The Kindergarten Experience

Policymakers have concentrated their efforts on tinkering with length of day and number of years in kindergarten. More profound effects might result from a curriculum change that recognizes that 5-year-olds do not learn in the same manner as older children.

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Although kindergarten attendance is nearly universal in the United States today,[1] the kindergarten experience itself is far from uniform. Kindergarten is most often a half-day program, although full-day attendance is on the rise.[2] In many districts, kindergartners follow a full-day, every-other-day schedule. Some students attend two years of kindergarten, due to either placement in two-year programs or retention. The typical age for kindergarten entrance also varies by state. Finally, there are differences in curricular approach and emphasis.

The question is: Which of these differences matter for the children who experience them, either in the short run or later on?

Mandatory Kindergarten

Currently, kindergarten attendance is mandatory in seven states and the District of Columbia and mandatory in two others if a student does not pass a specific test.[3] Despite the lack of widespread compulsory attendance legislation, most children do attend kindergarten. The current shift to mandatory kindergarten in several states, although affecting a small total number of students, might have large impacts in specific areas. For example, in Maryland (which will have mandatory kindergarten in 1992), some estimates suggest 10-20 percent of the eligible children in Baltimore City do not at present attend kindergarten.

As states move to mandatory kindergarten, however, the long-term effects remain unclear. Those who favor mandatory kindergarten argue that universal attendance will help even out disparities in readiness for 1st grade. But mandatory kindergarten may instead simply alter teachers' expectations of students.

When kindergarten is optional, not all students are expected to be ready for 1st grade. When kindergarten is mandatory, the expectations for performance for entering 1st graders are likely to rise, as well as expectations that all children will be able to meet the new standards. One unintended effect of mandatory kindergarten may thus be an acceleration of the kindergarten curriculum. I am unaware of any study that has documented the effects, intended or unintended, of mandatory kindergarten on the curriculum and standards.

Full-Day vs. Half-Day Kindergarten

The majority of today's kindergartners (58 percent) attend half-day programs, though increasing interest in compensatory programs and the need for child care have led to a steady rise in the percent of full-day programs. A small number of quality research studies examine the effects of full-day vs.

half-day programs (see Karweit 1989 for a review). Four studies using random assignment or equivalent matched group design (Johnson 1974; Holmes and McConnell 1990; Winter and Klein 1970; and Oliver 1980) found modest and sometimes inconsistent short-term effects for full-day programs. Twelve other studies that employed a matched control-group design found modest positive effects for full-day attendance. These effects were most consistent in studies that focused on disadvantaged students.

Little evidence substantiates the long-term effects of full-day kindergarten attendance. The lack of significant effects for additional time is consistent with research on the effects of allocated time on achievement (Karweit 1983; Karweit 1988; Berliner 1990). Lengthening the school day provides more opportunities for learning, but the actual use of time is still the critical issue. Meyer (1985), for example, found that some half-day kindergartens provided more high-quality time than did full-day programs.

The academic benefits of full-day kindergarten, then, are inconsistent and most clearly demonstrated in the case of at-risk populations. The lack of consistent findings for other populations is important to bear in mind as districts think about implementing full-day programs. Other advantages of full-day kindergarten, such as consistent schedules in the school, helping working parents by providing a longer school day, and the possibility of more individualized attention for young children, deserve careful consideration. But as a means to provide academic benefits, full-day kindergarten will have to compete with alternatives such as establishing prekindergartens, reducing class size in early grades, or providing tutors in early grades. Unfortunately, little research documents the relative effectiveness of these differing approaches.

Two-Year Kindergarten Programs

Young children differ markedly in their rates of development and cumulative experiences upon entry to kindergarten. Two-year kindergarten programs are one response to this student diversity. *Developmental kindergartens* screen children prior to the kindergarten year and place some of them in a two-year route to 1st grade. The first and second years of kindergarten differ in approach and curriculum. *Transitional first* or *junior kindergartens* place children in a differentiated program after they have had difficulty in kindergarten, but prior to 1st grade entry. *Kindergarten retention* recycles a child through kindergarten after failure the first time through.

The research on two-year programs and retention suffers from faulty design — namely, lack of random assignment or equivalent control groups and failure to adequately identify the basis of comparison (comparison of comparable children after equal time or at equal age). Typically, the matched control group is constructed from students who were recommended for retention or two-year placement, but whose parents refused retention or placement. But the mere fact of parental refusal suggests pre-existing (and uncontrolled for) differences in the groups on such factors as socioeconomic status, parent involvement, and attitudes and beliefs about child development.

Shepard (1989) reviews the evidence on two-year programs and concludes that whether students are placed on the basis of pre-academic difficulties or developmental immaturity, "kindergarten retention and transition rooms are ineffective." Additional studies published subsequently do not contradict this conclusion.

For example, in a longitudinal study of the academic effects of developmental kindergarten, Banerji (1990) compared a matched sample of developmentally placed and recommended-yet-refused-placement students after equal time in school (same age) and after equal grade in school (same grade). She found significant positive differences favoring the developmental group on both measures. These effects vanished in the second and third years, however. Mantzicopoulos and Morrison (1991) found significant positive effects on reading in same-grade comparisons at the end of the second year of kindergarten, which faded out at the end of grades 1 and 2.[4]

An important point to emphasize is that neither two-year programs nor promotion was effective. In most cases, the children were still performing poorly in school.

The major challenge facing kindergarten is to provide developmentally and individually appropriate learning environments for all kindergarten children.

Highlights of Research on Kindergarten

Kindergartens across the United States vary in their structure and focus, and information on relative effectiveness is often insufficient or inconclusive. Research suggests that changes in the organization of kindergarten will have some, but probably modest, effects on student success. More lasting positive effects may come from curriculum reform efforts that have not yet been adequately evaluated.

- Kindergarten is mandatory in seven states and the District of Columbia and mandatory in two other states based on testing. Long-term effects of mandatory kindergarten on students, standards, and curriculum are unclear.
- Most children attend half-day kindergarten programs. Full-day programs appear to have modest positive effects for at-risk children, but there is little evidence of general long-term positive effects.
- Two-year programs and retention in kindergarten generally do not succeed in providing academic benefits. Benefits of two-year developmental kindergarten are short-term at best, generally vanishing within a few years.
- Raising or lowering the entrance age for kindergarten has little long-term impact on students' success.
- Studies of reading in kindergarten favor whole language/language experience approaches over basals, but the conclusions are disputed.

Entrance Age

Typically, children in the United States begin kindergarten at age 5. States routinely debate raising and lowering the entrance age to help make children "ready" for school. Studies of the effect of age do not support this strategy. Although the youngest children in the classroom do score lower on 1st grade reading tests (Shepard and Smith 1986), these differences disappear by 3rd grade. Moreover, moving the starting age up or down does not solve the problem of being the youngest in the classroom; it simply defines another group of children as the "young" students. The kindergarten population today is older than it was 30 years ago due to changes in regulations governing starting ages (Shepard and Smith 1986). The major effect of this has been to accelerate the kindergarten curriculum.

More Time, Higher Quality?

Most kindergarten reform efforts have focused on the amount and scheduling of time. On the whole, these temporal features do not seem to be particularly important in explaining differences among students at the end of kindergarten or later on. Research on these components of kindergarten does not provide strong evidence to redirect or shape future kindergarten practice. It suggests by and large that changes in the current *organization* of kindergarten time will have some, but probably modest, effects. The major challenge facing kindergarten is to provide developmentally and individually appropriate learning environments for all kindergarten children. To do this, we need to move beyond our preoccupation with more readily alterable features of kindergartens, such as the length of the school day.

More profound effects could result from a curriculum change that recognizes that 5-year-olds do not learn in the same manner as older children. This new curriculum provides experiences and activities that are meaningful for children this age and features integrated subject matter and a focus on experiential learning, meaning, and higher order thinking.

Although it is useful to guarantee that all children have the same opportunities for the same amounts of kindergarten education, the real issue is the quality of the experience.

Such a curriculum also seeks a balance between child- and teacher-initiated activities, recognizes the importance of play, and views the teacher as a facilitator of learning.

Curricular Emphasis and Approach

As the major gateway to elementary school, kindergarten is inevitably connected to definitions and debates about readiness. Being "ready for school" is often thought of as a quality that can be measured on a universally accepted standard, in which a score above a certain point indicates "ready" and a score below a certain point indicates "not ready." But being ready is defined in different ways in different

locations; the same child might be seen as ready in one school district and not ready in another.

In particular, readiness is associated with the approach to beginning reading. Being ready in kindergarten means one thing in a district with a skills-oriented reading approach and another in a district following a whole language approach. The continuing debate about approaches to reading therefore reaches down to kindergarten.

Simply stated, the reading debate concerns the merits of focusing attention on the communicative function of written language or on the form of the written language (Stahl and Miller 1989; Chall 1989; Carbo 1989; Turner 1989). Currently this debate is seen as a square-off between advocates of phonics and whole language. When Stahl and Miller (1989) examined studies that compared whole language/language experience to use of a basal series in kindergarten, they found that 17 studies favored the whole language/language experience approach, 14 studies indicated no difference, and 2 studies favored the basals. Thus, Stahl and Miller's meta-analysis endorses the use of whole language/language experience approaches rather than basals in kindergarten.[5]

Marilyn Adams (1990) suggests that the issue is not whether whole language or phonics is more effective but when and how much of each is effective. Teachers throughout the country seem to be attempting to determine just that. While considerable practical reform seems to be under way in the focus and methods used in kindergarten, this reform, to my knowledge, is not being studied in any systematic way. Certainly, many districts have produced new guidelines and curricular materials in the last five years that are dramatic departures from the previous phonics worksheets. But we don't know the extent to which actual classroom practice has been altered.


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Whether this and other curricular changes — if they are in fact occurring — will continue and remain in place is an open question. But it appears that meaningful reform of kindergarten education may be hampered by several impediments.

First, there is the continuing and even heightened emphasis on changing kindergartens through external means, such as increasing the kindergarten day, lowering or raising entrance age, and requiring kindergarten attendance. This emphasis is understandable, as these features of kindergartens can be manipulated by changing laws, not by the more difficult task of changing what people believe, how they behave, or the activities they pursue. Although it is useful to guarantee that all children have the same opportunities for the same amounts of kindergarten education, the real issue is the quality of the experience.

Second, curriculum reformers may be underestimating the importance of the last wave of reforms. In our enthusiasm to put new ideas in place, we need to incorporate, not discard, previous models. Good educational practice is probably evolutionary, not revolutionary. Change focusing on only one facet will fail because the necessary enabling conditions are neglected. Effective practice involves simultaneous attention to quality, appropriateness, incentives, and time (Slavin 1986).

A last and especially troubling impediment is the lack of rigorous evaluations. We simply do not have an adequate, replicated research base on which to base decisions about kindergarten education. Curricular

reform in particular seems likely to be underevaluated, perhaps because of the ideological fervor behind such reforms. Advocates of specific approaches may be blinded by the vision they hope we will see. But, in order for reform to be sustained and expanded, the vision must be backed by data. □

[1]Among current 1st and 2nd graders, approximately 98 percent attended kindergarten (*National Household Education Survey*, 1991).

[2]Approximately 58 percent of current 1st and 2nd graders attended full-day kindergarten (*National Household Education Survey*, 1991).

[3]Kindergarten is required in Arkansas, Delaware, Florida, South Carolina, South Dakota, Virginia, Oregon, and the District of Columbia. Kindergarten must be attended or readiness demonstrated in Louisiana and West Virginia (Education Commission of the States, Clearinghouse Notes, 1990).

[4]Shepard and Smith did not find significant differences on six out of seven measures. The one significant difference was on the CTBS reading, favoring the retained students.

[5]We note that they did not make the same conclusion about 1st grade, although several authors disputed the analyses and conclusions (McGee and Lomax 1990, Schickedanz 1990).

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