Children who are developmentally unprepared to cope with school face disadvantages that may become lifelong.

Many well-meaning but ill-informed parents and educators are pushing young children into our school systems too soon. Being bright and being ready to begin formal schooling are two very separate issues. When children enter school before they are developmentally ready to cope with it, their chances for failure increase dramatically.

Research on Academic Success of Early Entrants
Much of the research we will review compares elementary school children who at the time they entered school were less than five years three months of age when enrolled in kindergarten or six years three months when enrolled in 1st grade (often called “summer children” because their birthdays fall between June and September) with children who were as much as six years three months old at kindergarten entrance or seven years three months when they started 1st grade.

To summarize this research very briefly:
1. The chronologically older children in a grade tend to receive many more above-average grades from teachers than do younger children in that grade.
2. Older children also are much more likely to score in the above-average range on standardized achievement tests.
3. The younger children in a grade are far more likely to have failed at least one grade than are older children.
4. The younger children in a grade are far more likely to have been referred by teachers for learning disabilities testing and subsequently have been diagnosed as being learning disabled than are older students in a grade.
5. The academic problems of younger children who were developmentally unready at school entrance often last throughout their school careers and sometimes even into adulthood.

For example, a study of 278 pupils in the Hebron, Nebraska, Elementary School (Uphoff, 1985) found that 23 percent of the population had birthdays between June 1 and October 15, the cutoff date for that state. Another 9 percent were born in the same time period but had been held back for one year before starting school. The youngest group (summer children: SC) made up 75 percent of the school’s failure population, while none of the held-back summer children (HBSC) had failed a grade.

That study also found that although the SC had a higher average IQ (girls, 115; boys, 107) than the HBSC (girls, 105; boys, 98), they still performed worse in school, with more of the SC failing grades than the HBSC.
Gilmore also examined all teacher-assigned grades, which often include pupil maturity (cooperation, attitude, effort, and so on) as a factor. Again, the results favored the older pupils who were more ready for school when they started. Sixty percent of the SC girls and 100 percent of the HBSC girls received above-average grades, as did 47 percent of the SC boys and 81 percent of the HBSC boys.

Huff (1984) reported that a group of “at-risk” children identified in a 1980 kindergarten readiness assessment in Fairbrook Elementary (Beavercreek, Ohio) were followed as they progressed through the grades. Fifteen parents had delayed their child’s start by one year; 21 had not. Using early 2nd grade test data (2.0 = on target) from the Iowa Test of Basic Skills, Huff found that the delayed starters had a cumulative grade level equivalent score of 2.6, while the early starters had reached only the 2.1 level. The other key factor was that because 15 of the 21 early starters had been retained at least once, the younger group had been in school an average of six months more to achieve five months less than the older group.

In a study of all 154,000 pupils in the Hawaii Schools, where December 31 is the cutoff date for school entrance, Diamond (1983) found that December-born children were twice as likely to have been diagnosed as specifically learning disabled as were the January-born pupils.

Finally, a study of 11th grade honor English students focused on the results of their work on a nine-week term paper project. The papers were evaluated carefully following a detailed analysis plan (an average of 65 minutes per paper). Of the 34 students, 71 percent of the oldest seven earned an “A” while only 14 percent of the youngest seven students received the same grade. All were bright, but some—the youngest—lacked the self-discipline and maturity to perform up to capacity (Uphoff, 1984).

### Damaging Consequences Documented in Other Areas

The problem of early entrance has grown worse since 1957, when Sputnik provided the impetus for the “curriculum shove-down,” which has resulted in kindergarten now teaching much of what used to be presented in the first grade. However, researchers have been aware of the problem for years.

As a result of his study of 500 K-12 pupils in Montclair, New Jersey, Forrester (1955) reported that:

> those pupils who were very bright but very young at the time of school entrance did not realize their potential. They tended to be physically immature or emotionally unstable, or they would cry

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**Figure 1. Comparison of Grade-Level Equivalent Scores of Summer Children and Held-Back Summer Children on the Iowa Test of Basic Skills.**

<table>
<thead>
<tr>
<th>Grade-Level Equivalent Score Levels</th>
<th>SC</th>
<th>HBSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above-Average</td>
<td>27%</td>
<td>79%</td>
</tr>
<tr>
<td>Average</td>
<td>33%</td>
<td>8%</td>
</tr>
<tr>
<td>Below-Average</td>
<td>40%</td>
<td>13%</td>
</tr>
</tbody>
</table>

SC = Summer Children (early starters)  
HBSC = Held Back Summer Children (delayed starters)
"The less bright but older and developmentally more mature pupils were able to do more with the ability they had than were the brighter, younger students."

Easily. And socially, they seldom showed leadership. From junior high school on, 50 percent of them earned only "C" grades. On the other hand, generally the very bright late-school-entrance group excelled throughout their school careers.

In many cases early entry may result in maladjustment in school, and even may have an adverse effect on adult life.

Mawhinney (1964) reported on why the Grosse Point, Michigan, Schools abandoned an early entrance program for very bright children as a result of data obtained from their 14-year longitudinal study. The results:

1. Nearly one-third of early entrants turned out to be poorly adjusted.
2. Only one-twentieth of early entrants were judged to be outstanding leaders at the end of the experiment.
3. Nearly three out of four were considered entirely lacking in leadership.

Gott (1963) studied 171 California children who were about four years nine months of age at school entrance (Group A) and another 171 who were about a year older when they entered school (Group B). All were ranked on a 10-point scale measuring socio-emotional development. Four times as many A's as B's were in the lowest rank. According to records and faculty reports, Group B pupils were judged higher on leadership than the younger entrants.

In presenting the pros and cons of required preschool for all children, Soderman (1984) notes the "cognitive sifting down" of the curriculum over the past years. She observes that:
Children at 4 and 5... have a genuine need to play, and the quality and quantity of the time they spend playing are later seen (or observed to be lacking) in their creative thought, ability to make decisions, and potential for coping with stressful situations... The American Academy of Pediatrists has expressed concern about the dramatic increase of "stress-related symptoms being seen in young children.

Campbell (1984), head of the bureau of child development at the New York State Department of Education, says that demanding kindergartens create too much stress for the youngsters and can have damaging consequences. Phi Delta Kappa's Practical Application of Research concludes in its summary:

At present, teacher agendas and ideologies about what adults think children ought to be learning ("reading readiness" at age 3?) result in inappropriate and deficient experiences for children.

Knowing of such results as these and of the major increase in youth suicides in America over the past 20 years (about the time the curriculum was "sifted downward"), we decided to conduct a pilot study (Uphoff and Gilmore, 1984) in Montgomery County, Ohio. We studied all youth suicides (25 years of age and under) occurring in 1983 and during the first half of 1984. Summer children make up almost 35 percent of total births per year in Ohio. Of the male youth suicides, at least 45 percent were summer children; when the October- and November-born males who started school even younger are added to the figures, the percentage increases to 55. The percentage of female suicides who had been summer children was a startling 83 percent.

Should these figures continue to hold when a larger study is conducted, the message is very strong and clear for educators and parents. Perhaps Ames and Ilg (1979) captured it best when they wrote:

Birthday or chronological age is no guarantee of readiness for school. Our position is that the child's behavior age, not his birthday age, should determine the time of school entrance and of subsequent promotion.

Possible Actions
That a problem exists is quite clear. Fortunately, there are several possible ways to reduce the magnitude of the "unready" child's problem.

First, states can change the cutoff date for school entrance, in fact, one-third have already done so. In the last decade at least 17 states have moved their cutoff date from late fall-early winter to much earlier in the fall or even late summer. For example, in 1980 the date in Kentucky was December 31 (must be age five on or before); it is now October 1. Oklahoma changed from November 1 to September 1 in 1980. West Virginia did the same in 1983.

Swartz and Black (1981) have been working for years to get Illinois to change its starting date from December 1 to September 1. Their study of learning disabled children in West Central Illinois found a normal distribution of birthdates for school entrance except for the September to November quarter which was 87 percent higher. They conclude that "an adjustment in school entrance age can be viewed as proactive and one that considers only research and sound educational principles."

A second possible action is for schools to use a well-designed pupil developmental assessment process to determine children's readiness to enter kindergarten or to be promoted to 1st grade. Such a screening process takes time, personnel, and equipment, but may be well worth the effort.

Third, parents could hold their "too young" children for another year before entering them in school. The right kinds of preschool or head start programs (play emphasized) and good home enrichment experiences are often very helpful and prevent undue stress, frustration, and failure. The Ypsilanti Head Start longitudinal study clearly shows that such preschool programs with play as the vehicle for learning make a big difference later on (Hansen, 1984).

Fourth, schools could "kick the curriculum back upstairs" where it used to be. Parents in Racine, Wisconsin, are pushing their schools to reduce academic pressure in the early grades. The experience of several European nations clearly shows that delaying the start of reading and mathematics instruction until all children are older (and many more are ready) helps all to learn better and faster (Those that are truly ready to read earlier should, of course, be given the opportunity but not be pushed.)
A fifth consideration, and one chosen by many schools, is to assign developmentally unready children to a special kindergarten, pre-first grade, junior-first grade, or similar program that offers five years of primary education instead of the more usual four (K-3) years. For example, Project First Chance (a special kindergarten) in the Lamar Consolidated School District (Rosenberg, Texas) uses the Arizona Behavior Analysis Criterion-Referenced Utilization Scale (ABACUS) through the University of Arizona Special Education Department. The Optional Kindergarten program of the West Des Moines Community Schools provides a planned pre-kindergarten program for "unready" five-year-olds. The Coldwater (Ohio) Schools have a half-day "pre-primary" class for the 20-25 percent of children who were in kindergarten but are not ready to move on to the 1st grade. Other districts have full-day "junior first grades." A few even repeat the regular kindergarten.

Another alternative—repeating a grade—has been found to work well with many children under certain conditions. If failure is stressed—especially that of the child—the repeat will be less likely to produce positive results. However, when parents assume the burden and responsibility for the repeat, the odds of successful results are much improved. For example, the parents might explain to their child, "We goofed! We started you too early, and now we want you to have a chance to catch up with yourself so that learning can be fun and easier for you." Many researchers believe that the earlier in school a child repeats a grade, the greater the chances for long-range success.

**Too Much Too Soon for Too Many**

Obviously, the present situation has built-in expectations and requirements that are simply too much too soon for too many young children. *Newsweek's* 1983 cover story on "Bringing Up Superbaby" contends that intense early learning is drawing fire from psychologists not only because it does not live up to its claims but also because it may impede other skills. The article quotes Craig Ramey of the University of North Carolina, "Pressure for academic achievement can take away something from other agendas such as the development of social skills." The article continues:

Even worse, early education may backfire. A sure prescription for trouble is making learning stressful. Scientists don't know exactly how information gets into the brain, but there are hints that experiences infused with unpleasant emotions never reach the memory banks. An hour with the cue cards makes the child anxious, that lesson may never be learned—and future lessons will be less effective.

Ilg and Ames (1951) of the Gesell Institute summarized the problem of the "unready" child when they observed, over 30 years ago, that too often we attack the child's attitude by saying, "He could do better if he would" when it would be more accurate to say, "He would do better if he could.

**References**


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