

# Massachusetts School Psychologists Association

Helping students, parents and teachers.

## ***Full-Day Kindergarten: What does the research have to say?***

Gayle L. Macklem, School Psychologist

### **National Trends**

There is a national trend toward the development of full-day kindergarten programs for all children. Experts in early childhood education feel that society needs full-day programs so children will be prepared for living in a complex world. Society's needs will eventually overcome the major detractors to full-day kindergarten, tradition and cost (Morrison, 1995). The trend toward all-day kindergarten programming is reflected in the increasing percentages of students attending all-day programs. In the early 1980's, about 30% of children attended all-day programs, but in the early 1990's almost 50% of children attended full-day programs. In 1993, 54% of kindergarten teachers were teaching in full-day programs (Clark & Kirk, 2000).

Many parents need full-day programming. Parents find it difficult to schedule either day care or home care, and also a half-day kindergarten program. Parents believe that full-day programming is good for children. There are fewer transitions for children in full-day programs. In some areas, private schools offering a full-day program are in competition with public schools for students (Rothenberg, 1999). Teachers generally prefer full-day programming for kindergarten children. Interestingly, full-day kindergartens are found more frequently in high-poverty and high-minority schools, and also in rural schools (Rothenberg, 1995).

### **Individual State Decisions Regarding Full-Day Programs**

As of July 1999, there were fifteen (15) states and the District of Columbia that offer full day kindergarten programming. In the following states all kindergartners must attend all day programs: Arkansas, D.C., Florida, Virginia, and West Virginia. In the remaining states, the option to attend for the full school day must be offered: Alabama, Georgia, Hawaii, Louisiana, Mississippi, North Carolina, North Dakota, South Carolina, South Dakota, Texas and Vermont (Pennsylvania Partnerships for Children, 1999).

A study group in Pennsylvania argued that early childhood development research supported stimulating programming for young children. Research showed that first-grade teachers saw a difference in children who attended full-day versus half-day programs. In order for Pennsylvania to move ahead economically, the authors of the report thought that it was critical that children be prepared for the years of learning following kindergarten. The major obstacles to full-day kindergarten cited in this report included money and ideology (as noted above).

In New Jersey, a court decision directed the Commissioner of Education to study the feasibility of full-day kindergarten (New Jersey Department of Education, 1997). In studying ideological objections to full-day programming, the New Jersey group found that most kindergarten-age children no longer required naps. In addition, once full-day programs are in place, fatigue is

typically no longer a factor. The New Jersey study group determined that well-planned full-day kindergarten programs provide one of the most cost-effective strategies for helping children, who may be at-risk, become more effective learners in elementary school.

In Maryland, a review of the literature on full-day kindergarten showed that no studies were found that favored half-day programs. Full-day programming was positively related to school success with reductions in grade retention and improvements in test performance. Children who did not attend full-day programs demonstrated more behavior problems and were less academically engaged later on. A Council of Chief State School Officers in Maryland reviewed the research, and concluded that a substantial majority of the studies demonstrated social differences in favor of all-day programming for kindergarten aged children (School Improvement in Maryland)

### **Massachusetts Needs**

In Massachusetts, the Special Legislative Commission on Early Childhood established under the Education Reform Act of 1993 issued a report called "Children First". In this report the commission recommended that the availability of full-day kindergarten be increased across the state. This commission's work resulted in the availability of state funding to support full-day kindergarten programs.

In 1996, only about one sixth of the cities and towns offered full-day kindergarten programs. In 1999, the Department of Education issued a report that addressed policy development. This report emphasized using data to guide policy development. Among the conclusions and recommendations was the following: "expand services and equalize access for families with children who need education and care programs" (Massachusetts Department of Education, 1996, p.27.). One strong recommendation was to increase the number and quality of full-day kindergarten classrooms.

The Early Childhood Advisory Council to the Massachusetts Board of Education has reported that "half-day kindergarten is not good for either children or schools" (Massachusetts Department of Education, 1996, p.27). They recommended that full school day kindergarten should be phased in across the state, with funding to ensure small enough class sizes to implement the Curriculum Frameworks. They pointed out, attitudes toward school and expectations for student performance developed in kindergarten, will effect children for a number of years after their kindergarten experiences. >

\*\*\*MSPA position papers are available through this website: <http://www.mspa-online.com>.

If you would like to use the material, please feel free to do so, but credit the author as stated.

If you are a member of MSPA and would like to submit a position paper, please contact by email: [papers@mspa-online.com](mailto:papers@mspa-online.com)

## **Full-day Kindergarten, pg.2**

### **Beyond money and philosophy:**

In addition to the needs of working parents, teacher preferences, and competition for students, there may be additional issues that could effect the length of the kindergarten day. American schools are under the pressure of increasing standards with the need to cover vast amounts of material and to foster the development of higher level thinking skills. Research on acquisition of early skills suggests that early instruction is critical.

The basic skill of reading, for example, is a top priority for education given that most reading failure is not necessary and 95% of children can be taught to read. However, the difficulty of teaching reading has been drastically underestimated, and many classrooms across the United States are not teaching reading systematically and explicitly (American Federation of Teachers, 1999).

In a publication that summarized U.S. Secretary of Education Richard Riley's Seventh Annual State of American Education, it was reported that less than half of parents of preschoolers read to their children every day although they may read sometimes (Partnership for Family Involvement in Education, 2000). This is disconcerting given the importance of the development of early literacy.

Significantly greater intensity and duration of instruction in early reading is required for the 25-40% of children who are at risk for reading difficulty. Beginning reading for children at-risk for reading difficulties must be more intensive, or last longer than normal instruction. The children who are weaker or less prepared, need intervention at the right time. The foundations for success in reading are formed well before first grade. Research indicates that the right time for intensive instruction appears to be kindergarten. Preventive instruction in phonological awareness during kindergarten can have a positive effect on reading growth in first grade, and later on (Torgesen, 1998).

There is considerable evidence from large training studies in the United States and other countries that phonological awareness can be strengthened in kindergarten. (Blachman, 1991). And, unless children who enter school with weaker skills in phonological awareness receive extra assistance, they will remain stuck at a sight-word stage of reading and have few skills for coping with words that they have not already memorized (Lieberman, Shankweiler & Lieberman, 1989). Appropriate instruction phonemic awareness in kindergarten increases the chances that a child will become a good reader by the end of first grade. Kindergarten programs must include direct instruction in phoneme awareness (Hall & Moats, 1998).

The Learning First Alliance (1998) which is an organization of twelve leading national education associations points out that full-day kindergarten programs can increase children's cognitive skills. In addition, full-day programs prepare children to profit from high-quality school instruction in grade 1. Children who may have difficulty learning to read must be identified with early diagnostic assessments in kindergarten, so that immediate intervention is assured (Learning First Alliance, 1998; Torgesen, 1998).

### **What does the Research have to say about Full Day Kindergarten?**

It is important to review the research on full-day versus half-day kindergarten because kindergarten practices are often filled with ritual and have often been based on folk wisdom (Grave, 2000). When the research was reviewed in regard to the issue of length of day for kindergarten programs, it was found that researchers did not fully agree on the benefits of full day programming in the past. This was because the research had limitations. Before reviewing the research it is important to understand the limitations of the research conducted in the past.

There were three limitations of the research which made it difficult to set policy based on research. First, few studies separated the effects of kindergarten from the effects of other experiences that children may have such as day care, preschool, or strong family educational support at home. And, few studies included the effects of poverty or racial/ethnic identity on outcomes. Second, attention to exactly how much time was spent in the full versus half day programs or how the time was used, was not defined carefully enough. Third, in many studies the possible confounding factors were not adequately defined. For these reasons, it was, and still is not possible at this time to establish a causal link between better student achievement and all-day kindergarten.

Given the complexity of the research needed to compare full and half-day kindergarten, early studies showed inconsistent and mixed effects for middle class children although the effects of full-day kindergarten were consistent and clearly positive for at-risk students, and for students with lower socioeconomic backgrounds. Research during the 90s however, has shown more consistently positive outcomes for students in all-day kindergarten programs (Clark & Kirk, 2000). Studies conducted the first year that a full-day program is implemented often do not appear to show as many positive gains. For example, a 1990 study showed positive effects only for boys, and primarily in mathematics (Holmes & McConnell, 1990). Studies conducted over time; i.e., at least two years, show positive effects of full-day kindergarten.

### **Academic Benefits of All-Day Kindergarten Programs:**

A study comparing 511 children in full-day as compared to children in half-day programs found children scoring higher on every item tested on achievement tests (Hough & Bryde, 1996). Elicker and Mathur (1997) found higher levels of readiness for first grade, and slightly greater progress for children in all-day programs. Additional second year studies showed higher reading and math scores in the subsequent grades for children in all-day programs (Koopmans, 1991, reported in Clark & Kirk, 2000).

An important large longitudinal study, of 6000 children, comparing the effects of children in half-day versus full-day kindergarten programs was published in 1992. This study controlled for preschool attendance. Participation in all day kindergarten programs resulted in stronger school achievement later on. Children scored higher on standardized tests, fewer were retained and fewer were referred for Chapter 1 placement if they had had a full day kindergarten experience. Significant differences were found on all academic engagement scales for children who attended full-day kindergarten (Cryan, Sheehan, Wiechel & Bandy-Hedden, 1992). >

## Full-day Kindergarten, pg.3

### Social Benefits of All-Day Kindergarten Programs:

Researchers have found social benefits for children placed in full-day kindergarten programs. Children who experienced the all-day kindergarten programs were less intellectually dependent, experienced less anxiety, were less withdrawn, and were more likely to approach the teacher. Additional studies showed that children were more engaged with their peers, and made significantly greater progress in social skills when participating in full day kindergarten programs (Clark & Kirk, 2000).

Elicker (1997) concluded that full-day programs appear to decrease stress on students as compared to half-day programs, where there is more pressure on teachers to get through the curriculum. In the review of research conducted by the New Jersey Department of Education, less anger, shyness and blaming behaviors were identified among children attending full day programs. Children in the full day kindergarten programs more often displayed positive emotion in their activities (Elicker & Mathur, 1997). Children in full-day programs were less dependent on teachers for approval and had higher expectations for success on academic tasks than children in half-day programs (Rothenberg, 1995).

### Behavioral and Motivational / Attitudinal Benefits of All-Day Kindergarten Programs:

One frequent opposition to full day kindergarten programs has been the concern that children will become exhausted. Elicker (1997) found no evidence of this in full day kindergarten classes in a middle class community. Studies have found improved independent learning and involvement in activities in full-day programs. Children have been found to be more productive when working with peers (Clark & Kirk, 2000). Children in full-day programs generally have been found to exhibit more positive behaviors than students in half-day or alternate-day programs (ERIC, 1997).

### Parent and Teacher Reactions to Full Day Programming for Kindergarten Students:

The content of instruction is undoubtedly very important when a comparison between full and half-day kindergarten programs is made. All-day kindergarten teachers tend to use small-group instruction more frequently, use learning centers more frequently, give more one-on-one instruction, encourage more free play, and use more cooperative learning activities. Researchers report that children tend to choose more literacy activities during free choice time in all-day programs (Clark & Kirk, 2000).

Lick and Mathur (1997), found that children in full-day programs spent a greater percentage of the school day in child-initiated learning centers and in teacher-directed individual work. Consequently, they spent less time in teacher-directed large group instruction. Teachers felt that they were better able to get to know children and their families and to assess children so that they could meet individual needs.

In the same study, teachers and parents felt that the day was more relaxed. There were more opportunities for children to choose activities, develop interests and there was more time for creative activities. Many teachers prefer all-day kindergarten because they have more time for individual instruction, get to know families better, and prefer the more relaxed atmosphere. Teachers feel that all-day programs are more effective in preparing children for first grade (Clark & Kirk, 2000).

Several studies have found that parents are more satisfied and feel that children benefit more in all-day programs (Clark & Kirk, 2000; Elicker and Mathur, 1997). Rothenberg (1995) reported that full day programs allowed teachers to explore topics in more depth and to increase day-to-day continuity.

### Summary of Benefits of Full-Day Kindergarten

Just the length of instructional time alone, may produce some of the benefits that researchers find in full-day kindergarten programs. However, there is an enormous variation in how time is spent in full-day classrooms in the United States, with some programs filled with educationally relevant activity and some programs merely providing childcare.

Therefore is not only the increases in time that should be considered, but also what the children and teachers are doing during the additional time that should be examined when making comparisons between half-day and full-day programming. It appears that the full-day kindergarten programs tend to be less pressured, with increased small group and individualized instruction. The development of children's cognitive skills, including the basic skill areas of reading and mathematics, is enhanced in full day kindergarten programming. The effects of engagement behaviors appear to be strong, and there are benefits both behaviorally and socially for children in full-day kindergarten programs.

There is clear evidence that children can learn to read in kindergarten, and that direct instruction in the precursor skills for reading (phoneme awareness), have very long-term benefits. The report of the National Reading Panel (2000) indicated that children in kindergarten showed larger effect sizes in acquiring phonemic awareness than children in first grade and above, and children in kindergarten made greater gains from phonemic awareness training in spelling, than first graders.

There is also clear evidence that there are short-term benefits when kindergarten is extended to full-day programming. There are very strong positive effects on first grade performance. Whether or not the benefits carry on beyond the next few years of schooling, is not yet clear, but the short-term effects cannot be denied. And, no study has yet been identified in which half-day kindergarten produced greater learning effects than full-day kindergarten programs.

### References

- Access ERIC (1997). What should parents know about full-day kindergarten? <http://ericps.crc.uiuc.edu/npin/library/1998/n00013/n00013.html>.
- American Federation of Teachers, (1999, June). Teaching Reading is Rocket Science: What expert teachers of reading should know and be able to do. DC: American Federation of Teachers.
- Barton, A. & Putnam-Franklin, S. (1996, January). Commission recommends subsidizing early childhood care and education, consolidating government efforts, expanding full-day kindergarten options. Early Learning Network News: A newsletter for the early childhood community. MA: Early Learning Services Massachusetts Department of Education. >

# Massachusetts School Psychologists Association

Helping students, parents and teachers.

## Full-day Kindergarten, pg.4

### References (cont.)

Blachman, B. (1991). Getting Reading to Read: Learning How Print Maps to Speech. Washington, D.C.: U.S. Department of Health and Human Services, National Institutes of Health.

Cryan, J., Sheehan, R. Wiechel, J. & Bandy-Hedden, I. (1992). Success outcomes of full-day kindergarten: More positive behavior and increased achievement in the years after. *Early Childhood Research Quarterly*, 7(2), 187-203.

Elicker (1997). Study: Full-day kindergarten may ease stress on students. *Purdue News*. <http://www.ourdue.edu/UNS/html4ever/9711.Elicker.kindergarten.html>.

Elicker, J. & Mathur, S. (1997). What do they do all day? Comprehensive Evaluation of a Full-Day Kindergarten. *Early Childhood Research Quarterly*, 12(4), 459-480.

Finn, J.(n.d.) Full-day kindergarten: Answers with Questions. A digest of research. The Laboratory of Student Success. PA: Temple University Center for Research in Human Development and Education. <http://www.temple.edu/LSS/spot210.htm>.

Grave, E. (2000, June). Kindergarten programs: Readiness, transitions and delay of kindergarten entry. *The CEIC Review*, 9(3), 14-15.

Hall, S. & Moats, L. (1998). *Straight Talk About Reading: How Parents can make a difference during the early years*. IL: NTC Publishing Group.

Holmes, C. & McConnell, B. (1990, April) Full day versus half day kindergarten: An experimental study. Paper presented at the annual meeting of the American Educational Research Association, Boston. (Reported in Clark & Kirk, 2000).

Hough, D. & Bryde, S. (1996). *The Effects of Full Day Kindergarten on Student Achievement and Affect*. (ERIC Document Reproduction Service No. ED 395 691).

Learning First Alliance (1998, June). *Every Child Reading: An Action Plan of the Learning First Alliance*. Washington: DC; Learning First Alliance.

Learning First Alliance (1998, Spring/Summer). *Every Child Reading: An Action Plan of the Learning First Alliance. The Unique Power of Reading and How to Unleash IT*. The Professional Journal of the American Federation of Teachers, 22, 1&2, Washington, DC.

Lieberman, I., Shankweiler, D. & Liberman, A. (1989). *The Alphabetic Principle and Learning to Read*. Washington, DC: U.S. Department of Health and Human Services.

Massachusetts Department of Education, (1996). *Setting a Course for Early Education and Care in Massachusetts: Using Data to Guide Policy Development*. Future Trends, 5. Malden, Massachusetts.

Morrison, G. (1995). *Early Childhood Education Today*. N. J.: Merrill/Prentice Hall.

National Reading Panel, (2000, April). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction. Reports of the Subgroups*. NIH Pub. No. 00-4754. Washington, DC: U.S. Department of Health and Human Services, National Institutes of Child Health and Human Development.

New Jersey Department of Education, (1997, May). Report of the decision in *Abbott v. Burke*. <http://www.state.nj.us/njded/abbottstudy.htm>.

Pennsylvania Partnerships for Children, 1999, July. *Learning to Learn: Full-Day Kindergarten for At-Risk Kids*. <http://www.nationalforum.com/HILDEXer10e3.html>.

Rothenberg, D. (1995, May). *Full-Day Kindergarten Programs*. ERIC Digest. EDO-PS-95-4. Clearinghouse on Elementary and Early Childhood Education.

Rothenberg, D. (1999, March). *Parent Brochure*. Office of educational Research and Improvement, U.S. Department of Education.

School Improvement in Maryland, (n.d). *Best Practices: What Interventions Ensure Success for All Students*. <http://www.mdk12.org/practices/ensure/initiative/appendixf.html>

Torgesen, J. (1998, Spring/Summer). Catch them before they fail: Identification and assessment to prevent reading failure in young children. *The Unique Power of Reading and How to Unleash IT*. The Professional Journal of the American Federation of Teachers, 22, 1&2, Washington, DC.

U.S. Department of Education, 2000, March. *Parents featured in the state of American education address*. Partnership for Family Involvement in Education. Washington D. C.