

An Assessment of Full-Day Kindergarten

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This paper describes a research-based evaluation of a newly implemented full-day kindergarten program within a Midwestern school system that emphasized developmentally appropriate programming. Program evaluation over a two-year period included documentation of process and outcomes viewed from multiple perspectives

Significant transformations in kindergarten

Dramatic changes have taken place in kindergarten education in the United States in the last 25 years. Publicly funded kindergarten programs for 5-year-olds were implemented for the first time in the 1960s and 1970s (Day 1988, Olsen & Zigler 1989, Sava 1987). These were primarily part-day programs modeled after traditional nursery schools that emphasized play, socialization and transition from home to school (Connell 1989, Day 1988, Educational Research Service 1986).

But US kindergarten programs underwent significant transformations by 1990, becoming more academic and skill-oriented. Play and socialization took a back seat to preparing for increasingly rigorous first-grade curricula (Gullo 1990, Sava 1987, Shepard & Smith 1988), and the kindergarten's typical day was packed with tightly-scheduled reading and writing instruction, math lessons and other structured learning activities (Day 1988, Walsh 1989).

The nineties also saw growth in full- or all-day kindergarten programs. Although not a new concept—full-day programs have been offered, particularly in rural areas, since Margarete Schurz opened the first Froebelian kindergarten in 1857 in Wisconsin—only about 13% of the nation's 5-year-olds were enrolled in such programs in 1970. But by 1993 this proportion had grown to approximately 45% (US Census 1993) with over half of the nation's kindergarten teachers teaching full-day classes (Rothenberg 1995).

Multiple reasons underlie increase in participation

There are several reasons for the increasing number of full-day programs. More than 60% of mothers with children under 6 are now in the work force (Children's Defense Fund 1996), and many find that the traditional half-day program is not in line with their complex schedules and child care needs (Gullo 1990). And many teachers find it difficult to meet the demands of increasingly rigorous curricula within the 2 1/2- to 3-hour half-day programs. Additional criticism of the highly structured, academic half-day programs has been made by early childhood advocates who come down heavily on the time-pressured large group instruction, individual desk

work and segmented academic daily routines (Elkind 1987, Sava 1987, Shepard & Smith 1988, Walsh 1989).

These concerns raised a call for more developmentally appropriate programming, more integrated curriculum approaches, more child-initiated activity, and more attention to curriculum content beyond "the three Rs" (Bredekamp 1987, National Association of State Boards of Education 1988).

Additionally there is evidence that children experience more stress in developmentally inappropriate programs when compared to children in programs judged to be developmentally appropriate (Burts, Hart, Charlesworth, Fleege, Mosley & Thomasson 1992). Advocates also suggest that developmentally appropriate full-day kindergarten programs may reduce stress and improve outcomes for children who now experience two or three school or child care placements each day by offering consistent, high-quality environments of care and education (Day 1988). The potential exists for a program to be more child-centered, because it allows teachers and children to explore topics in depth (Rothenberg 1995), and thus provide the opportunity for children to have more positive expectations for themselves in school (Stipek, Feiler, Daniels and Milburn 1995).

Controversy calls for research

Proponents of full-day kindergarten cite opportunities offered by a longer day, such as better assessment of children's educational needs, more time for individualized instruction, more developmentally appropriate curriculum, less stress for teachers and children, and child care relief for working parents.

Critics express concern that already inappropriate curriculum approaches may be emphasized, that 5-year-olds will become overly tired, that children will miss important learning experiences at home, and that public schools are not in the business of providing "custodial" child care for 5-year-olds.

Research to date has not resolved these issues. Two goals of this comprehensive full-day kindergarten evaluation were: (1) Documenting both program processes and program outcomes, and (2) Examining specific issues raised by proponents and critics from an ecological perspective, assessing daily experiences, the impact of the program on teachers and parents, and relationships between school and home. Adopting these multiple perspectives provided data useful for assessing program impact, for program improvement, and for program replication (Fuller et al 1997, Powell 1994).

Evaluation objectives and methods

Research questions developed to satisfy the evaluation goals included:

- How do children in both programs spend their time each day?
- How are teachers affected by full-day kindergarten?
- How do parents perceive the full-day program?
- Are children's academic outcomes affected?
- Will program effects increase (over a two-year implementation period) in the second year?

The study was conducted using a sample of 179 typically developing kindergarten children (69 full-day and 110 half-day) within one program in a middle-class Midwestern community. The study group included 12 separate classes (four full-day and eight half-day) that were observed over a two year period. Randomly selected families were offered the option of full day kindergarten; only 17% refused and these vacancies were filled by additional randomly selected students.

Collection of data

Children's classroom activities were quantified using the *Early Childhood Classroom Observation System* (ECCOS) to document participation in teacher-directed, child-initiated or other learning activities; level of engagement in these activities; and affect. This allowed a profile to be constructed of typical child activity throughout the day for each classroom. Additionally, parent and teacher perspectives on classroom activities were collected through surveys and interviews.

Classroom activity categories

Teacher-directed activities, defined as those activities initiated and structured by the teacher, included four categories: (1) Large group-active—children in groups of 10 or more were observed either talking or doing more than 50% of the observed time. (2) Large group-listening—children in groups of 10 or more were observed either talking or doing less than 50% of the observed time. (3) Small group activity—two to 10 children in a group led and structured by teacher. (4) Individual work—children working individually at teacher-specified tasks.

Activities observed as being child-initiated were process-oriented, routinely available activities that were both selected and structured by the child. These included both indoor and outdoor free play, learning centers, cooperative learning, and individual creative activities.

Additional observed activity categories included rest, snack, meal and transition times.

Assessing children's engagement in activities

Four categories of engagement were quantified. Children who had focused their attention and were actively talking or doing something fell into the "active-engaged" category. The "listening-engaged" category included children who had focused their attention on the activity and were listening, paying attention or watching. Children whose attention was wandering, or who appeared to be daydreaming, unoccupied or engaged in an

inappropriate activity were categorized as "not engaged." Finally, a child who was active but appeared to lack attention focus or show disorganized behavior fell within the "disorganized" category.

Documenting children's affect

Children's emotional displays during activities were divided into three categories. Those observed to be happy, excited, very content, or very interested had "positive affect." The "neutral affect" category included children who appeared calm, mildly interested, placid or resting. Children who seemed angry, sad, bored, frightened, upset, depressed, perturbed, rejected, or worried were documented as experiencing "negative affect."

Perspectives gathered from teachers and parents

A series of four confidential interviews and surveys was conducted over the two-year implementation period for each teacher to document their perceptions of the advantages and disadvantages of full- and half-day programs. Recurring, open-ended questions allowed teachers to express their opinions, perceptions and recommendations for improvement of both the full- and half-day kindergarten programs. Coded by topic to identify themes, these data were used to create a comprehensive list of advantages and disadvantages of the full-day program, including all teachers' perspectives, and to document changes in perspectives from the first to second year.

Parents filled out questionnaires to rate satisfaction with their child's learning experience in each academic area, their satisfaction with the schedule, problems faced by their child, and perceptions of their child's readiness for first grade. They were also encouraged to share additional comments and recommendations.

Findings document higher levels of satisfaction, flexibility and developmentally appropriate activities

Observations of children's classroom activities revealed several positive features of the full-day program. Children in the full-day classrooms were not only initiating more learning activity, they were receiving more one-to-one instruction and spending proportionately less time in teacher-directed groups. Comparisons of first- and second-year classroom observation data showed that differences between full- and half-day programs became even stronger in the second year. The emphasis on these classroom processes is consistent with recommendations for developmentally appropriate practices (Bredekamp 1987, Bredekamp & Copple 1997).

Teachers' views

Children in full-day programs were perceived by their teachers as better able to initiate and engage flexibly in a variety of classroom activities. Teachers attributed the benefits found in more individualized interactions, more individualized planning and more integrative curriculum planning to the smaller number of children taught each day, and increased contact time.

Both full- and half-day teachers believed the full-day program eased the transition to first grade. They thought the extra time offered more flexibility and opportunity to do activities during free choice times. A perception of the full-day classes as being less stressful and frustrating was attributed to the additional time available to develop interests, and for children to engage in social and creative activities.

Finally, teachers perceived that more appropriate challenges for children at all developmental levels were offered with the full-day schedule. Children with developmental delays or at risk for school problems had more time for completion of projects and needed socialization. Advanced students were afforded more time to complete increasingly challenging long-term projects.

Parents' views

Full-day parents perceived similar benefits. The less-hurried atmosphere of full-day kindergarten was regarded as an opportunity for the teacher to get to know their children better. This longer contact with the teacher gave their children more time to explore, learn and acquire new skills, and to develop socially.

While predominantly positive, half-day parents' comments did present a mixed evaluation. The half-day schedule allowed some children a better opportunity to adjust, and enabled parents to balance education outside the home with quality time in the home. But many half-day parents thought the day was too short to meet their child's needs or that it presented child care problems.

Academic performance

Slightly greater progress in kindergarten and higher levels of first-grade readiness were indicated in academic outcomes of full-day children at the end of the kindergarten year.

The full-day group's progress at the end of the second year of the full-day program was significantly greater in four of the five developmental report card areas: literacy, math, general learning skills and social skills.

Possible biases inherent in having teachers provide the short-term outcome data require that additional analyses of the children's social adjustment and academic outcomes in first and second grade be examined to establish any long-term benefits of full-day kindergarten.

Conclusion

The multiple perspectives of evaluation used in this study lead us to conclude that participation in the full-day kindergarten program provided an enjoyable and developmentally appropriate experience for many children in the economically stable, middle-class community examined, in fact yielding both academic and developmental advantages over the half-day program. No evidence for any detrimental effects was found in the

evaluated implementation. Applying the broad evaluation approach of this study in future studies with more diverse populations and philosophies can help delineate the benefits and costs of full-day kindergarten in other populations.

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