Ready or Not...

A Look at Kindergarten Readiness

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Introduction

What is the appropriate age for a child to start kindergarten? Under current Tennessee law,[1] children must reach the age of five by September 30 of the year they enter kindergarten. In 1998, legislation proposed changing the cutoff date to July 31, effectively requiring that children entering kindergarten in Tennessee be two months older. The bill was referred to the Education Oversight Committee for study. [2]

Methodology

The conclusions reached and the recommendations made in this report are based on:

- Review of other states' policies and reports.
- Review of national and state reports on kindergarten readiness.
- Research of various educational journals and web sites.
- Telephone interviews with the bill's House and Senate sponsors, Department of Education officials, a Representative of the Tennessee Education Association, and education officials in other states.

Background

Many Tennessee teachers and lawmakers have expressed concern that some children enter kindergarten too young to perform well. The conventional wisdom has been that older children (age five or older *before* beginning kindergarten) perform better in kindergarten than younger children.[3] Today some still argue that children should be held back, while others believe that getting an early start in education is in a child's best interest.

At the heart of the debate is disagreement among professionals over what constitutes school readiness and how best to achieve it. Some believe that age determines readiness, while others view readiness as the mastery of certain skills such as counting, basic writing, and saying the alphabet. Still others define it as social and emotional maturity (e.g., the ability to sit and listen to a story and verbally communicate needs). Finally, some believe that all children are ready to learn when they enter school except in extreme cases of abuse or disability.[4]

Teachers' frustrations, pressure to improve the academic achievement of U.S. students, and the implementation of Goals 2000 have all fueled the debate on this issue. New research on childhood development is causing many to reevaluate the conventional wisdom that "older is better."[5]

Goals 2000

Goals 2000 set by the National Education Goals Panel (NEGP) has challenged professionals and policymakers to define what it means to be "ready" to enter

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[1] *Tennessee Code Annotated* 49-6-201(3).
[2] Senate Bill 278/House Bill 2812, 1998.
[3] M.E. Graue, Ready for what?: Constructing Meanings of Readiness for Kindergarten. SUNY Series, State University of New York, 1993, p. 10.
[4] National Association for the Education of Young Children (1998*), NAEYC Position Statement on School Readiness* (Adopted 1990, Revised 1995), [On-line]. Available: http://www.naeyc.org/.
[5] Lorrie A. Shepard, "Children Not Ready to Learn? The Invalidity of School Readiness Testing," *Psychology in the Schools*, 34 (2), 1997, p. 85

kindergarten.[6] Goal One, which states that "by the year 2000 all children in America will start school ready to learn," has received the most attention. It sets out three objectives to achieve this goal:

1. All children will have access to high quality and developmentally appropriate preschool and programs that prepare children for school;
2. Every parent in the United States will be a child's first teacher and devote time each day helping his or her preschool child learn, and parents will have access to the needed training and support;
3. Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and maintain the mental alertness necessary to be prepared to learn, and the number of low birth-weight babies will be significantly reduced through enhanced prenatal health systems.

In a recent update to Goal One, the NEGP suggested that schools need to expand their definitions of readiness to include physical, social, and emotional well being.[7]

National Center for Educational Statistics

A survey conducted in 1993 by the National Center for Educational Statistics (NCES) found that public school kindergarten teachers consider the following qualities most important for kindergarten readiness:

- To be physically healthy, rested, and well-nourished,
- To be able to communicate needs, wants, and thoughts verbally, and
- To be enthusiastic and curious in approaching new activities.[8]

Other school-related attributes that the survey identified by both parents and teachers are:

- Ability to use pencils and paint brushes;
- Ability to count to 20 or more; and
- Ability to recite letters of the alphabet.

Parents placed more emphasis on school-related attributes than did teachers.

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[6] National Education Goals Panel (1998). *Goal One Update: A Report from the National Education Goals Panel*, [On-line]. Available: http://www.ed.gov/pubs/AchGoal1/goal.html.

[7] Ibid.

[8] Sheila Heaviside and Elizabeth Farris, *Public School Kindergarten Teachers' Views on Children's Readiness for School*, NCES 93-410, U.S. Department of Education, National Center for Education Statistics, 1993, p. 2.

Analysis and Conclusions

As of April 1997, all states require children to be five years old by August 1 or later in the year they start kindergarten with the exception of Indiana, which has a cutoff date of June 1.

Tennessee, which has a cutoff date of September 30 for children entering kindergarten, ranks about the middle among 53 states and territories from the earliest to latest cutoff date. Connecticut and Vermont have the latest official cutoff date of January 1 and Indiana has the earliest of June 1. Interestingly, Indiana's most recent legislative session included a bill that would have changed the cutoff date for children entering kindergarten from June 1 to September 1. Indiana Department of Education officials wanted to make Indiana's policy similar to other states. Arkansas is in the process of phasing out the October 1 cutoff date and changing it to September 1.

Six other states give the Local Education Agencies (LEAs) the authority to decide at what age a child may enter school:

- Colorado
- Massachusetts
- New Hampshire
- New Jersey
- Pennsylvania
- Washington (up to three months before 8/31)[9]

Source: Education Commission of the States

Thus, with the exception of seven states, all states have a mandatory cutoff date of September 1 or later. (See Exhibit 1.) The National Education Association's (NEA's) position, proposes that all children be five when they enter kindergarten. It obviously conflicts with many state laws.

Exhibit 1
Cutoff Dates by State in Order from Earliest to Latest

Rank	Cutoff Date	State	Notes
			5 on or before all cutoff dates unless otherwise noted.
1	6/1	Indiana	
2	8/1	Missouri	Metro areas of St. Louis and Kansas City may select any cutoff date between 8/1 and 10/1.
3	8/15	Alaska	
4	8/31	Delaware	
		Kansas	
		North Dakota	In ND, children born between 9/1 and 12/31 can be enrolled early upon passing screening tests approved by the State Department of Education.
		Arizona	
		West Virginia	
5	9/1	Alabama	
		Florida	
		Georgia	
		Idaho	

[9] State Characteristics: Kindergarten, *Education Commission on the States, ECS Information Clearinghouse*, April 1997. [On-line] Available http//www.esc.org.

Exhibit 1 (continued) Cutoff Dates by State in Order from Earliest to Latest			
		Illinois	
		Minnesota	
		Mississippi	
		New Mexico	
		Oklahoma	
		Oregon	
		South Carolina	
		South Dakota	
		Texas	
		Wisconsin	
6	9/2	Utah	
7	9/15	Iowa	
		Wyoming	
8	9/30	Louisiana	Orleans Parish, LA school district has a 12/30 cutoff date.
		Nevada	
		Ohio	
		Tennessee	
		Virginia	
9	10/1	Arkansas	AR is in the process of phasing in a 9/1 cutoff date over a two-yr. period.
		Kentucky	
10	10/15	Maine	
		Nebraska	
11	10/16	North Carolina	
12	12/1	Michigan	
		New York	In NY, schools can also select 12/15 or 12/31.
13	12/2	California	
14	12/31	District of Columbia	
		Hawaii	
		Maryland	
		Rhode Island	
15	1/1	Connecticut	
		Vermont	Districts in VT can also select 12/15 or 12/31. A bill has been introduced to create a statewide 9/1 cutoff date.
16	*	Colorado	LEA option.
	*	Massachusetts	LEA option.
	*	New Hampshire	LEA option.
	*	New Jersey	LEA option.
	*	Pennsylvania	LEA option.
	*	Washington	LEA option.
Source: Education Commission of the States and the State Departments of Education			

Two National Center for Education Statistics surveys in 1993 and 1995 found nine percent of children in the first and second grades were held back a year before beginning kindergarten, usually at the wish of the parents.[10]

Many teachers and parents believe that holding children back will increase their chances of academic success, despite the fact that "findings of developmental psychology do not demonstrate that one age of school entry is inherently preferable to another."[11] Some teachers encourage parents to hold children back, based on age and gender alone.

Three of the most common correlating factors among those held back are:

- age—the child's "late" birthday (between July-December),
- gender—males are held back more often than females, and
- socioeconomic status—children from lower socioeconomic backgrounds are held back at a higher rater than other children.[12]

Denying entry to students based on age, gender, and socioeconomic background may be detrimental. This is especially true for children from lower socioeconomic backgrounds who may lack high quality preschool and home learning environments, and who need kindergarten the most.

Further, holding children back may lead to higher standards and expectations of children at that level, and thus increase the chances of failure.[13] Both parents and teachers placed more importance on emotional development than academic. NCES's survey found parents have higher expectations regarding readiness for school than do teachers.[14]

Some believe setting readiness standards puts too much blame and responsibility on children and not enough on teachers and schools.[15] The National Association for the Education of Young Children (NAEYC) argues that the problem is not that children are not ready for school, but that schools are not ready for children. (See Appendix A.) They, as well as others, claim that developmentally inappropriate academic expectations and curriculum have been set for kindergarten children.

Regardless of the established cutoff date, some children will always be younger than their classmates. As one professor noted, being the youngest is relative rather than absolute. Changing the cutoff date only establishes a new group of the youngest.[16]

Many teachers and parents believe that holding their children back an extra year before starting kindergarten will help them to be more mature and increase their chances of academic success. However, research has not confirmed this.

Some teachers and parents argue that it is to the child's advantage to wait an extra year to begin school if the child is unable to recite the alphabet or lacks social and emotional maturity. They believe that an extra year will give the child time to become more

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[10] Nicolas Zill, Laura Spencer Loomis, and Jerry West, *The Elementary School Performance and Adjustment of Children Who Enter Kindergarten Late or Repeat Kindergarten: Findings From National Surveys*, NCES 98-097, U.S. Department of Education. National Center for Education Statistics, 1997, p. vi.

[11] Ibid, p. 2.

[12] Ibid, p. 4.

[13] R. Charlesworth, "Behind" Before They Start?, *Young Children*, March 1989, pp. 5-13.

[14] NCES, p.6.

[15] L. Darling-Hammond and B. Falk, "Alternatives to Grade Retention," *Resources for Restructuring*, National Center for Restructuring Education , Schools, and Teaching, 1996.

[16] Graue, p. 10.

knowledgeable and mature, thus increasing his or her chances of academic success upon entering school.[17] In addition, some parents want children, particularly boys, to be as old as possible to compete in athletics in later years.

Many parents have begun holding their children back, even if they are legal age, because of this belief. Affluent parents especially have used this strategy to help give their children an edge in hopes of helping to put their kids at the top of the class and increase their chances to get into prestigious colleges.[18]

Conversely, lack of certain abilities and desire to increase academic success are also the reasons given for children to begin school as early as possible. Others argue that those who are lacking in those areas by the end of the fourth or fifth year are the ones who need kindergarten the most. As a report by the Southern Regional Education Board points out, this is especially true for children from disadvantaged environments who are likely to end up even farther behind their peers if school entry is delayed.[19]

As many have noted, tremendous development occurs between ages four and 10, and children who are held back a year may lose out on the opportunity to foster that development. Current research on brain development favors children entering school as early as possible to take full advantage of the developmental potential of the early years.

Research indicates that those held back perform higher on standardized tests than others in the first and second grades, but those differences even out by third or fourth grade, or diminish entirely. [20]

In addition, most researchers have found that the differences are statistically insignificant. A 1995 National Center for Educational Statistics (NCES) survey on first and second grade students who entered kindergarten late concluded that they did no better than other students. It further concluded that there was no "evidence that children who may have been at increased risk of experiencing difficulties in school benefited from (or were harmed by) delayed kindergarten entry." [21]

Other research indicates there may be advantages in the short run, but in the long run holding children back may do more harm than good. Problems such as higher drop-out rates and behavior problems in adolescence have been associated with children who were held back. [22]

The SREB and other national organizations warn that standardized testing is an inappropriate means of determining school readiness.

In addition to age, many schools now use standardized tests to determine kindergarten readiness. Many of the instruments are unreliable and lack validity, which leads to misidentification of students. As a result many students are discouraged from entering, who otherwise would have made satisfactory progress.

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[17] Diane Long, "The Later Kid Starts School, the Better," *Tennessean*, December 2, 1996.
[18] Shepard, p.88.
[19] Southern Regional Education Board, *Getting Schools Ready for Children: The Other Side of the Readiness Goal*, 1994, p.20.
[20] L. Rusch, "Delaying Kindergarten: New Evidence Suggests There's no Reason to Hold Your Child Back," *Parents*, April 1998, p. 130.
[21] NCES (November 1997), p. vi.
[22] Ibid, p. 4.

Opponents of standardized tests to determine kindergarten readiness argue that the tests do not give an accurate assessment of a child's ability.[23] Many also believe that requiring students to achieve a certain score on tests is too narrow a criterion to be used during a time of tremendous developmental change for children, even on a monthly basis.[24] Because of the fluidity and varying rates of development, experts suggest schools should provide developmentally appropriate curricula to accommodate different levels of learning and development.

"Developmentally appropriate" is defined in a report by the National Conference of State Legislatures (NCSL) as practices that "consider all factors – age, developmental stage, learning style and appropriate curriculum."[25] The report states that "developmental stage" includes cognitive, emotional, social, and physical functioning, as well as age.

The National Association for the Education of Young Children (NAEYC) states in its position statement regarding school readiness: "Raising the legal entry age is a misdirected effort to impose a rigid schedule on children's growth."[26]

Experts suggest improving the ecological forces such as health care, childcare, and access to quality preschool programs in the first four years of a child's life as the best way to prepare children for school.

Research consistently shows that factors such as prenatal care, education of the mother, preschool attendance, and health care have a significant impact on a child's readiness to begin school.

To achieve these goals NCSL, NAEYC, Educational Goals 2000, and the Carnegie Foundation all recommend addressing the health care needs of children and families and improving access to preschool programs prior to kindergarten to prepare children for school. To improve readiness they suggest ensuring that all children have basic health care, including prenatal care and childhood immunizations, economic security, basic nutrition, adequate housing, family support services, and access to high-quality early childhood programs.

The focus on early development as the solution to school readiness is reiterated by the National Education Goals Panel (NEGP) and Goals 2000, established by President Clinton and 50 state governors in 1990, which became an independent federal agency with the passage of *Goals 2000: Education America Act* in 1994. (See page 2.)

The NAEYC's solution to readiness goes further to address inequities and differences that impact readiness. NAEYC's Position Statement for promoting school readiness requires:

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.

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[23] SREB, p. 13.
[24] Ibid, p. 10.
[25] Shelley L. Smith, Mary Fairchild, and Scott Groginsky, *Early Childhood Care and Education : An Investment That Works*, National Conference of State Legislatures, January 1997, p. 24.
[26] NAEYC, p. 2.

The Carnegie Foundation encourages parent and community involvement/responsibility. It suggests:

- Promoting responsible parenthood;
- Guaranteeing quality child care choices;
- Ensuring good health and protection; and
- Mobilizing communities to support young children and their families.

These federal and national organizations, along with the SREB, claim that investments in programs that promote the health and well-being of children, and access to preschool programs and schools with developmentally appropriate curricula, are more likely to improve readiness of children to learn than increasing the entry age to kindergarten.

Two of the indicators used to measure progress toward school readiness by the National Education Goals Panel toward Goals 2000 based on these criteria are the number of low birth-weight babies and percentage of children immunized. Since 1990, the number of low birth-weight babies in Tennessee has increased from 82 to 87 per 1,000. However, the percentage of children receiving immunizations has increased by five percent from 74 percent to 79 percent.[27]

Tennessee lacks sufficient preschool programs to serve children ages three and four. In 1997, Tennessee passed the Early Childhood Education Plan to provide preschool services to all three- and four-year old children who qualify. The State Board of Education estimates that 12,000 of the 45,000 at risk three- and four-year-olds do not have the opportunity to participate in any early childhood education programs. Head Start serves only about 30 percent of eligible children.[28]

Recommendations

Legislative

In an effort to improve school readiness for Tennessee students, the General Assembly may wish to:

- Consider the findings of available research in determining whether to revise the current kindergarten cutoff date.
- Consider other states' cutoff dates because of the effect on students moving into or out of Tennessee.
- Explore ways to improve access to high quality and developmentally appropriate preschool programs that prepare children for school.

Administrative

The State Board of Education and the Department of Education should consider the following to address issues of school readiness:

- Evaluate current kindergarten curriculum to ensure that it accommodates various levels of development and that kindergarten programs are developmentally appropriate for the social, emotional, and intellectual needs of young children.

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[27] *National Education Goals: Building a Nation of Learners*, The National Education Goals Panel, May 28,1998, [On-line] at http//www.negp.gov/negp_cf/search2.cfm.

[28] Tennessee State Board of Education, *Master Plan for Tennessee Schools: Preparing for the 21st Century*, 1997.

- If standardized tests are to be used, ensure that tests are developmentally appropriate and that administrators of the test are adequately trained.
- Keep data on number of children tested, demographics, and number of delayed entries into kindergarten based on readiness tests.
- Establish guidelines for helping school systems' readiness.

Appendix A

NAEYC Position Statement Adopted July 1990
Revised 1995

NAEYC Position Statement on School Readiness

Preamble

National, state, and local efforts to reform education continue to raise concern regarding children's "readiness" to enter kindergarten and first grade. The issue first gained national prominence with the adoption of the National Education Goals including as Goal 1, "by the year 2000, all children will start school ready to learn." Traditionally, the construct of school readiness has been based on the assumption that there is a predetermined set of capabilities that all children need before entering school. The National Education Goals Panel, however, recognizes that children's early learning and development is multidimensional, complex, and influenced by individual, cultural, and contextual variation (Kagan, Moore, & Bredekamp, 1995). Therefore, any discussions of school readiness must consider at least three critical factors:

1.the diversity of children's early life experiences as well as inequity in experiences;

2.the wide variation in young children's development and learning; and

3.the degree to which school expectations of children entering kindergarten are reasonable, appropriate, and supportive of individual differences.

Position

The National Association for the Education of Young Children (NAEYC) believes that the commitment to promoting universal school readiness requires

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.
The traditional construct of readiness unduly places the burden of proof on the child. Until the inequities of life experience are addressed, the use of readiness criteria for determining school entry or placement blames children for their lack of opportunity. Furthermore, many of the criteria now used to assess readiness are based on inappropriate expectations of children's abilities and fail to recognize normal variation in the rate and nature of individual development and learning. NAEYC believes it is the responsibility of schools to meet the needs of children as they enter school and to provide whatever services are needed in the least restrictive environment to help each child reach his or her fullest potential.

Every child, except in the most severe instances of abuse, neglect, or disability, enters school ready to learn school content. However, all children do not acquire the competence needed in the school setting. The absence of basic health care and economic security places many children at risk for academic failure before they enter school. Families who lack emotional resources and support are likewise not always able to prepare their children to meet school expectations.

It is a public responsibility to ensure that all families have access to the services and support needed to provide the strong relationships and rich experiences that provide children with a foundation for all future learning. At a minimum such services include basic health care, including prenatal care and childhood immunizations; economic security; basic nutrition; adequate housing; family support services; and high-quality early childhood programs.

Supporting families' childrearing efforts is critically important for ensuring that more young children enter school ready to succeed. But, such efforts address only half of the problem. Attention must also be given to ensuring that the expectations used to determine readiness are legitimate and reasonable.

Expectations of the skills and abilities that young children bring to school must be based on knowledge of child development and how children learn. A basic principle of child development is that normal variability includes a wide range of competence within an age group. Children's social skills, physical development, intellectual abilities, and emotional adjustment are equally important areas of development, and each contributes to a child's adaptation to school life. Within any group of children, it is likely that one child will possess advanced language and social skills, but be physically and emotionally less mature than is typical of the age group. Another child may have well-developed skills in large and small muscle control but be less advanced in language abilities. Other children will present still different configurations of development. When readiness expectations are based on a narrow range of skills and competencies, and focus on only a few dimensions of development, the true complexity of growth is overlooked and children whose development is well within the normal range may be erroneously characterized as inadequate.

Wide variability also exists in the rate of children's growth. The precise timing of when a child will achieve a certain level of development or acquire a specific skill cannot be predicted, nor does development and learning occur in a uniform, incremental fashion. Raising the legal entry age is a misdirected effort to impose a rigid schedule on children's growth in spite of normal differences. Similarly, holding an individual child out of school a year is often an attempt to ensure that the child is "more ready" for the program, but such a strategy assumes that children should fit a set of rigid expectations rather than that programs need to adapt for children's individual variation.

A prevalent, fundamental misconception is that children's learning occurs in a rigid sequence and that certain basic skills must exist before later learning can occur. In fact, much of children's learning is from whole to part. Children's acquisition of higher order thinking processes and problem- solving abilities occurs in tandem with and may outpace acquisition of "basic" skills. For example, children are able to comprehend far more complex stories than they can produce. While the beginning acquisition of basic literacy and numeracy skills is important, these abilities are unlikely to flourish when presented out of context as isolated skills. To focus only on sounding out letters or forming letters properly on the lines ignores children's complex language capabilities, often squelches their burgeoning interest in reading and writing, and deprives children of the meaningful context that promotes effective learning.

Because learning does not occur in a rigid sequence of skill acquisition and because wide variability is normal, it is inappropriate to determine school entry on the basis of acquiring a limited set of skills and abilities. Schools may reasonably expect that children entering kindergarten will be active, curious, and eager to learn. They will know some things about themselves, and will be interested in making friends and sharing experiences with them. Although gaining in self-control, kindergarten children's enthusiasm will sometimes overwhelm them, as, for example, they call out an answer before the teacher calls on them. First graders, unless they have had extremely negative previous experiences, usually bring enthusiasm and curiosity to their work. Typical six-year-olds are gaining fine motor control, but for many, writing within narrow lines can still be difficult. Likewise, six year olds are gaining in their ability to move beyond their own first hand experiences to abstract reasoning, but the here and now remains the most meaningful and interesting.

It is often assumed that tests exist to reliably determine which children are "ready" to enter school. Because of the nature of child development and how children learn, it is extremely difficult to develop reliable and valid measures of young children's abilities. Preschool children, by nature, are not good test-takers. When tests are used to make decisions that have significant impact on children's lives, such as denial of entry or assignment to a special class, the tests must offer the highest assurance of reliability and validity. No existing readiness measure meets these criteria (Meisels, 1987). Therefore, 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.

Today, not only do many kindergartens and primary grades focus on skill acquisition in the absence of meaningful context, but the expectations that are placed on children are often not age-appropriate. Whether the result of parental pressures or the push to improve student performance on standardized tests, curriculum expectations of older children have been pushed down to earlier grades. Children entering kindergarten are now typically expected to be ready for what previously constituted the first grade curriculum. As a result, more children are struggling and failing.

Even those children who have received every advantage prior to school entry find the inappropriate demands difficult to meet, often experiencing great stress and having their confidence in their own capacities as learners undermined. Because parental expectations are among the most powerful predictors of children's adjustment to school, parents' perceptions of their children's experience of struggle and failure have serious long term implications.

Making Schools Ready for Every Child

Providing a Foundation for Later Learning

The nature of children's development and learning dictates two important school responsibilities. Schools must be able to respond to a diverse range of abilities within any group of children, and the curriculum in the early grades must provide meaningful contexts for children's learning rather than focusing primarily on isolated skills acquisition. Children who come to school with a history of rich experiences -- being read to frequently, going to the store with their own grocery list, dictating or writing letters to grandparents, taking trips to the park or the zoo, and so on -- have a rich background of firsthand experience upon which later learning can be based. These experiences depend on families having sufficient time, energy, financial, and emotional resources. Given the growing numbers of young children who spend major portions of their day outside their home in early care and education settings, it is equally critical that all early childhood programs offer these types of rich experiences as well.

Early intervention services provide families with an array of comprehensive support services to help them provide the rich environment so critical for early learning. The federally funded Head Start program is the best known example of this type of program; a number of states and communities offer variations on the theme that have proven effective. Effective intervention efforts have several key elements:

1.they provide comprehensive services to ensure that a wide range of individual needs is met;

2.they strengthen parents' roles in supporting their children's development and learning;

3.they provide a wide array of firsthand experiences and learning activities either directly to children or through parent participation.

Intervention efforts which include these critical elements are most likely to result in lasting improvements in children's achievement. Less effective are the too frequent remedial efforts in which children are drilled on isolated skills. Often, emphasis on drill and practice only causes these children to lag further behind their counterparts. When children learn skills or concepts in meaningful contexts, learning is easier and more likely to transfer to new situations. For this reason, children whose background and experiences are not congruent with school expectations are less able to call upon their own experiences to provide the needed context for school learning.

Making Schools Responsive to Individual Needs

Providing comprehensive services and family support to children prior to school entry will better prepare many children for school's expectations. Because of individual differences in development, however, there will always be variation in the skills and abilities of any group of children entering school. Schools and teachers must be able to respond to such variation by individualizing their curriculum and teaching practices.

Making schools more responsive to the needs of individual learners will require ensuring that teachers and administrators understand how children learn and develop. They must know how to plan and implement a developmentally appropriate curriculum that places greater emphasis on child-initiated, teacher-supported learning experiences than teacher lectures, small group as opposed to whole-group activities, integrated lessons as opposed to strict demarcations between subject areas, and active hands-on learning with a variety of materials and activities as opposed to drill and practice of repetitive seatwork. Rather than imposing rigid, lock-step distinctions between grades, schools must be able to offer continuous progress for children through the primary grades, recognizing that children's developmental timetables do not conform to the yearly calendar.

Making the necessary changes will require new understanding and resources. In addition to ensuring that teachers of young children have specialized training in child development and early education, class size should be reduced and additional adults available to ensure individualized instruction. Investments in classroom equipment and materials are also needed so that children have access to a wide array of materials and activities for hands-on learning.

The investment and commitment needed to ensure that every child enters school ready to succeed and that schools are effective in educating every child will not be small. But, it is essential. For too long we have enabled educational achievement for the very few. We have used labeling as a sorting mechanism and allowed too many children to fail. This nation can no longer afford such costly errors of exclusion. We must provide every child with the firm foundation so critical to learning in school and we must ensure that schools are prepared to meet the needs of individual children as they arrive at the school door. Only then will our nation be ready to enter the 21st century.