



## **School Transition and School Readiness: An Outcome of Early Childhood Development**

*SARA RIMM-KAUFMAN, PhD*

*University of Virginia, USA*

*(Published online February 25, 2004)*

### **Topic**

*School transition*

### **Introduction**

Recent research has redefined what it means for a child to “be ready” for kindergarten. This primary objective of Goals 2000 set by the National Education Goals Panel<sup>1</sup> was “to insure that all children enter school ready to learn.” Historically, views on readiness have placed differing levels of priority on children’s social and academic preparedness.

### **Subject**

Researchers have been examining the topic of school transition and readiness for several decades. The recurrent questions emerge: What does it mean to be ready for school? How do different stakeholders prioritize different aspects of school readiness? What are the antecedents of school readiness? This short report summarizes evidence on the school transition and readiness with the goal of describing stakeholders’ definitions of readiness, characteristics of child readiness, and readiness as an outcome of early childhood experiences.

### **Problems**

Children and their families experience a large discontinuity as they make the transition into kindergarten. This shift is notable despite the fact that more than 80% of American children received care on a regular basis from a non-parental caregiver prior to this transition.<sup>2</sup> The change in priorities and the heightened academic rigour present challenges to children as they begin their formal education.

The current educational climate in the U.S. has furthered the experience of discontinuity for American children. The emphasis on accountability has forced a “push down curriculum” in which children are expected to perform at higher academic levels at earlier ages. The transition to kindergarten has become an increasingly visible issue as federal and state governments consider the merits of federally funded preschool programs. Further, the children entering kindergarten are different from those of a generation ago; they are increasingly diverse with regard to racial, ethnic, economic and language backgrounds.<sup>3</sup>

School readiness leads to school success. Research suggests that children's school outcomes, especially achievement, remain remarkably stable after the first years of school.<sup>4,5</sup> Further, there is evidence that interventions are more likely to be successful in the early school years.<sup>6</sup> As a result of this evidence, researchers, policy-makers, educators and parents are grappling with what it means for children to be "ready" for school.

### **Research Context**

Numerous large-scale studies currently target the success of the transition to school as a key outcome variable: the Head Start Transition Study,<sup>7</sup> the National Education Longitudinal Study,<sup>8,9</sup> the NICHD Study for Early Child Care,<sup>10</sup> and the National Center for Early Development and Learning.<sup>11,12</sup>

Three main bodies of literature have informed discussions about school readiness. The first body is based on large-scale surveys that examine the views of stakeholders (kindergarten teachers and parents, for example) on their perception of school readiness. The second body of research examines definitions of school readiness by considering the relative importance of cognitive skills, social and self-regulatory skills and chronological age. The third body of literature examines school readiness and child outcomes in the early years of school as a function of early educational experience and family social processes.

### **Key Research Questions**

Key research questions include: How do teachers and parents define readiness? What are the cognitive, social, self-regulatory and chronological markers of school readiness? What are the child-care and home contexts associated with school readiness?

### **Research Results**

#### *What is Readiness: Teachers' and Parents' Definitions*

Studies have examined the definition of readiness among different stakeholders in the kindergarten transition process. A national survey of kindergarten teachers conducted by the National Center for Educational Statistics showed that teachers identified "ready" children as those who are physically healthy, well-rested and well-fed; able to communicate needs, wants and thoughts verbally; and curious and enthusiastic in approaching new activities. Surprisingly, teachers did not attach particular importance to specific numeracy and literacy skills. Parents, in contrast, typically define readiness in terms of academic abilities, such as the ability to count or know the alphabet.<sup>13</sup> A study conducted by the National Center for Early Development and Learning appraises readiness by examining teachers' judgments on children's school transition, showing that almost half of children entering school experienced some difficulty with the transition to kindergarten. Problems following directions were the most commonly cited problem among kindergarten teachers.<sup>14</sup>

#### *Readiness as Defined by Cognitive, Social, Self-Regulatory and Chronological Markers*

Research on school readiness has focused on the links among cognitive, social, self-regulatory and chronological markers of readiness. Early signs of cognitive ability and maturity have been shown to be linked to children's performance in school, and for this

reason, this highly intuitive approach to assessing readiness has been used as an indication that a child is prepared for the school environment.<sup>15</sup> Meta-analytic work by La Paro and Pianta<sup>16</sup> shows that preschool and kindergarten cognitive assessments predict, on average, 25% of variance in early elementary school (kindergarten, first or second grade) cognitive assessments, supporting the importance of cognitive indicators, but also suggesting that other factors account for most of the variance in early school outcomes.

Other research points to the link between children's learning-related social skills and academic performance. For example, children's social adjustment to kindergarten has been shown to be linked to their performance and involvement in school during the kindergarten school year,<sup>17,18</sup> and children's work-related skills (e.g. the degree to which children show compliance with instructions) are closely related to school success.<sup>19</sup>

Research also points to the importance of self-regulation in predicting school readiness. Blair<sup>20</sup> proposes a neurobiological definition of school readiness and suggests that self-regulatory skills provide the foundation for many of the behaviours and abilities required in kindergarten. Ability to attend selectively, show appropriate social responses and stay engaged in academic tasks are all implicated as factors that contribute to and define "school readiness."

Children's age is also a marker of school readiness insofar as it indicates maturity in the cognitive, social and self-regulatory domains. Research on the effect of age is mixed. For example, some studies suggest that while there is some advantage for children in being slightly older upon the transition to kindergarten, these effects disappear by third grade.<sup>21,22</sup>

#### *What are the antecedents of "readiness"?*

There is research demonstrating that attributes of children's child-care environment contribute directly to their transition and adjustment to school. Quality preschool or child-care predicts ease of kindergarten adjustment,<sup>23</sup> enhances pre-academic competencies, strengthens social and self-regulatory skills<sup>24</sup> and reduces the likelihood of some negative outcomes, such as grade retention.<sup>25</sup> Higher caregiver training and lower child-staff ratio were also associated with cognitive competence prior to school entry.<sup>26</sup> These effects appear to be even more pronounced among children exposed to high-risk conditions.<sup>27</sup> Most recent evidence supports a dose response, in that children who spend more time in non-maternal child care environments show greater conflict and externalizing problems in kindergarten.<sup>10</sup>

Family processes also influence children's competencies as they enter school. Quality of parent-child relationships, specifically parental sensitivity and stimulation, have a clear and frequently documented correlation with early school success.<sup>28-32</sup> Parents' behaviours toward their children and the stimulation, materials and routines they provide in the home environment are key aspects of family factors that have substantial effects on children's adjustment to the first months and years of school.<sup>33,34</sup>

## Conclusion

The evidence suggests that school readiness is an important factor for predicting children's success in school and that the characterizations of school readiness are multi-dimensional. Teachers and parents have different definitions of school readiness – teachers emphasize readiness in a social domain, whereas parents emphasize academic readiness. Research on which of these definitions is most closely linked to school success shows moderate stability of cognitive indicators of school readiness, as well as the importance of children's abilities in other domains. Research shows that social and self-regulatory abilities provide a foundation for academic success and that chronological age, alone, is not an effective indicator of school readiness. Early predictors of school success point to the contribution of positive peer relationships and sensitive and stimulating family processes, and, in some respects, quality child-care environments.

## Implications

These findings have implications for policy and practice. Programs designed to prepare children for kindergarten need to consider the ways in which they teach social and self-regulatory skills, as well as enhance cognitive abilities.<sup>35</sup> Often, the expansion to social skill development requires a more contextually-sensitive approach to easing the transition to school, in that parents and teachers need to view themselves as key contributors of social as well as academic adjustment.<sup>11</sup>

Awareness of the multi-dimensionality of readiness is key for practitioners. Because parents and teachers do not agree on the definition of school readiness, transition practices are needed to help families and schools agree on appropriate ages for school entry and develop congruent expectations for the kindergarten year. Given the increased diversity in U.S. schools and the heightened academic rigour of the early years of school, extra resources allocated toward such transition practices may benefit children, especially those at risk for early school problems.

**To learn more on this topic, consult the following sections of the Encyclopedia:**

- [How important is it?](#)
- [What do we know?](#)
- [What can be done?](#)
- [According to experts](#)

## REFERENCES

1. National Education Goals Panel. *National education goals report executive summary: Improving education through family-school-community partnerships*. Washington, DC: National Education Goals Panel; 1995.

2. West J, Denton K, Germino-Hausken E. *America's Kindergarteners. Statistical Analysis Report*. Washington, DC: National Center for Education Statistics, Office of Educational Research and Improvement; 2000.
3. Zill N, Collins M, West J, Germino-Hausken E. *Approaching Kindergarten: A Look at Preschoolers in the United States*. Washington, DC: National Center for Education Statistics; 1995. NCES 95-280
4. Alexander KL, Entwisle DR. Achievement in the first 2 years of school: Patterns and processes. *Monographs of the Society for Research in Child Development* 1988;53(2).
5. Entwisle DR, Alexander KL. Early schooling and social stratification. In: Pianta RC, Cox MJ, eds. *The Transition to Kindergarten*. Baltimore, MD: Paul H. Brooks Publishing; 1998:13-38.
6. Ramey CT, Ramey SL. Intensive educational intervention for children of poverty. *Intelligence* 1990;14(1):1-9.
7. Ramey SL, Ramey CT. Early educational intervention with disadvantaged children—To what effect? *Applied and Preventive Psychology* 1992;1(3):131-140.
8. Meisels SJ, Liaw FR. Failure in grade: Do retained students catch up? *Journal of Educational Research* 1993;87(2):69-77.
9. Meisels SJ. Discussant for individual differences in the transition to school: Language, literacy, and context. In: Vernon-Feagans L. *Individual Differences in the Transition to School: Language, Literacy, and Context. Symposium conducted at: Meeting of Society for Research in Child Development; April, 1997*. Washington, DC: Society for Research in Child Development; 1997.
10. NICHD Early Child Care Research Network. Does amount of time spent in child care predict socioemotional adjustment during the transition to kindergarten? *Child Development* 2003;74(4):976-1005.
11. Rimm-Kaufman SE, Pianta RC. An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology* 2000;21(5):491-511.
12. Pianta RC, La Paro K, Payne C, Cox JJ, Bradley R. The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *Elementary School Journal* 2002;102(3):225-238.
13. United States Department of Education. *Readiness for kindergarten: Parent and teacher beliefs. Statistics in brief*. Washington, DC: National Center for Education Statistics, Office of Educational Research and Improvement; 1993. NCES 93-257. Available at: <http://nces.ed.gov/pubs93/web/93257.asp>. Accessed January 19, 2004.
14. Rimm-Kaufman SE, Pianta RC, Cox MJ. Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly* 2000;15(2):147-166.
15. Meisels SJ. Assessing readiness. In: Pianta RC, Cox M, eds. *The Transition to Kindergarten: Research, Policy, Training, and Practice*. Baltimore, MD: Paul Brooks Publishers; 1999:39-66.
16. La Paro K, Pianta RC. Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research* 2000;70(4):443-484.

17. Ladd GW, Price JM. Predicting children's social and school adjustment following the transition from preschool to kindergarten. *Child Development* 1987;58(5):1168-1189.
18. Ladd GW. Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development* 1990;61(4):1081-1100.
19. McClelland MM, Morrison FJ, Holmes DL. Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly* 2000;15(3):307-329.
20. Blair C. School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist* 2002;57(2):111-127.
21. Kinard E, Reinhertz H. Birthdate effects on school performance and adjustment: A longitudinal study. *Journal of Educational Research* 1986;79(6):366-372.
22. Stipek D, Byler P. Academic achievement and social behaviors associated with age of entry into kindergarten. *Journal of Applied Developmental Psychology* 2001;22(2):175-189.
23. Howes, C. Can the age of entry into child care and the quality of child care predict adjustment in kindergarten? *Developmental Psychology* 1990;26(2):292-303.
24. Cost, Quality, and Child Outcomes Study Team. *Cost, quality and child outcomes in child care centers, Technical report*. Denver, Colo: University of Colorado at Denver, Department of Economics, Center for Research in Economic and Social Policy; 1995.
25. Zill N, Collins M. *Approaching kindergarten: A look at preschoolers in the United States*. Washington, DC: US Department of Education, Office of Educational Research and Improvement; 1995. NCES No. 95-280. Available at: <http://nces.ed.gov/pubs95/95280.pdf>. Accessed January 19, 2004.
26. NICHD Early Child Care Research Network. Child-care structure, process and outcome: Direct and indirect effects of child-care quality on young children's development. *Psychological Science* 2002;13(3):199-206.
27. Bryant DM, Burchinal M, Lau LB, Sparling JJ. Family and classroom correlates of Head Start children's developmental outcomes. *Early Childhood Research Quarterly* 1994;9(3-4):289-304.
28. Estrada P, Arsenio WF, Hess RD, Holloway SD. Affective quality of the mother-child relationship: Longitudinal consequences for children's school-relevant cognitive functioning. *Developmental Psychology* 1987;23(2):210-215.
29. Comer JP, Haynes NM. Parent involvement in schools: An ecological approach. *The Elementary School Journal* 1991;91(3):271-277.
30. Ramey CT, Campbell FA. Poverty, early childhood education, and academic competence: The Abecedarian experiment. In: Huston AC, ed. *Children in poverty: Child development and public policy*. New York, NY: Cambridge University Press; 1991:190-221.
31. Pianta RC, Harbers K. Observing mother and child behavior in a problem solving situation at school entry: Relations with academic achievement. *Journal of School Psychology* 1996;34(3):307-322.

## SCHOOL TRANSITION

32. Connell CM, Prinz RJ. The impact of childcare and parent-child interactions on school readiness and social skills development for low-income African American children. *Journal of School Psychology* 2002;40(2):177-193.
33. Bradley RH, Caldwell BM, Rock SL. Home environment and school performance: A ten year follow up and examination of three models of environmental action. *Child Development* 1988;59(4):852-867.
34. Belsky J, MacKinnon C. Transition to School: Developmental Trajectories and School Experiences. *Early Education and Development* 1994;5(2):106-119.
35. Raver CC. Emotions Matter: Making the case for the role of young children's emotional development for early school readiness. *SRCD Social Policy Report* 2002;16(3). Available at: [http://harrisschool.uchicago.edu/About/publications/working-papers/pdf/wp\\_02\\_06.pdf](http://harrisschool.uchicago.edu/About/publications/working-papers/pdf/wp_02_06.pdf). Accessed October 25, 2007.

To cite this document:

Rimm-Kaufman, S. . School transition and school readiness: An outcome of early childhood development In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2004:1-7. Available at: <http://www.child-encyclopedia.com/documents/Rimm-KaufmanANGxp.pdf>. Accessed [insert date].

Copyright © 2004