered instruction and intervention, and family involvement. However, PreK RTI approaches should also reflect the culture and beliefs of early childhood education, emphasizing elements such as positive language to describe children's development rather than language that labels children; a holistic view of child development; the importance of educators working with families and other caring adults to support the child's success; and use of multi-dimensional assessments that help identify children's strengths and needs across settings and over time (Coleman, Roth, & West, 2009).
- ◆ By continually monitoring children's progress toward particular outcomes, the early childhood teacher can identify when students are making good progress, when they need additional challenge, or when they may need alternative intervention approaches to achieve the desired outcomes (National Research Council, 2008). When assessing children's learning and progress, it is important to use multiple sources of information to make instructional decisions, especially for children with special needs whose performance across different settings may vary even more than that of the general student population (National Research Council, 2008).
- ◆ The U.S. Department of Education (2007b) reports that of the 700,166 children ages 3 to 5 who were served under the Individuals with Disabilities Education Act (IDEA) in 2007, 46% had a primary disability of speech and language impairment, with another 39% reported as having a primary disability of developmental delay. Responsive instruction can ensure these children receive the early intervention they need to achieve success. Both typically developing young children and those with disabilities or developmental delays benefit from a curriculum that is systematic, integrated, and linked to assessment (Sandall, McLean, & Smith, 2000).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* recognizes that each preschool classroom will include children with a wide range of developmental needs and physical and cognitive strengths and challenges. The program is designed to provide teachers with consistent opportunities to modify and individualize instruction and intervention to make learning accessible to all children.

The Teaching Guides include Responsive Instruction pages for each day of the week. These pages provide suggestions for modifying and individualizing instruction for 3-year-olds and children with special needs, including those with social-emotional, visual, hearing, physical, or cognitive challenges. The pages also include suggestions for extending instruction through enrichment activities. Teachers can use these Responsive Instruction suggestions to accommodate individual needs during whole-group instruction, or to offer additional scaffolded support and guided practice tailored to students' needs during Small Group and Individual Instruction.

The Responsive Instruction pages also provide suggestions for using informal assessment to extend and individualize instruction for particular children. Each Big Experience includes an Observe feature that prompts teachers to monitor children's understanding and application of specific skills that are highly predictive of kindergarten readiness. The One-to-One feature on the Responsive Instruction pages then provides suggestions for additional targeted instruction and intervention related to these key skills.

Daily Learning Centers time provides further opportunity to observe children's progress and monitor their application of new skills and concepts across settings and content areas. Teachers can use this time to provide additional intervention and guidance to children who need it, in the context of concrete activities.





## Children With Special Needs

### RESEARCH & EXPERT OPINION

- ◆ The features of high quality early childhood education for typically developing children hold true for children with special needs as well. Four features that particularly benefit young children with special needs—as well as all children—are: instruction that is responsive to individual differences; an emphasis on language development; support for social and emotional skills; and family engagement (National Research Council, 2001).
- ◆ The Division for Early Childhood (DEC) of the Council for Exceptional Children states that to benefit both typically developing young children and those with disabilities or developmental delays, “it is important to implement an integrated, developmentally appropriate, universally designed curriculum framework that is flexible, comprehensive, and linked to assessment and program evaluation activities” (Sandall, McLean, & Smith, 2000, p.3).
- ◆ Universal Design for Learning (UDL) is a set of principles that make learning universally accessible by creating flexible goals, methods, materials, and assessments to accommodate all learners’ differences, including learning disabilities, physical challenges, and sensory impairment. Instructional materials designed with UDL principles increase student access to the curriculum by providing:
  - Multiple means of content representation, to provide students a variety of ways to learn;
  - Multiple means of expressing learned content, to offer students alternatives to show what they know; and
  - Multiple means of engagement with content, to motivate and challenge students appropriately (Rose & Meyer, 2000).
- ◆ UDL improves access to and participation in the general education curriculum for all students, including those with special needs (Hitchcock & Stahl, 2003; National Joint Committee on Learning Disabilities, 2008).
- ◆ Like typically developing children, young children with special needs vary widely in their development and the challenges they face in different domains. In-depth observation across different settings is necessary to pinpoint each child’s skills and needs, in order to determine the most appropriate behavioral objectives and instructional strategies (Cook, Klein, & Tessier, 2008).

## SCHOLASTIC BIG DAY FOR PREK DELIVERS

*Big Day for PreK* includes guidelines for modifying instruction and extending instruction for children with identified special needs, including vision impairments, hearing impairments, cognitive challenges, physical challenges, language and communication delays, and emotional and behavioral disorders (including attention disorders).

The Responsive Instruction pages for each day provide suggestions both for modifying Big Experiences to accommodate specific needs and for following up individually with students who need more tailored instruction. These suggestions are designed to increase children's access to the curriculum by offering multiple means of engaging students with content, multiple means of representing content, and multiple means for children to express learned content. One way of doing this is by simplifying an activity—for example, the teacher may provide a two-shape puzzle for children with cognitive challenges instead of the multi-shape puzzle on a Math Mat. Another strategy is to modify the modality through which instruction is delivered—for example, children who lack small-muscle control can be given blocks to form large letters on the floor rather than gluing yarn to paper. Other approaches to modifying and individualizing instruction in the program include modifying materials, modifying the environment, modifying the ways learners can respond to instruction, modifying the level and type of support, and supporting attention to the activity at hand.

Small groups and Learning Centers provide additional opportunities for students with special needs to receive scaffolded support, engage in guided practice, and interact with peers. During small group instruction, teachers can observe children more closely and adapt instruction as necessary to meet individual needs. Learning Centers can be an important time for children with special needs to gain confidence exploring on their own. Teachers can work with therapists, specialists, and families to identify strategies for supporting students with special needs during independent exploration.

*Big Day for PreK* also provides teachers with the tools to closely monitor all children's learning and development, facilitating early identification of special needs. Assessment in the program is based on developmental continuums, or Pathways to Readiness, that provide teachers with age-appropriate, research-based indicators and benchmarks to help monitor growth in five critical domains: Social-Emotional Development, Oral Language Development, Emergent Reading, Emergent Writing, and Mathematics Development. Teachers are encouraged to recognize that children will progress toward various milestones at different rates, and that these pathways only provide general benchmarks. By using these tools to monitor children's development, teachers can identify signs that particular children may need additional support or intervention—for example, if they remain at the Pre-Emergent or Beginning level in a particular domain for a long time, or if they regress in a particular domain. If the teacher has concerns about a child's progress, they may follow up with additional assessment or consult a specialist to determine if further intervention is needed.



## English Language Learners

### RESEARCH & EXPERT OPINION

- ◆ The proportion of English language learners in U.S. schools is growing rapidly; over the last two decades of the 20<sup>th</sup> century, the number of language-minority students in K–12 public schools more than doubled, from 6 million in 1979 to 14 million in 1999 (August & Shanahan, 2006). Approximately four in five of these English language learners come from homes where Spanish is the primary language (National Research Council, 2008).
- ◆ According to the National Literacy Panel on Language-Minority Children and Youth, effective strategies for supporting English acquisition are essential because “[i]nadequate reading and writing proficiency in English relegates rapidly increasing language-minority populations to the sidelines, limiting the nation’s potential for economic competitiveness, innovation, productivity growth, and quality of life” (August & Shanahan, 2006).
- ◆ Extensive English oral language and vocabulary development are critical to facilitating English language acquisition for English language learners (August, Carlo, Dressler, & Snow, 2005; Goldenberg, 2008; Trumbull & Pacheco, 2005). Teachers can provide a language-rich environment with many opportunities—both through explicit instruction and informal conversation—to engage in purposeful language interactions with adults and peers (Tabors & Snow, 1994; Trumbull & Pacheco, 2005).
- ◆ Continued development of young children’s home language helps to foster the acquisition of the new language (August & Shanahan, 2006; NAEYC, 1995; Trumbull & Pacheco, 2005). Research shows that literacy skills transfer across languages, even those that use different alphabetic systems (Goldenberg, 2008). For English and Spanish, studies show relatively high transfer between the two languages (Goldenberg, 2008).
- ◆ Early childhood educators should encourage families to continue developing children’s home language skills in order to support the acquisition and development of the second language (August & Shanahan, 2006; NAEYC, 1995; Trumbull & Pacheco, 2005).
- ◆ By encouraging positive home–school connections and showing respect for children’s home language and culture, educators can help young children feel supported and motivated to learn (August & Shanahan, 2006; NAEYC, 1995; Strickland & Riley-Ayers, 2006).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* provides complete equity in English and Spanish. Over 1,000 components are available in both English and Spanish, including the Teaching Guides, print books and audiobooks, BookFlix, Big Wall Charts, BookStix, Math Mats, Science Posters, downloadable teacher resources, family letters, *Big Day for PreK* Family Space, and more. Bilingual and dual language programs can use these English and Spanish resources flexibly and interchangeably, as appropriate for students' needs. In addition, Spanish-speaking parents and caregivers can use the Spanish language Family Space to access program resources and information, providing them with essential tools to support children's educational experiences and continue language development in the home.

The *Big Day for PreK* curriculum provides support for teachers to strengthen English learners' literacy and language skills throughout the day. The English Language Development feature in the Teaching Guides provides suggestions for explicit language instruction to help students understand new concepts, practice developing language skills, and draw connections between their home language and English. For teachers teaching in Spanish, Bridge to English features provide support for making connections to English during whole-group lessons. Teachers can use visual aids such as the Big Wall Charts, Science Posters, and Math Mats to support English learners' understanding of new words and concepts.

Small Group Instruction provides time for teachers to work more closely on specific language skills with English learners. The Teaching Guides help to guide the teacher in monitoring students' language use, modeling language, providing immediate feedback, and supporting students' language skills by elaborating on and extending their statements.

Learning Centers provide opportunities for English language learners to play and practice communicating with their English-speaking peers. The Creativity, Writing, and Dramatic Play Centers provide rich opportunities to encourage students to engage in conversation about their creations or activities. Children can further practice their oral language skills by telling about their activities in the centers or about stories they read. Materials such as books in the Reading & Listening Center and clothing and dolls in the Dramatic Play Center can be tailored to reflect children's diverse languages and cultural backgrounds.

Scholastic *Big Day for PreK* provides formal and informal opportunities throughout the day to develop vocabulary and oral language—essential for English language learners. New vocabulary is always introduced in context, which is particularly useful for supporting the understanding of students whose home language is not English. Structured interactions, such as dialogic reading, provide English learners with highly supported opportunities to practice oral language skills. The *Big Day for PreK* curriculum also guides teachers in helping English learners feel supported and motivated by nurturing positive connections with families and demonstrating respect for students' home languages and cultures.

# Early Childhood Assessment

## RESEARCH & EXPERT OPINION

- ◆ The primary purposes of assessment in early childhood education are to provide insight into children's strengths and needs and assist them in progressing toward specific learning goals (Burns, 1996; National Research Council, 2008). Early childhood assessment can also be used to measure development and learning, guide program decision-making, evaluate program quality, report to others, and identify students in need of special services (Epstein, Schweinhart, DeBruin-Parecki, & Robin, 2004; Strickland & Riley-Ayers, 2006).
- ◆ Early childhood assessment will take many forms including observation, collecting children's work, and recording and interviewing children (National Research Council, 2008; Neuman, Copple, & Bredekamp, 2000; Strickland & Riley-Ayers, 2006). Information on any content area should be compiled from multiple sources. This provides a more accurate picture and reduces the risk of individual or cultural bias (Epstein, et al., 2004).
- ◆ Testing is one form of assessment that can provide information on a child's performance on specific tasks at a particular moment in time (Epstein, et al., 2004). After using assessment information to identify strengths and needs at the beginning of the year, ongoing systematic daily observations are critical for monitoring growth and learning over time (National Research Council, 2008; Strickland & Riley-Ayers, 2006). Portfolios, or collections of multiple sources representing student performance, can also provide rich information on progress over a period of time (Epstein, et al., 2004).
- ◆ Among the widely accepted domains to assess in early childhood as indicators of school readiness are social and emotional development, language and literacy, and cognitive skills, including mathematics (National Research Council, 2008).
- ◆ High-quality early childhood education curricula should guide the teacher in linking assessment information to instruction and pedagogical decisions (National Research Council, 2008; Strickland & Riley-Ayers, 2006).
- ◆ Careful assessment helps preschool teachers design instruction that is responsive to each child's cognitive, developmental, and cultural needs. This is especially critical when working with children with disabilities and special needs (National Research Council, 2001).
- ◆ Ongoing assessment is essential to determining the strengths and needs of English language learners and tailoring instruction accordingly (August & Shanahan, 2006; Trumbull & Pacheco, 2005).



## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

Scholastic *Big Day for PreK* includes multiple informal and formal measures that are appropriate to children's development, to help provide educators and families with a comprehensive picture of each child's strengths and progress along the path to kindergarten readiness and school success. These tools were developed with the guiding principle that assessment should result in benefits for the children and be used to guide instruction. All assessment materials are available in both English and Spanish.

Assessment in the program is based on five Pathways to Readiness—developmental continuums with research-based indicators and benchmarks in five domains: Social-Emotional Development; Oral Language Development; Emergent Reading; Emergent Writing; Mathematics Development. The developmental continuum for each domain identifies a discrete set of key skills that indicate key stages of development—Pre-Emergent, Beginning, Emerging, and Developed. Both informal and formal assessments in *Big Day for PreK* monitor children's growth toward the full development of those skills.

The *Big Day for PreK* curriculum includes daily opportunities to observe children's growth toward developmental milestones in informal ways across all parts of the day. The Observe feature of the Teaching Guides helps to focus teachers' observations during Big Experiences—Circle Time/Story Time—and Small Group Instruction. Easy-to-manage, curriculum-embedded observation tools are included to help teachers focus attention on progress and identify children who may need additional support in a particular area.

- **Circle Time/Story Time Observation Guides** directly correspond to the Circle Time/Story Time Observe features in the Teaching Guides. These forms, downloadable from Teacher Space, help teachers to monitor children's progress and plan One-to-One follow-up.
- **Small Group Observation Guides** help teachers focus their observations of children and plan for Small Group Intervention.
- **Clipboard Observation Guides** help teachers track each child's performance of important skills within key domains throughout each theme.
- **PreK 360 Records** are graphic organizers that help teachers organize their notes about each child and summarize observations when preparing for family conferences.
- **Anecdotal Records** help teachers keep ongoing daily records for each child. These forms can be printed, or observation notes can be entered directly on Teacher Space.
- **Show and Grow Portfolios** provide an authentic and visual representation of children's progress in print or online. Suggestions for how to organize and manage a print portfolio are provided in the Professional Handbook. Each child's anecdotal records and assessment results are stored in an online folder for easy organization, monitoring, and review.

Scholastic *Big Day for PreK* formally assesses progress and growth toward competence in four domains that have been shown to be predictive of kindergarten readiness: Oral Language, Phonological Awareness, Alphabet Knowledge, and Mathematics. The formal assessment, called the Scholastic Early Childhood Inventory (SECI), is presented in an engaging, game-like environment to minimize anxiety. The SECI assessment can be administered at three points in the school year: beginning, middle (after Theme 4 of the program), and end (in the final four weeks of the school year). The first administration places each child along a developmental continuum for each of the key domains. Subsequent administrations track progress along the developmental path.



## Professional Development

### RESEARCH & EXPERT OPINION

- ◆ A growing body of evidence points to the key role of the early childhood educator in how much a young child learns (NAEYC, 2009; Shonkoff & Phillips, 2000). The professional development of teachers has been shown to be integrally related to the quality of early childhood programs and thus the overall effect of those programs in having a positive outcome for children (Howes, Phillips, & Whitebook, 1992; Kontos, Howes, & Galinsky, 1997; National Research Council, 2001).
- ◆ Extended professional development, often with coaching, is key to effective curriculum implementation (National Research Council, 2001; Strickland & Riley-Ayers, 2006). Teacher education and training has also been shown to be related to such important teaching characteristics as attunement to diversity, ability to work with administrators and families, and sensitivity and responsiveness to children (Howes & Smith, 1995).
- ◆ Effective professional development programs are job-embedded, continuous, collaborative, and research-based (Epstein, 1993; Joyce & Showers, 2002; Strickland & Riley-Ayers, 2006). Teachers benefit from information about child development, how to organize the environment, routines to promote activities that build social-emotional relationships, standards in specific content areas, serving children with special needs and children who are culturally and linguistically diverse, and how to work with teams of professionals (National Research Council, 2001).
- ◆ The content of professional development activities should revolve around teachers' authentic experiences and focus on the goals, materials, curriculum, and characteristics of the children that are part of the teachers' daily realities (National Staff Development Council, 2002). Teachers who are trained and encouraged to reflect on their own practice, as well as on how the children respond to classroom activities, can revise and plan their teaching effectively to meet the needs of all children (National Research Council, 2001; Sandall et al., 2000).

## SCHOLASTIC *BIG DAY FOR PREK* DELIVERS

*Big Day for PreK* provides professional development in a variety of ways. Professional development is embedded into the Professional Handbook and Teaching Guides, and through an interactive, online professional development course.

The *Big Day for PreK* Professional Handbook presents comprehensive guidance for program implementation, and provides practical professional development for PreK teachers. The Handbook includes research-based guidance on essential areas, including engaging families, modifying instruction for diverse learners, grouping, classroom management, and assessment. Research on best practices for instruction across curriculum domains is presented in the Handbook, along with guidance for implementing the research in daily practice. These best practices form the foundation of instruction throughout the Teaching Guides, ensuring that teachers implement research-based practices each day.

All teachers of *Big Day for PreK* receive access to a comprehensive online professional course from Scholastic RED professional development, called “Developing Foundations for Early Childhood Success.” This course focuses on developing teachers’ knowledge of children’s development in the social, emotional, and behavioral domains, in communication and language, in early literacy, and in early mathematics. On completing this course, teachers will be able to:

- Design a classroom environment that considers each child’s development in language and communication, early literacy and mathematics, and social-behavioral and emotional domains.
- Link learning at school with learning at home.
- Respond to teachable moments and lead activities to support children’s social-behavioral and emotional development.
- Incorporate activities that develop children’s communication skills and oral language into daily classroom routines.
- Implement strategies and plan lessons to support early literacy and mathematics.
- Prepare children to be school ready.
- Increase children’s world knowledge, and ability to learn from print-rich environments.



## Conclusion

Children's early experiences are critical to their learning, growth, and development. A growing body of research provides insight into what constitutes a high-quality learning environment for young children. As described in this report, Scholastic *Big Day for PreK* harnesses these key research findings and best practices in early childhood education to provide a comprehensive program that prepares young children for kindergarten and beyond.

Grounded in responsive, integrated instruction, *Big Day for PreK* engages preschoolers in intentional learning opportunities and purposeful play to cultivate key social-emotional and self-regulation skills, develop critical language and literacy skills, and build a necessary foundation in essential learning domains including mathematics, science, social studies, the arts, physical education, and health. In *Big Day for PreK*, the emphasis on promoting meaningful conversations throughout the day encourages children to explore and use new vocabulary and build essential oral language skills. The extensive collection of literature in *Big Day for PreK*, available in English and Spanish, helps to plant the seeds for a lifelong love of reading and provides children with a window into a wide variety of experiences and concepts that help them understand themselves and the world around them. The program's innovative technology helps children, teachers, families, and other caring adults partner to support children's learning, and 100% equity in English and Spanish offers complete support for bilingual and dual-language classrooms. Through this comprehensive, research-based curriculum, *Big Day for PreK* is designed to help ensure that young children will develop the critical skills, knowledge, and life habits to become successful learners and productive, responsible citizens of the 21<sup>st</sup> century.

## REFERENCES

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Adams, M. J. (2001). Alphabetic anxiety and explicit, systematic phonics instruction. In S. B. Neuman and D. Dickinson (Eds.), *Handbook on research in early literacy* (pp. 66-80). New York: Guilford Press.
- Adams, M. J. & Bruck, M. (1995). Resolving the "Great Debate." *American Educator*, 19(2), 7-20. Cited in I. L. Beck. (2006). *Making sense of phonics: The hows and whys*. New York: Guilford Press.
- Adams, M., Foorman, B., Lundberg, I., & Becker, T. (1996). *Phonemic awareness in young children*. Baltimore: Brookes Publishing Co.
- Albert Shanker Institute. (2009). *Preschool curriculum: What's in it for children and teachers?* Washington, DC: Albert Shanker Institute.
- Anderson, A., Anderson, J., & Thauberger, C. (2008). Mathematics learning and teaching in the early years. In O. N. Saracho & B. Spodek, *Contemporary perspectives on mathematics in early childhood education* (pp. 95-132). Charlotte, NC: Information Age Publishing, Inc.
- Andrews, N. (2010). [Spatial Tasks: At what age are young children successful?]. Unpublished raw data.
- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent involvement in preschool: Predictors and the relation of involvement to preliteracy development. *School Psychology Review*, 37(1), 74-90.
- August, D., Carlo, M., Dressler, C., & Snow, C. (2005). The critical role of vocabulary development for English language learners. *Learning Disabilities Research & Practice*, 20(1), 50-57.
- August, D. & Shanahan, T. (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah, NJ: Erlbaum.
- Barnett, W. S., Epstein, D. J., Friedman, A. H., Boyd, J. S., & Hustedt, J. T. (2008). *The state of preschool 2008: State preschool yearbook*. New Brunswick, NJ: National Institute for Early Education Research.
- Basch, C. (2010). Healthier students are better learners: A missing link in school reforms to close the achievement gap. Equity Matters: Research Review No. 6. A Research Initiative of the Campaign for Educational Equity, Teachers College, Columbia University. Retrieved March 16, 2010, from [http://www.equitycampaign.org/i/a/document/12557\\_EquityMattersVol6\\_Web03082010.pdf](http://www.equitycampaign.org/i/a/document/12557_EquityMattersVol6_Web03082010.pdf)
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.
- Bennett-Armistead, V. S., Duke, N. K., & Moses, A. M. (2005). *Literacy and the youngest learner: Best practices for educators of children from birth to 5*. New York: Scholastic Inc.
- Berliner, D. C. (2009). *Poverty and Potential: Out-of-school factors and school success*. Boulder, CO and Tempe, AZ: Education and the Public Interest Center & Education Policy Research Unit. Retrieved January 28, 2010, from <http://epicpolicy.org/publication/poverty-and-potential>

## References (cont.)

- Brenneman, K., Stevenson-Boyd, & Frede, E.C. (2009). *Math and science in preschool: Policies and practice*. Preschool Policy Brief, Issue 19. New Brunswick, NJ: National Institute for Early Education Research. Retrieved April 14, 2010 from <http://nieer.org/resources/policybriefs/20.pdf>
- Burns, M. S. (1996). Dynamic assessment: Easier said than done. In M. Luther, E. Cole, & P. Gamlin (Eds.), *Dynamic assessment for instruction: From theory to application*. New York, Ontario, Canada: Capture Press Inc.
- Burns, M. S., Griffin, P., & Snow, C. E. (eds.) (1999) *Starting Out Right. A Guide to Promoting Children's Reading Success*. Committee on the Prevention of Reading Difficulties in Young Children, Commission on Behavioral and Social Sciences and Education. National Research Council. Washington, DC: National Academy Press.
- Chard, D. J. & Osborn, J. (1999). Phonics and word recognition instruction in early reading programs: Guidelines for accessibility. *Learning Disabilities Research & Practice*, 14(2), 107-117.
- Church, E. B. (2007). Encouraging Expressive Writing. *Scholastic Early Childhood Today*, 21(6), 4.
- Cohen, J. (Ed.). (2001). *Caring classrooms/Intelligent schools: The social emotional education of young children*. New York: Teachers College Press.
- Coleman, M. R., Roth, F. P., & West, T. (2009). Roadmap to pre-K RTI: Applying Response to Intervention in preschool settings. New York: National Center for Learning Disabilities. Retrieved March 17, 2010, from [www.RTINetwork.org/PreKRTIRoadmap](http://www.RTINetwork.org/PreKRTIRoadmap)
- Collins, M. F. (2005). ESL preschoolers' English vocabulary acquisition from storybook reading. *Reading Research Quarterly*, 40(4), 406-408.
- Cook, R. E., Klein, M. D., & Tessier, A. (2008). *Adapting early childhood curricula for children with special needs*. Upper Saddle River, NJ: Pearson.
- Craig, H. K. & Washington, J. A. (2004). Language variation and literacy learning. In C. A. Stone, E. R. Silliman, B. J. Ehren & K. Apel (Eds.), *Handbook of language and literacy* (pp. 228-247). New York: Guilford Press.
- Crain-Thoreson, C. & Dale, P. S. (1999). Enhancing linguistic performance: Parents and teachers as book reading partners for children with language delays. *Topics in Early Childhood Special Education*, 19, 28-39.
- Cunningham, A. E. (1990). Explicit versus implicit instruction in phonemic awareness. *Journal of Experimental Child Psychology*, 50, 429-444.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33(6), 934-945.

- Davis, M. M., Gance-Cleveland, B., Hassink, S., Johnson, R., Paradis, G., & Resnicow, K. (2007). Recommendations for prevention of childhood obesity. *Pediatrics*, 120, Supplement 4, S229-S253. Retrieved March 9, 2010, from [http://www.pediatrics.org/cgi/content/full/120/Supplement\\_4/S229](http://www.pediatrics.org/cgi/content/full/120/Supplement_4/S229)
- Denton, C. A., Hasbrouck, J. E., Weaver, L. R., & Riccio, C. A. (2000). What do we know about phonological awareness in Spanish? *Reading Psychology*, 21, 335–352.
- Dickinson, D. K., McCabe, A., Anastasopoulos, L., Peisner-Feinberg, E. S., & Poe, M. D. (2003). The comprehensive language approach to early literacy: The interrelationships among vocabulary phonological sensitivity and print knowledge in preschool-aged children. *Journal of Educational Psychology*, 95(3), 465–481.
- Dickinson, D. K. & Tabors, P. O. (Eds.) (2001). *Beginning literacy with language: Young children learning at home and school*. Baltimore: Brookes Publishing Co.
- Drew, W. F. & Rankin, B. (2005). Promoting creativity for life using open-ended materials. Spotlight on Young Children and the Creative Arts. Washington, DC: NAEYC. Retrieved April 14, 2010 from [http://rbaeyc.org/resources/Creative\\_Arts\\_Article.pdf](http://rbaeyc.org/resources/Creative_Arts_Article.pdf)
- Duke, N. K. (2003). Information books in early childhood. National Association for the Education of Young Children.
- Duncan, G.J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P. (2007). School readiness and later achievement. *Developmental Psychology*, 43(6), 1428–1446.
- Epstein, A. S. (1993). Training for quality: Improving early childhood programs through systematic inservice training. *Monographs of the High/Scope Education Foundation*, 9. Ypsilanti, MI: High/Scope Press.
- Epstein, A. S., Schweinhart, L. J., DeBruin-Parecki, A., & Robin, K. B. (2004, July). Preschool assessment: A guide to developing a balanced approach. *Preschool Policy Matters*, 7. New Brunswick, NJ: National Institute for Early Education Research.
- Eshach, H. & Fried, M. N. (2005). Should science be taught in early childhood? *Journal of Science Education and Technology*, 14(3), 315–336.
- Frede, E. C. (1998). Preschool program quality in programs for children in poverty. In W. S. Barnett & S. S. Boocock (Eds.), *Early care and education for children in poverty: Promises, programs, and long-term outcomes* (pp. 77–98). Buffalo, NY: State University of New York Press.
- Goldenberg, C. (2008). Teaching English language learners: What the research does and does not—say. *American Educator*, 32(2), 8–44. Retrieved February 5, 2010, from [http://archive.aft.org/pubs-reports/american\\_educator/issues/summer08/goldenberg.pdf](http://archive.aft.org/pubs-reports/american_educator/issues/summer08/goldenberg.pdf)
- Goodway, J. D. & Robinson, L. E. (2006). SKIPing toward an active start: Promoting physical activity in preschoolers. *Beyond the Journal: Young Children on the Web*. Retrieved February 14, 2010, from <http://www.naeyc.org/files/yc/file/200605/GoodwayBTJ.pdf>

## References (cont.)

- Graves, M. (2009). *Teaching individual words: One size does not fit all*. New York: Teachers College Press.
- Halgunseth, L. C., Peterson, A., Stark, D. R., & Moodie, S. (2009). Family engagement, diverse families, and early childhood education programs: An integrated review of the literature. Washington, DC: National Association for the Education of Young Children.
- Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Brookes.
- Hitchcock, C., & Stahl, S. (2003). Assistive technology, universal design, universal design for learning: Improved learning opportunities. *Journal of Special Education Technology*, 18(4). Retrieved October 10, 2008, from <http://jset.unlv.edu/18.4/hitchcock/first.html>
- Hodges, E. A. (2003). A primer on early childhood obesity and parental influence. *Pediatric Nursing*, 29(1), 13–16.
- Howes, C. & Smith, E. W. (1995). Relations among child care quality, teacher behavior, children's play activities, emotional security, and cognitive activity in child care. *Early Childhood Research Quarterly*, 10(4), 381–404.
- Howes, C., Phillips, D. A., & Whitebook, M. (1992). Thresholds of quality: Implications for the social development of children in center-based child care. *Child Development*, 63, 449–460.
- Joyce, B. & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Justice, L. M., Kaderavek, J. N., Fan, X., Hunt, A., & Sofka, A. (2009). Accelerating preschoolers' early literacy development through classroom-based teacher-child storybook reading and explicit print referencing. *Language, Speech, and Hearing Services in Schools*, 40(1), 67–85.
- Kaderavek, J. & Justice, L. M. (2002). Shared storybook reading as an intervention context: Practices and potential pitfalls. *American Journal of Speech-Language Pathology*, 11(4), 395–406.
- Kamhi, A. G. & Catts, H. W. (2002). The language basis of reading: Implications for classification and treatment of children with reading disabilities. In K. G. Butler, E. R. Silliman (Eds.), *Speaking, reading, and writing in children with language learning disabilities: New paradigms in research and practice* (pp. 45–72). Mahwah, NJ: Erlbaum.
- Kontos, S., Howes, C., & Galinsky, E. (1997). Does training make a difference to quality in family care? *Early Childhood Research Quarterly*, 12, 351–372.
- Lally, J. R. (2000). Infants have their own curriculum: A responsive approach to curriculum planning for infants and toddlers. *Head Start Bulletin*, 67, 6–7.
- Landry, S. (2005). *Effective early childhood programs: Turning knowledge into action*. Houston, TX: Rice University Press.



- Lonigan, C. J. & Whitehurst, G. J. (1998). Relative efficacy of parent and teacher involvement in a shared-reading intervention for preschool children from low-income backgrounds. *Early Childhood Research Quarterly*, 13(2), 263–290.
- Lyon, R. G. & Moats, L. C. (1997). Critical conceptual and methodological considerations in reading intervention research. *Journal of Learning Disabilities*, 30(6), 578–588.
- Meidel, W. T. & Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37, 379–402.
- Miller E. & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. College Park, MD: Alliance for Childhood.
- Mischel, W. (1996). From good intentions to willpower. In P. Gollwitzer & J. Bargh (Eds.), *The psychology of action* (pp. 197–218). New York: Guilford Press.
- Mischel, W., DeSmet, A. L., & Kross, E. (2006). Self-regulation in the service of conflict resolution. In M. Deutsch, P. T. Coleman, & E. C. Marcus, *The handbook of conflict resolution: Theory and practice* (pp. 294–316). San Francisco: Wiley.
- Mohr, K. A. J. & Mohr, E. S. (2007). Extending English-language learners' classroom interactions using the response protocol. *The Reading Teacher*, 60(5), 440–450.
- Murphy, A. P. (2008). *The secret of play: How to raise smart, healthy, caring kids from birth to age 12*. New York: DK Publishing.
- National Association for the Education of Young Children (NAEYC) (1995). *Responding to linguistic and cultural diversity: Recommendations for effective early childhood education. A position statement of the National Association for the Education of Young Children*. Washington, DC: NAEYC.
- NAEYC. (1996). *Technology and young children—Ages 3 through 8. A Position Statement of the National Association for the Education of Young Children*. Washington, DC: NAEYC.
- NAEYC. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8. A position statement of the National Association for the Education of Young Children*. Washington, DC: NAEYC.
- NAEYC & the National Association of Early Childhood Specialists in State Departments of Education. (2002). *Early learning standards: Creating the conditions for success*. Washington, DC: NAEYC.
- National Association for Sport and Physical Education. (2002). *Active start: A statement of physical activity guidelines for children birth to five years*. Position statement. Retrieved February 14, 2010, from <http://www.aahperd.org/naspe/standards/PEPS.cfm>
- National Clearinghouse for English Language Acquisition. (n.d.). *Frequently Asked Questions*. Retrieved February 10, 2010, from <http://www.ncela.gwu.edu/faqs/view/4>

## References (cont.)

- National Council for the Social Studies. (1988). Social studies for early childhood and elementary school children preparing for the 21<sup>st</sup> century. A report from the NCSS Task Force on Early Childhood/Elementary Social Studies. [Online.] Retrieved February 14, 2010, from <http://www.socialstudies.org/positions/elementary>
- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy.
- National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network. (2005). Pathways to reading: the role of oral language in the transition to reading. *Developmental Psychology*, 41, 428–442.
- National Joint Committee on Learning Disabilities. (2008). *Adolescent literacy and older students with learning disabilities: A report from the National Joint Committee on Learning Disabilities*. Retrieved October 8, 2008, from [www.ldonline.org/njclcd](http://www.ldonline.org/njclcd)
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on rreading and its implications for reading instruction*. Washington, DC: National Institute of Child Health and Human Development.
- National Research Council. (2001). *Eager to learn: Educating our preschoolers. Committee on Early Childhood Pedagogy*. Washington, DC: The National Academies Press.
- National Research Council. (2005). *Mathematical and scientific development in early childhood: A workshop summary*. Washington, DC: The National Academies Press.
- National Research Council. (2008). *Early childhood assessment: Why, what, and how. Committee on Developmental Outcomes and Assessments for Young Children*. Washington, DC: The National Academies Press.
- National Research Council. (2009). *Mathematics learning in early childhood: Paths toward excellence and equity*. Washington, DC: The National Academies Press.
- National Scientific Council on the Developing Child. (2008). *Science briefs: Focus and planning skills can be improved before a child enters school*. Retrieved February 14, 2010, from [http://developingchild.harvard.edu/index.php/download\\_file/-/view/90/](http://developingchild.harvard.edu/index.php/download_file/-/view/90/)
- National Staff Development Council. (2002). *What works in elementary school: Results-based staff development*. Oxford, OH: National Staff Development Council.
- Neuman, S. B. & Dwyer, J. (2009). Missing in action: Vocabulary instruction in Pre-K. *The Reading Teacher*, 62(5), 384–392.
- Neuman, S. B. & Roskos, K. (2007). *Nurturing knowledge: Building a foundation for school success by linking early literacy to math, science, art, and social studies*. New York: Scholastic Inc.

- Neuman, S. B., Copple, C., & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, DC: National Association for the Education of Young Children.
- Owens, R. E. (2004). *Language Development: An Introduction* (6th ed.). Allyn and Bacon.
- Phythian-Sence, C., & Wagner, R. K. (2007). Vocabulary acquisition: A primer. In R. K. Wagner, A. E. Muse, & K. R. Tannenbaum (Eds.), *Vocabulary acquisition: Implications for reading comprehension* (pp. 1–14). New York: Guilford Press.
- Piotrowski, J.T. and Linebarger, D.L. (2008, May). *The impact of television narratives on the early literacy skills of preschoolers*. Paper presented at the annual meeting of the International Communication Association, Montreal, Quebec, Canada. Retrieved April 14, 2010 from [http://www.allacademic.com/meta/p234721\\_index.html](http://www.allacademic.com/meta/p234721_index.html)
- Prensky, M. (2005/2006). Listen to the natives. *Educational Leadership*, 63(4), 8–13.
- Primavera, J., Wiederlight, P. P., & DiGiacomo, T. M. (2001, August). Technology access for low-income preschoolers: Bridging the digital divide. Paper presented at the annual meeting of the American Psychological Association, San Francisco, CA. Retrieved January 23, 2010, from [http://www.knowledgeadventure.com/school/teacher/pdf/childtechnology\\_white\\_paper.pdf](http://www.knowledgeadventure.com/school/teacher/pdf/childtechnology_white_paper.pdf)
- Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report*, 16(3). Ann Arbor, MI: Society for Research in Child Development.
- Rayner, K., Foorman, B., Perfetti, C. A., Pesetsky, D., & Seidenberg, M. (2001). How psychological science informs the teaching of reading. *Psychological Science in the Public Interest*, 2, 31–74.
- Rhode Island KIDS COUNT. (2005). *Getting ready: Findings from the National School Readiness Indicators Initiative*. Providence, R.I.: Rhode Island KIDS COUNT .
- Rose, D.H., & Meyer, A. (2000). Universal design for learning. *Journal of Education Technology*, 15(1), 67-70.
- Safe Kids USA. (2009). *Raising safe kids: One stage at a time—A study of child development and unintentional injury*. Safe Kids USA Research Report. Retrieved March 9, 2010, from <http://www.safekids.org/our-work/research/reports/>
- Sandall, S., McLean, M. E., & Smith, B. J. (2000). *DEC recommended practices in early intervention/early childhood special education*. Denver, CO: Division for Early Childhood of the Council for Exceptional Children.
- Sanders, S. W. (2002). *Active for life: Developmentally appropriate movement programs for young children*. Washington, DC: National Association for the Education of Young Children.
- Sarama, J. & Clements, D. H. (2008). Mathematics in early childhood. In O. N. Saracho & B. Spodek, *Contemporary perspectives on mathematics in early childhood education* (pp. 67-94). Charlotte, NC: Information Age Publishing, Inc.

## References (cont.)

- Scarborough, H. S. (2002). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 97–110). New York: Guilford Press.
- Schatschneider, C., Francis, D. J., Foorman, B. R., Fletcher, J. M., & Mehta, P. (1999). The dimensionality of phonological awareness; An application of item response theory. *Journal of Educational Psychology*, 91, 439–450.
- Semlak, S. (2000). Curriculum in early head start. *Head Start Bulletin*, 69, 14–15.
- Shonkoff, J. & Phillips, D. (Eds.). (2000) *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- Snow, C. E., Tabors, P. O., Nicholson, P. A., & Kurland, B. F. (1995). SHELL: Oral language and early literacy skills in kindergarten and first-grade children. *Journal of Research in Childhood Education*, 10 (1), 37–48.
- Stanovich, K.E. (1993). The construct validity of discrepancy definitions of reading disability. In G.R. Lyon, D. Gray, J. Kavanagh, & N. Krasnegor (Eds.), *Better understanding learning disabilities: New views on research and their implications for education and public policies*. (273–308). Baltimore: Brookes.
- Stewart, K. (2009). Kindergarten crunch: Lack of playtime killing joy of learning, say advocates. *Salt Lake Tribune*, August 24, 2009. Retrieved September 1, 2009, from [http://www.sltrib.com/education/ci\\_13179052](http://www.sltrib.com/education/ci_13179052)
- Storch, S. A. & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38(6), 934–947.
- Strickland, D. & Riley-Ayers, S. (2006). Early literacy: Policy and practice in the preschool years. National Institute for Early Education Research (NIEER) Preschool Policy Brief. Retrieved February 5, 2010, from <http://www.colorincolorado.org/article/11375/>
- Tabors, P. & Snow, C. (1994). English as a second language in preschool programs. In F. Genesee (Ed.), *Educating second language children: The whole child, the whole curriculum, and the whole community* (pp. 103–126). Cambridge, England: Cambridge University Press. Retrieved February 5, 2010, from <http://books.google.com/books?hl=en&lr=&id=bvzV7uEMDoQC&oi=fnd&pg=PA103&dq=english+learners+preschool&ots=FtAeiGV3vv&sig=vrh03KUn7IAYTGFqWq93PJ-eUWo#v=onepage&q=english%20learners%20preschool&f=false>
- Task Force on Children's Learning and the Arts: Birth to Age Eight & Goldhawk, S. (1998). *Young children and the arts: Making creative connections*. Washington, DC: Arts Education Partnership. Retrieved February 14, 2010, from <http://www.aep-arts.org/files/publications/Young%20Children.pdf>
- Teale, W. H. (2003). Reading aloud to young children as a classroom instructional activity. In A. van Kleeck, S. A. Stahl, & E. B. Bauer (Eds.), *On reading books to children* (pp. 114–139). Mahwah, NJ: Erlbaum.

- Texas Education Agency. (2002). The alphabetic principle. Reading Rockets website. Retrieved April 14, 2010, from <http://www.readingrockets.org/article/3408>
- Texas Education Agency. (2008). *Revised Texas Prekindergarten Guidelines*. Austin, TX: Texas Education Agency.
- Tough, P. (2009). Can the right kinds of play teach self control? *New York Times Magazine*, September 25, 2009. Retrieved February 14, 2010, from <http://www.nytimes.com/2009/09/27/magazine/27tools-t.html>
- Trumbull, E. & Pacheco, M. (2005). *Leading with diversity: Cultural competencies for teacher preparation and professional development*. Providence, RI: Brown University and Pacific Resources for Education and Learning. Retrieved April 13, 2010, from [https://www.prel.org/products/pr\\_/compendium07/trumbull\\_pacheco\\_cul.pdf](https://www.prel.org/products/pr_/compendium07/trumbull_pacheco_cul.pdf)
- U.S. Department of Education. (2007a). *Children ages 3 through 5 served under IDEA, Part B, as a percentage of population, by disability category and state: Fall 2007*. Office of Special Education Programs, Data Analysis System (DANS), OMB# 1820-0043. Retrieved April 9, 2010, from [http://www.ideadata.org/tables31st/ar\\_1-14.htm](http://www.ideadata.org/tables31st/ar_1-14.htm).
- U.S. Department of Education. (2007b). *Children with disabilities receiving special education under Part B of the Individuals with Disabilities Education Act, 2007*. Office of Special Education Programs, Data Analysis System (DANS), OMB# 1820-0043. Retrieved April 9, 2010 from [http://www.ideadata.org/tables31st/ar\\_1-2.htm](http://www.ideadata.org/tables31st/ar_1-2.htm)
- U.S. Department of Education, National Center for Education Statistics. (2007). *The condition of education 2007* (NCES 2007–064). Washington, DC: U.S. Government Printing Office. Retrieved February 10, 2010, from [http://nces.ed.gov/pubs2007/2007064\\_1.pdf](http://nces.ed.gov/pubs2007/2007064_1.pdf)
- U.S. Department of Health and Human Services. (2001). The Surgeon General's call to action to prevent and decrease overweight and obesity. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Retrieved March 16, 2010, from <http://www.surgeongeneral.gov/topics/obesity/calltoaction/CalltoAction.pdf>.
- U.S. Department of Health and Human Services. (2003). *Head Start Policy Book*. Washington, DC.
- Valdez-Menchaca, M. C. & Whitehurst, G. J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology*, 28(6), 1106–1114.
- Vellutino, F. R., Fletcher, J. M., Snowling, M. J., & Scanlon, D. M. (2004). Specific reading disability (dyslexia): What have we learned in the past four decades? *Journal of Child Psychology and Psychiatry*, 45(1), 2–40.
- Vellutino, F. R., Scanlon, D. M., Sipay, E. R., Small, S. G., Pratt, A., Chen, R., & Denckla, M. B. (1996). Cognitive profiles of difficult to remediate and readily remediated poor readers: Toward distinguishing between constitutionally and experimentally based causes of reading disability. *Journal of Educational Psychology*, 88, 601–638.

## References (cont.)

- Viadero, D. (2010). Researchers testing programs to teach science in preschool. *Education Week*, 29(18), 10.
- Wagner, R. (2008). *Learning to read: The importance of assessing phonological decoding skills and sight word knowledge*. New York: Scholastic Inc.
- Washington, J. A. & Thomas-Tate, S. (2009). How research informs cultural-linguistic differences in the classroom: The bi-dialectal African American child. In S. Rosenfeld & V. W. Berninger (Eds.), *Implementing evidence-based academic interventions in school settings* (pp. 147–164). New York: Oxford University Press.
- White, K. R., Taylor, M., & Moss, B. (1992). Does research support claims about the benefits of involving parents in early intervention programs? *Review of Educational Research*, 62(1), 91–125.
- Whitehurst, G. J. (1992). Dialogic reading: An effective way to read to preschoolers. *Reading Rockets*. Retrieved February 10, 2010, from <http://www.readingrockets.org/article/400>
- Whitehurst, G. J., Falco, F. L., Lonigan, C. J., Fischel, J. E., DeBaryshe, B. D., Valdez-Menchaca, M. C., et al. (1988). *Developmental Psychology*, 24(4), 552–559.
- Whitehurst, G. J., Arnold, D. S., Epstein, J. N., Angell, A. L., Smith, M., & Fischel, J. E. (1994). A picture book reading intervention in day care and home for children from low-income families. *Developmental Psychology*, 24, 552–559.
- Whitehurst, G. J. & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 68, 848–872.
- Yarosz, D. J. & Barnett, W. S. (2001). Who reads to young children? Identifying predictors of family reading activities. *Reading Psychology*, 22, 67–81.
- Yelland, N. (2005). The future is now: A review of the literature on the use of computers in early childhood education (1994–2004). *AACE Journal*, 13(3), 201–232.
- Zevenbergen, R. (2007). Digital natives come to preschool: Implications for early childhood practice. *Contemporary Issues in Early Childhood*, 8(1), 19–29.
- Zevenbergen, A. A. & Whitehurst, G. J. (2003). Dialogic reading: A shared picture book reading intervention for preschoolers. In A. van Kleeck, S. A. Stahl, & E. B. Bauer (Eds.), *On reading books to children: parents and teachers* (pp. 177–202). Mahwah, NJ: Erlbaum. Retrieved January 11, 2009, from <http://books.google.com/books?hl=en&lr=&id=MNXJFWk8DGsC&oi=fnd&pg=PA177&dq=whitehurst+dialogic+reading&ots=BzjAkGfDui&sig=8Yg5UmXEducf0Cza3deUzF7Y3Nk#v=onepage&q=whitehurst%20dialogic%20reading&cf=false>



# RESEARCH FOUNDATION PAPER



Scholastic Inc.  
557 Broadway  
New York, NY 10012