

# Kindergarten: Getting ready for *big school*

The first few weeks of fall can create anxiety for parents whose children are entering kindergarten. Are their 5-year-olds ready to launch into formal schooling?

In reality, families and teachers can do many things to help children be ready for the *big school* (Furman 1986).

Kindergarten readiness is a complex puzzle, and children are only one piece. Families, schools, and communities make up the other pieces (Maxwell, Halle, and Forry 2013). Because kindergarten readiness is formed within relationships—caregiver-child, teacher-child, and child-child—and is based on experience, its foundation is laid long before the kindergarten bell rings (Horm, Norris, Perry, Chazan-Cohen, and Halle 2016). The initial pieces of the readiness puzzle are placed during infancy, and the final pieces are added in the months before kindergarten begins.

## What is kindergarten readiness?

What indicates children are kindergarten ready has been debated for many years by families, teachers, and policymakers (Scott-Little, Kagan, and Frelow 2006), resulting in some confusion about what children need to know and be able to do. For example, families are more likely to stress math and language readiness, while kindergarten teachers are more likely to expect 5-year-old children to be able to sit still, listen, pay attention to directions, and cooperate with peers (Ackerman and Barnett 2005; Diamond, Reagan, and Bandyk 2000; Hair, Halle, Terry-Human, Lavelle, and Calkins 2006).

Experts in kindergarten readiness agree that preparing children for success in kindergarten requires a whole child approach. This approach was among the recommendations of the National Education Goals Panel, a bipartisan group created after the

National Education Summit in 1989 (Kagan et al. 1995). (The panel was discontinued after passage of the No Child Left Behind Act in 2002. For the panel's reports, see <https://federaleducationpolicy.wordpress.com/2012/02/24/the-national-education-goals-reports-1991-1999/>.)

The whole child approach continues to influence policy and practice. It is evident in most states' early learning guidelines for young children (Daily, Burkhauser, and Halle 2010; Horm, Norris, Perry, Chazan-Cohen, and Halle 2016) as well as Head Start's *Early Learning Outcomes Framework: Ages Birth to Five* (Office of Head Start 2015). The approach is also reflected in Texas's early learning guidelines for children 0 to 3 ([www.littletexans.org/](http://www.littletexans.org/)) and prekindergarten children ([http://tea.texas.gov/index2.aspx?id=2147495508&menu\\_id=2147483718](http://tea.texas.gov/index2.aspx?id=2147495508&menu_id=2147483718)).

According to the goals panel, the whole child approach requires families and teachers to consider children's skills and abilities in five developmental



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domains (Horm, Norris, Perry, Chazan-Cohen, and Halle 2016; Isaacs 2012; Kagan et al., 1995):

- **physical well-being/health and motor development**—includes freedom from disease, mastery of typical 4-year-old physical competencies, and brain and sensory development;
- **social and emotional competence**—includes the quality of attachments to primary caregivers, teachers, and peers, a view of self as capable and empowered, ability to identify and appropriately express feelings, empathy for others, and social abilities such as making friends, cooperating with peers, and resolving conflicts in nonviolent ways;
- **approaches toward learning**—includes learning styles as influenced by gender, biologically based temperament, and culture, ability to persist at a task and generate multiple solutions to problems, capacity for curiosity, imaginativeness, and enthusiasm, and executive functioning (such as the ability to delay gratification, think before reacting, figure out where to direct attention in order to learn, and remember what was learned before);
- **language/literacy and communication**—includes age-appropriate mastery of primary language (vocabulary, listening, speaking, and social conventions), abilities such as following directions, asking questions to clarify directions, and using language creatively (listen and tell stories), and emerging literacy (print awareness, sequence of stories, and ordered scribbling as prelude to writing); and

- **cognitive development and general knowledge**—ability to learn through imitation as well as focus on a lesson, and the ability to categorize (one strategy for organizing and recalling information and then building upon categories).

With regard to the fifth domain, families and teachers may assume that children must possess a specific body of general knowledge prior to entering kindergarten (Scott-Little, Kagan, and Frelow 2006). However, the goals panel (Kagan et al. 1995) advocated a broad view of general knowledge. They pointed out that all children learn by doing and that their base of knowledge is a product of their experiences. Further, their experiences are strongly influenced by their familial and cultural background. Teachers may mistakenly judge children whose general knowledge matches their own as more ready than children whose life experiences have provided them with different general knowledge (Bowman and Moore 2006; Loasa and Ainsworth 2007; Kagan et al. 1995; Rimm-Kaufman, Pianta, and Cox 2000).

To summarize, kindergarten readiness experts urge early care and education programs to provide activities and experiences that foster children's development in all five domains. Research has found that early care and education programs that base their curricula on the whole child approach better prepare children for kindergarten success than those with a narrower (primarily academic) approach to early learning (Ackerman and Barnett 2006; Barnett 2004; Espinosa 2002).

## Links between domains

Although the five domains are discussed separately, in reality, they are linked together in different profiles or patterns (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006). In a national study, Hair and associates (2006) found four profiles of linkages at the beginning of kindergarten that predicted how well children fared by the end of first grade.

At the beginning of kindergarten, all the children showed strengths on the third domain—approaches toward learning. The differences were found in mastery of indicators for the remaining four domains. In particular, two profiles indicated strengths, and two indicated risks.

**Comprehensive positive development strengths profile.** About 16 percent of children showed strengths in all five domains at the begin-

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ning of kindergarten and were faring well at the end of the first grade. Among other strengths, they worked to the best of their abilities, performed well on math and reading assessments, were in good general health, and were able to self-regulate (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).

**Social/emotional and health strengths profile.** About 37 percent of children were strong in health and physical well-being as well as social/emotional well-being, but had limited skills in language/literacy and communication as well as cognitive development at the beginning of kindergarten. They worked to the best of their ability, were able to self-regulate, and were in good general health at the end of first grade. They performed better than both risk groups (described below) on math and reading assessments, but not as well as children with the comprehensive positive development profile (described above) (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).

**Social/emotional risks profile.** About 27 percent of children had limited skills in all four domains. They also had significantly greater limitations in social-emotional well-being at the start of kindergarten than children with the other three profiles. They struggled with all measures of well-being at the end of the first grade (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006). For example, they were not working to the best of their ability, had the greatest difficulty self-regulating, performed poorly on math and reading assessments, and were

in poorer health than children in either of the two strength patterns (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).

**Health risks profile.** About 19 percent of children had shown some strengths in social/emotional well-being at the beginning of kindergarten, along with limited skills in the language and cognition domains. Additionally, they scored lower on health and physical well-being indicators than children with the other three profiles. They too struggled with all measures of well-being at the end of the first grade, and continued to have the poorest health (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).

These four patterns have major implications for children, their families, schools, and communities:

- Children who start kindergarten with either risk profile are likely to be struggling to master skills in all developmental domains at the end of first grade (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).
- Children need individualized curricula that address developmental domains with which they struggle.
- Kindergarten readiness strategies need to begin earlier than prekindergarten (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).
- Home-school-community partnerships are needed to promote kindergarten readiness. This need is punctuated by the costs of unreadiness to children, their families, and the community.

## Costs of kindergarten unreadiness

Each year about 3 million young children in the United States start kindergarten (Daily, Burkhauser, and Halle 2010). Unfortunately, thousands of 5-year-old children arrive at kindergarten unprepared to achieve the school's educational goals (Werthemer, Coan, Moore, and Hair 2003). In fact, in a large national survey, about 30 percent of kindergarten teachers estimated that half the children in their classes did not meet expectations for kindergarten readiness (Rimm-Kaufman, Pianta, and Cox 2000). Similarly, Hair and associates (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006) found that more than 45 percent of the children in their national study were not kindergarten ready.

Additionally, researchers have found that the

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strongest predictor of a lack of kindergarten readiness is low socioeconomic status (Lee and Burkham 2002; Isaacs 2012; Vandivere, Pitzer, Halle, and Hair 2004). Children with the two risk profiles were more likely to live in poverty than were children with the two strengths profiles (Hair, Halle, Terry-Humen, Lavelle, and Calkins 2006).

In fact, less than half (48 percent) of children living in poverty compared to 75 percent of their more affluent counterparts are kindergarten-ready at age 5, “resulting in a 27 percentage point gap in school readiness” (Isaacs 2012). This gap is due to both the financial hardships associated with poverty as well as characteristics of poor children’s primary caregivers who typically have less education, higher rates of single and teen parenthood, and poorer health “that place their children at risk for less successful outcomes” (Isaacs 2012).

Kindergarten readiness is crucial to children’s academic success through high school and beyond. Children who are ready for school are not only more likely to experience academic success through high school but also less likely to have school adjustment problems, become delinquent, or drop out of high school (Economics of Early Childhood Investments 2014; Isaacs 2012).

Costs associated with school unreadiness include the following (Bruner 2004; Economics of Early Childhood Investments 2014; Isaacs 2012):

- **child education**—more special education referrals, higher rates of grade retention, and lower high school completion rates;

- **child human service**—higher incidence of juvenile delinquency and greater need for mental health care; and

- **adulthood**—adolescent parenting, welfare dependency, and lost economic activity.

When calculations are made of the economic costs associated with the adverse impacts of kindergarten unreadiness on children, their families, and society, the results are staggering. The estimated annual societal costs associated with some of these negative outcomes exceed *hundreds of billions of dollars* annually (Bruner 2004).

## ENCOURAGE THE DEVELOPMENT OF FOCUSED ATTENTION.

However, families, teachers, and communities can do much to decrease the human and financial costs associated with kindergarten unreadiness. One effective strategy is to provide quality early care and education beginning in infancy (Herndon and Waggoner 2015; Horm, Norris, Perry, Chazan-Cohen, and Halle 2016; Maxwell, Halle, and Forry 2013; Winsler, Tran, Hartman, Madigan, Manfra, and Bleiker 2008).

### Practices that promote kindergarten readiness

Teachers and caregivers in early care and education programs can help children along the path of school readiness, beginning in infancy. Consider the following guidelines as you support children’s development across domains.

**Provide quality early care and education for infants, 0 to 3 years.** According to Horm and associates (2016), kindergarten readiness begins in infancy. This developmental stage “is characterized by rapid growth and development of concepts, attitudes, skills, and abilities that are foundational for current development, later success in school, and lifelong learning.” Infant and toddler teachers can foster development in each of the five domains.

#### Physical well-being/health and motor development

- Promote acquisition of age-appropriate fine and gross motor skills. Infants use these skills to

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explore and engage in the world, which allows them to learn and build their knowledge.

- Intervene early in vision and hearing problems because infants and toddlers use these and other senses to explore their world and build their knowledge.
- Provide experiences that support typical brain development. Experiences that hamper brain development include inadequate nutritional intake and exposure to such hazards as air pollution and dangerous chemicals.

### **Social and emotional competence**

- Foster secure attachments between children and at least one teacher in the classroom. Sensitive and responsive caregiving lay the foundation for an inner working model of relationships that becomes the template for relationships with peers and kindergarten teachers. Children who have experienced loving care feel emotionally safe and anticipate positive interactions with teachers and peers.
- Respect children's innate tendencies (temperament) for how they approach the world and others. Create "goodness of fit" relationships with difficult, easy/flexible, and slow-to-warm-up children. For example, allow transition time when introducing a new activity to slow-to-warm-up infants and toddlers. They need ample time to become comfortable before they can begin to learn from the experience.

### **Approaches toward learning**

- Cultivate interest and persistence in infants' approaches toward learning. Interest, indicated by infants' curiosity and exploration, and persistence, the ability to maintain engagement, are two different types of learning. Interest and persistence at age 3 predict academic and kindergarten readiness skills at age 5.
- Foster the development of executive functions through enjoyable adult-infant interactive activities such as peek-a-boo.

### **Language/literacy and communication**

- Respond to the communicative attempts of infants and toddlers to encourage their use of language as a means of seeking and sharing information. Encourage children's participation in ongoing conversations about their interests.
- Enhance infants' and toddlers' vocabularies by using a variety of words and asking open-ended questions. Smaller vocabularies at the end of the

toddler stage predict ongoing language and literacy problems as well as less readiness for kindergarten.

- Read, read, read! Reading stories to infants and toddlers introduces them to the wonders of the written word. They learn, among other things, to associate words with pictures and symbols, how to turn pages, and go from left to right.

### **Cognitive development and general knowledge**

- Encourage the development of focused attention, which is the ability to really notice people, events, activities, and objects. Provide play materials that can be used in a variety of ways to enhance children's ability to engage in focused attention (soft blocks, for example). Focused attention is one of the strongest predictors of school readiness.

### **Engage in developmentally appropriate practices for children, 0 to 5 years.**

The National Association for the Education of Young Children has produced a number of resources for teachers of young children that address developmentally appropriate activities. See [www.naeyc.org/dap](http://www.naeyc.org/dap). Also see previous issues of *Texas Child Care Quarterly* at [www.childcarequarterly.com/mag\\_index.html](http://www.childcarequarterly.com/mag_index.html).

**Use transition activities for prekindergarten children, 4 and 5 years.** Recent research has identified transition activities that are linked with successful adaptation to kindergarten. In one study (LoCasale-Crouch, Masburn, Downer, and Pianta 2008), investigators found that on average prekindergarten teachers used six of nine transition activities



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in the months prior to the children's entry into kindergarten. Investigators then asked the children's kindergarten teachers to assess the children's social-emotional and academic competencies at the start of kindergarten. The study found that the more transition activities used by the *prekindergarten* teacher, the greater the likelihood the *kindergarten* teacher rated the children as socially/emotionally and academically competent.

The nine transition activities used by the prekindergarten teachers were the following:

- Prekindergarten children visited a kindergarten class.
- Prekindergarten teacher visited a kindergarten class.
- Kindergarten teacher visited the prekindergarten class.
- Prekindergarten teacher held a springtime kindergarten orientation for prekindergarten children.
- Prekindergarten teacher held a springtime kindergarten orientation for prekindergarten parents.
- Prekindergarten and kindergarten teachers held a joint activity at the elementary school for prekindergarten children.
- Prekindergarten teacher held individual meetings with parents about kindergarten.
- Prekindergarten teacher shared written records of children's prekindergarten experiences with kindergarten teacher.
- Prekindergarten teacher had contact with kindergarten teacher about kindergarten curriculum or specific children.

Again, the more of these transition activities used by prekindergarten teachers, the better. If prekindergarten teachers' time and resources are limited, however, they can use the last transition activity on the list, which is the one that had the greatest impact on children's adaptation to school.

**What schools and communities can do:** In addition to considering children's kindergarten readiness, families, teachers and policymakers would ideally promote the concept of "ready schools" and "ready communities." According to Daily, Burkhauser, and Halle (2010), "[r]eady schools foster communication and continuity between early care and school settings and support successful transitions from preschool to kindergarten. Schools ideally will individualize the kindergarten curriculum for children with differing levels of abilities (NAEYC 2009).

"Ready communities provide high quality comprehensive programs and services to support [all] families with young children and work with state leadership to communicate the needs of the community's young children" (Daily et al. 2010).

## Piecing together a complex puzzle

A complex puzzle of families, early care and education programs, schools, and communities work together to ensure that children are ready for kindergarten. Readiness preparation begins in infancy, and early care and education professionals play a major role.

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