Opportunity Deferred or Opportunity Taken? 
An Updated Look at Delaying Kindergarten Entry

Many families find themselves in a quandary about whether their child is ready for kindergarten, even though he or she is legally eligible to enroll. They often seek the advice of the preschool or kindergarten teacher concerning their child's readiness. One family may wonder whether their child is mature enough. Another family may consider keeping their child out of school an extra year because the family wants to give the child an extra advantage. This practice has been labeled redshirting, analogous to the deferment procedure in high school and college sports. Teachers themselves may have concerns about certain children in their class, and therefore need to be aware of the latest research regarding the consequences of keeping eligible children out of school an extra year.

Parent concerns often are based on outdated beliefs and assumptions about the meaning of readiness. In the following sections, I discuss these assumptions and accompanying pressures as well as teachers' and parents' beliefs about prerequisites for kindergarten success. Then I summarize recent research on the effects on both the academic and social domains of delaying children's entry into school.

To ensure the quality of the research reviewed, I began with research that was published only in peer-reviewed journals. I then eliminated studies that were inadequate in terms of such factors as (a) reliability, validity, meaningfulness, and bias of the measures and (b) equivalency of control groups. I added a book-length interview study of the meaning of readiness (Graue 1993b) that provides insights regarding beliefs not available from other sources. I conclude the article with suggestions for early childhood educators to help families in their decisions.

Assumptions and pressures

Unexamined assumptions about the meaning of readiness held by families and teachers as well as pressures on administrators for accountability influence decisions about whether to recommend holding children out of kindergarten. Assumptions based on beliefs about the relative importance to development and learning of maturation versus interactive stimulation and teaching are elaborated below, followed by a discussion of the effects of accountability pressures on kindergarten entry decisions.

The meaning of readiness

Maturationist assumptions. For many years readiness for school was conceptualized in terms of the maturation of cognitive, social, and physical abilities. These abilities were perceived as developing essentially on their own according to a child's own time clock, without regard to stimulation from the outside environment. The idea that development proceeds in a linear and automatic manner has been interpreted to mean that certain levels of maturity need to be reached before children can succeed in school.

Maturationists believe that the passage of time will produce readiness. They generally advise delaying
school entry for some children, especially those whose birthdays occur near the cutoff date and those considered not ready for kindergarten by teachers, caregivers, and parents who believe that with the simple passage of time, children will achieve higher levels of development and greater readiness to participate in kindergarten.

**Interactionist assumptions.** An alternate conception of readiness derives from interactionist and constructivist views. The work of Piaget is often mistakenly interpreted as supporting the view that children must reach a certain level of development before they are ready to learn new strategies or skills. Frequently overlooked, however, is Piaget’s view that development results from the interaction between a child and the physical and social world (see Liben 1987).

Piaget did not believe that development is automatic. Rather, he believed that development must be stimulated by children’s interactions with the world around them and the people with whom they come in contact. A child may handle an object in a new way and make new discoveries that lead to higher levels of thinking. Or children may watch other children do something they had not thought of, and this may cause them to try new actions. Or a peer or teacher might ask a question that stimulates new ways of thinking. According to this interactionist view, interactive stimulation rather than age or maturation alone contributes to development and to readiness for new tasks.

Extending this view further, Vygotsky (1978) described how learning, development, and readiness for new learning often require guidance and instruction, not just the passage of time. In Vygotsky’s view, learning and often teaching precede development. New knowledge and skills result from support or **scaffolding** by an adult or a more expert peer. According to this view, the point is not that children need to be ready for school, but that schools need to be ready to guide, support, and instruct each child, regardless of the skills or knowledge a child brings. Age is largely irrelevant. In fact, research in countries with different age requirements for school entry shows that the oldest entrants in one country would be the youngest in another (Shepard & Smith 1986).

Countering a maturationalist perspective, the National Association for the Education of Young Children (NAEYC) points out that believing that children need basic skills before they can proceed is a mis-conception. For example, children can compose stories that are far more complex than those they can read. In other words, learning does not occur according to a rigid sequence of skills (NAEYC 1990).

**Pressures**

Accountability pressures have led some school districts to raise the age of school entry, with the goal of ensuring that children are ready for tasks formerly found in first grade. With older, supposedly more mature children at each grade, administrators in districts in which children enter at an older age hope for higher average achievement scores. However, raising the entrance age provides only a temporary solution. A more academic kindergarten curriculum increases the number of families who hold out their children (Cosden, Zimmer, & Tuss 1993). When families delay their children’s school entry, the children who have been redshirted require a more advanced curriculum—thereby boosting the spiral upward.

The need for appropriate support and stimulation for children and the futility of increasing school entry age form the basis for the position of NAEYC: “The only legally and ethically defensible criterion for determining school entry is whether the child has reached the legal chronological age of school entry” (NAEYC 1990, 22). Kagan (1992) adds that in addition to “a clear defensible standard, the flexibility to individualize ... services according to children’s needs after entry” (p. 51) is necessary. It is the school’s responsibility to meet the needs of the children who are legally eligible. Similar concerns are expressed in the position statement on kindergarten trends developed by the National Association of Early Childhood Specialists in State Departments of Education, and endorsed by NAEYC, “Not only is there a preponderance of evidence that
there is no academic benefit from retention in its many forms, but there also appear to be threats to the social-emotional development of the child subjected to such practices.” (NAECS/SDE 2000).

**Beliefs**

The beliefs of families, preschool and kindergarten teachers, school administrators, and pediatricians concerning the prerequisites for kindergarten influence decisions about school entry. These include beliefs concerning skills and attitudes important to school success and beliefs underlying families’ consideration of delaying kindergarten for their children.

**Beliefs about prerequisite resources and skills**

For children to start school ready to learn, experts on the National Education Goals Panel emphasized five interrelated dimensions of development:
- physical well-being and motor development
- social and emotional development
- approaches to learning
- language use
- cognition and general knowledge (Kagan, Moore, & Bredekamp 1995)

On a more specific level, in the National Household Education Survey—a nationally representative sample of families of four- to six-year-olds not yet in school—parents rated taking turns, sitting still and paying attention, and knowing letters as important (Diamond, Reagan, & Bandik 2000).

In a mostly African American and Latino urban district that had high rates of poverty as well as high drop-out, grade retention, and special education placement rates, parents of both ethnicities agreed with teachers that health and social competence were important prerequisites (Piotrkowski, Bottsko, & Matthews 2000). However, parents of both ethnicities emphasized academic skills and compliance with teacher authority to a greater extent than did teachers. Regardless of their educational level, parents believed that children’s knowledge was more important than their approach to learning.

Preschool teachers in this study, like those in a sample from a less impoverished community (Hains et al. 1989), had higher expectations for entry level skills than did kindergarten teachers.

**Teachers’ beliefs, program implementation, and effects on parents**

Teachers’ and administrators’ beliefs as well as pressures from other teachers affect teachers’ perceptions of children’s readiness for school. These beliefs also affect how they deliver programs for children. Graue’s (1993b) fascinating study of conceptions of readiness in kindergarten classrooms in three different schools within the same school district shows contrasting views and practices.

**Fulton.** The kindergarten teacher at Fulton, a school in a working class community, saw readiness as comprised of both the child’s maturational level and an environmental component that the teacher provided through appropriate activities and feedback. The teachers in this school “tended to work on an interventionist model of readiness . . . [to] allow precise
remediation of problems” (Graue 1993b, 236). For example, an extended-day kindergarten program was developed with the goal of encouraging all children to learn the skills needed to leave kindergarten on an equal level. Families in this school relied on the staff to gain an understanding of the meaning of readiness. Consistent with an interactionist approach in which teachers see their role as providing needed learning materials and stimulation, holding children out was not a popular idea at Fulton.

**Rochester.** An interventionist approach was also in place in one kindergarten at Rochester, a school with children from different socio-economic backgrounds and ethnicities in a community with a large bilingual population. The teacher in the extended-day bilingual class that Graue studied believed that provision of environmental stimulation was critical to enhancing the readiness of the children because they lacked the kinds of preschool experiences from which other children benefited. The bilingual families in this class, like the families at Fulton, counted on the teacher to interpret the meaning of readiness for them. They entered their children when they were eligible, whereas affluent families at Rochester were more likely to hold their children out.

**Norwood.** In contrast, the teachers at Norwood, a school in a primarily Anglo, middle-class community, held a maturationist model of readiness. As opposed to schools where teachers worked together to understand and meet the needs of individual children, the kindergarten teachers at Norwood felt pressured by the first grade teachers to produce students who could meet fairly rigid standards for first grade entry. The kindergarten teacher in the class studied believed that readiness was related to age. She expected younger children to be less ready.

Not surprisingly, the parents at Norwood also conceived of readiness “in terms of age, maturity, and social behaviors necessary to do well in school” (Graue 1993b, 230). They worried about whether their children had the necessary skills for kindergarten success. They were also aware of the expectations of the first grade teachers.

More parents at Norwood delayed kindergarten entry for their children, especially boys, apparently to ensure success—although these parents were not necessarily concerned about their children’s academic readiness. Fourteen percent of kindergarten boys in the school and close to 40 percent of the boys in the class studied had been held out an extra year. (Other studies, e.g., Graue & DiPerna 2000, also show that boys are more frequently held out.) Various extra-year programs were tried in attempts to provide children with more time to develop readiness.

Clearly, the beliefs and practices of the Norwood administration and teachers influenced not only their practices, but also the beliefs and decisions of parents. The beliefs in this school were similar to those of parents and teachers in another high achieving school studied by Graue (1993a).

**Parents’ beliefs related to delaying kindergarten entry**

Very little research is available about parents’ reasons for delaying kindergarten entry. In making their decisions, parents of four- to six-year-olds in the National Household Education Survey expressed concern about their children’s preacademic skills rather than about reports of their behavior (Diamond, Reagan, & Bandik 2000). Although Anglo parents were less likely than other parents to be concerned about their children’s readiness (however, 13.5 percent were)—even with level of parent education controlled—these parents and parents with higher education levels were more likely to suggest delaying their child’s kindergarten entry.

Only the study by Graue (1993b), noted earlier, specifically sought information about parents’ actual decisions prior to the beginning of school. Graue conducted interviews with the parents of the five or six oldest and youngest children scheduled to enter kindergarten in each school about what they thought about kindergarten entrance. Parents at all three schools expressed concerns about maturity, which they saw in terms of personal and social characteristics, rather than academic knowledge.
Many also emphasized wanting their children to have a good start. The culture at Norwood and of the more affluent parents at Rochester seemed to encourage parents to hold their children out. For example, of the six parents interviewed at Norwood, three had kept their age-eligible children (two boys and one girl) out the previous year. Greg’s mother wondered about his emotional readiness. She was the only parent to state that the major reason for holding her child out was to give him an advantage in high school sports (reflecting the traditional meaning of redshirting). She commented, “Plus, everyone says how boys are so much later blooming in a lot of ways” (Graue 1993b, 128). The decision of one parent at Rochester to hold out her son was influenced by the fact that her own brother had been held back in third grade and did better following retention. Even among those whose children entered Norwood when eligible, parents expressed reservations.

**What We DO Know about Holding Children Out**

1. Some families delay their child’s kindergarten entry because of maturity concerns. Often these concerns are influenced by the culture of the school or community.
2. On average, delaying kindergarten entry has no long-term effect on academic achievement. By about third grade, any early differences disappear. However, the combination of younngness and low ability may have negative consequences for achievement.
3. Holding children out deprives them of instruction that, regardless of age, promotes learning of many skills.
4. Holding children out does not result in any social advantage. There are no differences in peer acceptance or self-concept. On the contrary, some children who are redshirted worry that they have failed and develop poor attitudes toward school. They are more likely later to have behavior problems and to drop out.
5. Children who have been held out are more likely to receive special education services later. Enrolling children when they are eligible may lead to their receiving help earlier.
6. In developmentally appropriate kindergartens, children’s age or maturity should make no difference. In kindergartens that are pressure-cookers influenced by the demands of achievement-oriented teachers, families may have greater cause for concern.

**What We DON’T Know about Holding Children Out**

1. Little information is available about why parents hold their children out. The one interview study included only a small number of families. We do not know if parents suspect that their child has some problem, which they hope will disappear with the passage of time, that could prevent him (or occasionally her) from being successful in kindergarten.
2. There are no longitudinal studies that follow individual children over their school career that include information about why each child was held out and whether they received special services during the extra year. The research results reported are based on averages. Therefore, we cannot predict under what circumstances which children might encounter negative consequences nor which children might benefit from being held out and provided with what types of special services.
3. We do not know whether children’s progress differs depending on whether the decision to delay was based on family concerns or whether it was the result of district screening.
4. There is no way of knowing whether children who were held out might have fared more poorly if they had not been held out (Stipek 2002). Controlled studies to investigate this possibility would be difficult to conduct.

Typical was Alyson’s mother, who worried that Alyson’s September birth date put her at a disadvantage, although both mother and preschool teacher thought she was ready. However, the mother’s desire for her child to be at the top of her class made her consider keeping her out an additional year. Families of older children often stated that they were glad their children were more mature and would feel stronger about themselves.

**Effects of delaying school entry**

Maturationists predict that children whose kindergarten entry is delayed will fare better in school. However, as we will see, research does not substantiate the predicted beneficial effects on achievement, self-concept, or social development. The research results are summarized below according to their focus on academic or social effects.
Academic effects

The classic review of the literature by Shepard and Smith (1986) indicates that although the oldest children in a class on average are more successful than their younger peers in the first few grades (in first grade by about 7–8 percentile points), these differences are of little practical significance and usually disappear by grade three. Most of the differences are almost entirely attributable to children who fall below the 25th percentile in ability. That is, it seems that the combination of young age and low ability has negative consequences for achievement. Moreover, the validity of those studies in which differences were found can be questioned on the basis of criteria that are subject to teacher bias. The influence of teacher expectations regarding age can also be seen in teachers' tendencies to retain more younger than older students even if their skills are equally deficient.

Many studies have been conducted over the past 15 years that shed further light on the issue but essentially uphold Shepard and Smith's basic findings. For example, in a study of African American and Caucasian urban children, older children performed slightly but significantly better academically in grade one, but these differences disappeared four years later (Bickel, Zigmond, & Stagborn 1991; see also Cameron & Wilson 1990). In a study of children in families with very low incomes from a predominantly Anglo rural community, a predominantly African American urban community, and a predominantly Latino urban community, the oldest children scored higher than the youngest in reading and math in kindergarten, but these differences disappeared by grade three. Similarly, for upper-middle-class children, performance differences decreased by grade five (Sweetland & DeSimone 1987).

A comparison of children in a transitional (readiness) first grade classroom with children who were selected but not placed in that classroom, remaining in first grade, showed no significant differences in second grade achievement (Ferguson 1991). That is, having an extra year with a "dumbed-down curriculum" and attaining an older age had no positive effect on children's achievement or need for other services. A recent review of the empirical literature concludes that delayed entry as well as retention and transition class practices are not effective (Carlton & Winsler 1999).

Schooling vs. allowing time to mature. Among the advantages of children entering when eligible is that some skills, such as those needed for reading readiness, require instruction. A well-controlled study of more than 500 children in a district with developmentally appropriate kindergartens compared young first-graders (whose birthdays fell within two months of the cutoff date) with older kindergartners (whose birthdays fell within two months following the cutoff date) and older first-graders (who were one year older than the older kindergartners). At pretest, the reading and math achievement scores of younger first-graders were lower than those of older first-graders but higher than those of older kindergartners. The same was true at post-test. The differences between older kindergartners and younger first-graders on pretest indicate that a year in kindergarten has instructional benefits.

Moreover, there was no difference in the progress of younger and older first-graders from fall to spring. That is, each group achieved one year's growth. In addition, younger first-graders' progress exceeded that of older kindergartners, suggesting that age is an insufficient criterion for benefiting from reading and math instruction in first grade (Morrison, Griffith, & Alberts 1997).

Other studies comparing same-age children in different grades showed that by the end of first grade, younger children's reading
ability was no different from their older classmates' (Crone & Whitehurst 1999), and math achievement scores were higher than those of their same-age peers who were still in kindergarten (Stipek & Byler 2001; see also Morrison, Smith, & Dow-Ehrenberger 1995). After reviewing the research literature, Stipek (2002) concluded that for math and most reading and literacy skills, the effects of schooling seem to be more potent than the effects of time to mature; whereas for certain tasks, such as conservation and story recall and production, general maturation and experience are likely to contribute to skill acquisition. Other work suggests that instruction in school may contribute to the development of children's working-memory strategies (Ferreira & Morrison 1994).

Factors other than age. An additional point to consider is that a substantial number of redshirted and retained children have above average IQ scores (Morrison, Griffith, & Alberts 1997). The number of younger and older students who qualified for a gifted program was similar, although more older students were sent to be evaluated (De Meis & Stern 1992) — perhaps exemplifying teacher expectations. Even though the oldest children in a large nationally representative study were more likely than the youngest to score in the highest quartile in reading, math, and general knowledge, some of the youngest also scored in the highest quartile and some of the older children scored in the lowest quartile (West, Denton, & Germino-Hausken 2000). Many other factors, such as mother's education and marital status, had similar relationships. Hence, it is not age alone that contributes to children's achievement.

It is important to note that parents who hold their children out for social reasons may be disappointed by the lack of academic content and challenge in some kindergartens. They often discover that their children encounter what appears to be largely a repeat of preschool (Graue 1993a).

Social effects

Contrary to popular belief, children whose entry into school has been delayed do not seem to gain an advantage socially. In fact, more drawbacks than advantages are evident. Many children who have been redshirted worry that they have failed or been held back (Graue 1993b) and often have poor attitudes toward school (Shepard & Smith 1989; Graue & DiPerna 2000). Furthermore, students who are too old for grade are less likely to graduate from high school. However, according to Meisels (1992), "[i]t is possible that middle- to upper-income students who have been held out will form a subgroup of overage students who will not be at risk for dropping out in the same way as other students, but this is yet to be demonstrated" (p. 167).

Social development. Reviews of the literature have found no differ-
For more on redshirting...


a matched control group (Matthews, May, & Kundert 1999). Those who were identified as immature but who did not attend readiness programs were no more likely to miss school or receive poor social development ratings in grade one than those who had attended the readiness classes. However, a greater number of students identified as unready to enter school but who were not placed in readiness programs were retained at some point in their school career, and half of these retentions were made in kindergarten.

These results raise several questions: How many of the decisions to retain children have been based on a screening test with questionable reliability and validity? Were kindergarten teachers more likely to retain those children whose parents did not follow through on recommendations? Or were parents and teachers reluctant to retain those already overage from earlier developmental placement? More important, would special help during the kindergarten year have obviated the need for retention?

Challenging behaviors. Those who advocate the benefits of delaying kindergarten entry predict fewer behavior problems for children who are unready and whose entry is delayed. With the exception of a study by Bickel, Zigmond, and Staghorn (1991), studies have found an increase in behavior problems for children held out or those placed in a transition class (Ferguson 1991; Graue & DiPerna 2000). Note, however, that although the study of urban African American and Caucasian children by Bickel and associates found no difference in report card ratings of conduct, referrals, and retentions when controlled for socioeconomic level, preschool attendance, and race, the measure used in the study is subject to teacher bias.

ence in self-concept, peer acceptance, or teacher ratings of behavior (Graue & DiPerna 2000; see also Stipek & Byler 2001). In one study of social adjustment and self-perceptions in a mostly Anglo and Latino sample, the few correlations found between social functioning and age were subject to teacher bias; and most of these differences disappeared by grade one (Spitzer, Cupp, & Parke 1995). No differences were found in self-reported school adjustment, loneliness, perceptions of competence, or acceptance. However, although younger children were no more likely than older children to be rejected or neglected, they were less likely to be nominated by peers as well liked and as showing prosocial behavior.

Children who were deemed unready according to the Gesell Test (Ilg & Ames 1965) and placed in a developmental kindergarten or pre-first-grade class showed no difference in ratings for social development in first grade when compared to
Moreover, a large cross-sectional survey of more than nine thousand children at different ages shows that by adolescence, the average child, even those who had not been retained, had higher rates of parent-reported behavior problems, such as bullying, trouble getting along with others, depression, losing temper, feeling inferior; and after age twelve, hanging out with kids who get in trouble—even though these children had low scores for being at risk when they were younger (Byrd, Weitzman, & Auinger 1997). This was especially true for the Caucasian youth. Children who have been redshirted were also found to need more special services, not fewer (Graue & DiPerna 2000; see also Matthews, May, & Kundert 1999).

These findings suggest that there may be adverse behavioral consequences associated with the decision to delay kindergarten entry that may not appear until later years. It is not clear whether these problems derive from the effects of holding children out or from some preexisting condition that influenced parents’ decisions; however, the latter is unlikely since many problems do not emerge until adolescence.

Influenced by maturational thinking, parents often believe that with additional time, their child will outgrow a possible problem. What they fail to realize is that the sooner the nature of the problem is identified, the sooner the child can receive special services that may help the child overcome the problem (see also Maxwell & Eller 1994). When children who may have problems enter at the eligible age, they may actually benefit—assuming the school district makes services available and that their teachers refer them for these services rather than advising families to keep these children out an extra year.

**Suggestions for advising families**

Many families are under the mistaken impression that holding their child out will be beneficial, that it will give the child the gift of time. But families need to be aware of the possibility of too little challenge and the potential negative effects of holding children out. They need to know about the advantages of enrolling children when they are eligible.

In the cases of children whose entries were not delayed and who were later retained, it is important to consider whether the stimulation provided by the next year’s teacher and/or remediation would have allowed the child to catch up without retention. Families also need to consider what would have happened had the child received extra help during the year before he or she was retained. Growth and skill learning are not linear.

Some teachers and administrators encourage families to delay kindergarten entry for a number of reasons. Not only might they be unaware of current research on the negative effects of delaying school entry, but they often see only the progress children make during an extra year. They do not consider that similar or greater progress might occur if the child were to enter school and receive stimulation, instruction, and intervention services.

Nor do teachers see the negative consequences, which might not appear until high school. Moreover, pressured administrators frequently believe that if younger children are held out, the achievement scores of the older children remaining will be higher.

**Conclusions**

Families concerned about their child’s maturity and whether to enroll their child in kindergarten when he or she is eligible have often been advised to give the child the gift of time. Research does not support this practice. In fact, delaying kindergarten entry often has negative effects. Families need to consider that by holding their child out, they may in fact be depriving the child of important opportunities for learning—what Graue and DiPerna (2000) refer to as *theft of opportunity*.

**Reference**


