This study examined the impact of pupil age at time of school entry in a large public school in Bronx, New York. Results from a literacy assessment were examined for kindergarten, first-, and second-grade students. The assessment rated children on their knowledge of the alphabet, sight-word vocabulary, phonemic awareness, reading, and writing mechanics. Test results were analyzed by birth date and gender. Findings indicated that: in kindergarten, 64 percent of children born in the first third of the year were at or above grade level on the alphabet/sight word portion of the test; 27 percent were at or above grade level on reading; and 4 percent were at or above grade level on writing mechanics. Findings for children born later in the year indicated that achievement did decrease with birth date, although not steadily. For first-graders, achievement decreased with birth date in the areas of alphabet, sight words, and reading, but did not consistently decrease in phonemic awareness or writing mechanics. For second-graders, achievement did decrease consistently with birth date in all testing areas, with the biggest gap between those born in the first and final thirds of the year. Also, female students achieved grade level more often than male students in almost all grades and months of birth. Based on these findings, it was concluded that moving the cut-off date for kindergarten entrance from December 31 to September 1 would help to lessen occurrences of failure among the youngest students. (Contains 18 references.) (EV)
Born In December—Ready for School?

By Kristin Warder

Introduction

As a school volunteer and a teacher-in-training in early childhood, I often noticed that some children seemed more immature than the others and were having a more difficult time adjusting to school. When I asked teachers about this, they often told me, "I'm not really surprised, after all he has a late birthday." Many of the children that I noticed were born late in the year, usually between September and December, and were the youngest members of the class. When I became a teacher myself, I noticed the same phenomenon, and also saw that most of my holdover students had late-year birthdays as well. I wondered, "Is this just coincidence? Is it just the groups of children that I happened to have encountered, or is this a real situation affecting early childhood educators?" In an effort to answer these questions, I conducted some research into the issue.

Past Findings

The issue of pupil age at school entrance is not a new one. Research has been done on it since the 1950s and some isolated studies date back as far as the 1920s. (DeVault, et.al., 1957) Upon reviewing the available literature, it is clear that while there are different thoughts on the long-term significance of
birth date at school entrance, it does have an affect on school achievement. At least one study designed to prove that birth date does not have an effect on school performance found that, in fact, children with late-year birthdays fare worse than their early-year counterparts. (Crosser, 1991)

Why is this issue so pervasive? Why are we so concerned with the abilities of children in their first year of schooling? Research into the impact of birth date has been inspired by the need to explain why so many children are failing in the primary grades and beyond. DeVault, et al note that as children began entering school earlier, and first-grade failure became more common, there “emerged a feeling among various educators that the optimal age for entering Grade 1 should be scientifically examined.” (DeVault, 1957 p.18) The University of Texas study determined that underage first-grade enrollees (those under age 6) were at a disadvantage in school, and suggested providing “free public school kindergarten for all pupils who will have reached age 5 by September 1 of the current school year” as the ideal solution to the problems of underage first-graders. (p.128)

However, time has proven that providing free public kindergarten did not, in fact, solve the problem. Current research now looks at what should be the cutoff date for entrance to kindergarten as opposed to first grade. This has become known as the issue of school “readiness.”
School Readiness

What is school readiness? Okon and Okon defined school readiness as "the child’s attainment of a degree of physical, intellectual, and social development sufficient to enable him to fulfill school requirements and to assimilate curriculum content." (Okon and Okon 1973, p.7)

How can we determine school readiness? Readiness is often determined simply by chronological age. However, some districts may use screening procedures to determine the readiness of children entering their schools. Some researchers argue strongly in favor of such screening processes. There is, however, an almost dizzying array of screening procedures available. There is no one accepted screening test for school entry, and dozens of different tests may be used in just one state. One well-known set of screening procedures is from the Gesell Institute. These tests set out to determine a child’s developmental age as opposed to chronological age alone. The philosophy behind them is that “what we really need to know in determining readiness for school entrance is a child’s developmental level- we need to know at what age he is behaving as a total organism.” (Ilg and Ames 1972, p.17)

Unfortunately, screening procedures are often suspect because the tests used often have no established reliability and validity. (Meisels 1987, p.4) Add this to the many different tests being used, and it becomes difficult to view screening as a
reliable method of determining who should begin kindergarten. The NAEYC states that "the only legally and ethically defensible criterion for determining school entry is whether the child has reached the legal chronological age of school entry. While arbitrary, this criterion is also fair." (NAEYC, 1995)

Why Is Entry Age an Issue?

Perhaps we need to stop to consider why this problem of determining school readiness even exists. Why are children experiencing failure at this early level of schooling? Should there even be such a thing as kindergarten failure? (Charlesworth, 1989) A major factor in this issue is the increasing demands being placed on kindergarten pupils. Smith and Shepard note that "[W]hat was once considered the curriculum of first grade—that is learning readiness—is now the province of kindergarten." (Smith and Shepard 1987, p.132) In a similar vein, Webster writes that "[A]lthough it may have been apparent in the 1960s that the good kindergarten day is not blocked out into subject-matter periods, it is hard today to find anyone interested in the issue." (Webster 1984, p.329) As the curriculum from upper grades is pushed down to the lower ones, many children become "doomed" to "inevitable failure." (Charlesworth 1989, p.5)
Whose Problem Is It?

The problem seems to be less with our children and more with the demands of our current educational system. The NAEYC position statement on school readiness states that in order to have universal school readiness schools must start:

1. addressing the inequities in early life experience so that all children have access to the opportunities that promote school success;

2. recognizing and supporting individual differences among children, including linguistic and cultural differences and

3. establishing reasonable and appropriate expectations of children's capabilities upon school entry. (NAEYC 1995)

This statement implies that schools need to work on their readiness for the children, as opposed to the children's readiness for school. However, as the system itself is unlikely to change in the near future, and children will continue to experience failure, we must look at how we can determine readiness on the part of the child to deal with the demands currently in place.

Too Big a Gap?

But, if screening procedures are inappropriate, and chronological age is the only ethical criterion for school entrance, then what should be the set age? Currently, many
school systems (including New York City) use a cutoff date that requires children to be five years old by December 31 of the school year. This has some children entering kindergarten as older four-year-olds, while others are approaching age six.

Much of the existing research focuses on children with summer birthdays, but what about fall birthdays? The age gap is often wider than the research may suggest. Setting a more appropriate cutoff may eliminate many young failures. Even Ames, a great advocate of the Gesell screening procedures, states that "in spite of tremendous individual differences, children are alike enough so that if the legal entrance age were high enough, it would in the majority of cases probably do the trick, assuming that individual readiness examinations could not be given." (Ames 1967, p.11) Ames suggest that children should be five-and-a-half when entering kindergarten, and six-and-a-half for first grade. (p.12) Ilg and Ames write that "if chronological age alone must be used as an entrance criterion, our experience favors the older age allowed by a September 1 date." (Ilg and Ames 1972, p.16) It was with this thought in mind that I set out on my own research.

Procedure

I decided to look into the issue of pupil age at school entrance in a large public school in the Bronx. I decided to look at the test results of kindergarten, first, and second grade pupils on a literacy assessment, called ECLAS, that is currently
in use in all New York City public schools. The assessment rated the children on their knowledge of the alphabet, sight-word vocabulary, phonemic awareness, reading, and writing mechanics. The assessment was given in the fall of 1999. I recorded the scores of children from six classes in each of the three grades. I then grouped the results by birth date, and by gender. I looked for evidence that children with later birth dates achieved less than those born earlier in the year did. I divided by gender in order to determine if birth date had a different effect on males and females, since gender was found to have a notable impact in some studies. (Kinard and Reinherz 1986; Crosser 1991)

Results and Implications

When I divided the assessment results by grade and birth date, a pattern became apparent. In kindergarten, 64% of children born in the first third of the year (January through April) were at or above grade level on alphabet/sight words portion of the test; 27% were at or above grade level on the reading portion; and 4% on writing mechanics. (The phonemic awareness portion of the test is not given in kindergarten until May; this testing was done in October.) Of those born in the second third of the year, 50% were on or above grade level on alphabet/sight words; 20% on reading; and 5% on writing mechanics. Of those born in the final third of the year, 51%, 11%, and 2% were on or above grade level on the respective test
areas. Achievement did decrease with birth-date, although not steadily.

The results for first grade showed that 53% of children born in the first third of the year scored at or above grade level on alphabet/sight words; 63% on phonemic awareness; 53% on reading; and 50% on writing mechanics. Of those born in the second third of the year, 36% scored at or above grade level on alphabet/sight words; 82% on phonemic awareness; 50% on reading; and 52% on writing mechanics. Of those born in the final third of the year, 42%, 75%, 51%, and 49% were at or above grade level in the respective test areas. Achievement decreased with birth date in the areas of alphabet/sight words and reading, but did not consistently decrease in phonemic awareness or writing mechanics.

In the second grade, 63% of children born in the first third of the year scored at or above grade level on the alphabet/sight words portion of the test; 51% on phonemic awareness; 66% on reading; and 43% on writing mechanics. Of those born in the second third of the year, 62% scored at or above grade level on alphabet/sight words; 46% on phonemic awareness; 58% on reading; and 27% on writing mechanics. Finally, of those born in the last third of the year, 61%, 45%, 50%, and 20% were at or above grade level on the respective areas of the test. Here, achievement did decrease consistently with
birth date on all testing areas, with the biggest gap between those born in the first and final thirds of the year.

When I divided the results by gender, an important pattern emerged. Female students achieved grade level more than male students in almost all grades and months of birth did. (The only exception was first-graders born in the final third of the year; this is likely due to individual differences between children.) This indicates that since male students, at least in early childhood, seem to lag a little behind their female counterparts, then males born at the end of the year are furthest behind of all. This does not mean, of course, that all boys born at the end of the year will be at the bottom of their class, or will fail a grade, it just shows that starting school later may give these youngest children a necessary advantage in our current school system.

Moving the cutoff date for kindergarten entrance from December 31 to September 1 would help to lessen occurrence of failure by the youngest students. Of course, there will always be a youngest group, no matter what cutoff date is chosen. Moving the cutoff date can only shrink the gap, not eliminate it. However, since girls achievement seems less affected (although not unaffected) by birth date, would changing the cutoff date be unfair to them? What about individual differences? I would still argue in favor of an earlier cutoff date, especially since the gap in achievement seems to increase from kindergarten to
second grade. It is unlikely that waiting to start kindergarten would be detrimental to those individuals who might actually be ready for school, and it is likely that it would prove to be an advantage for those who aren’t. As the academic demands being placed on kindergarten children increase, the number of children born at the end of the year who achieve grade level is likely to decrease. The increasing movement to universal pre-kindergarten may help to alleviate the situation, but that is not in the immediate future in most of the country. If the cutoff date for kindergarten entry is not changed, then the parents of late birth date children should be informed of the possible social and academic implications for this age group. This would allow parents to make the choice for their children. When parents have access to the expertise of experienced teachers to combine with their own expertise about their children, then an educated and individualized decision can be made about school entry. This cooperation, more than any school policy, may truly be the key to ending the issue of “kindergarten failure.”

References


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