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ABSTRACT

This report details efforts that states in the Southern Regional Education Board (SREB) region have made to reach educational benchmarks for the year 2000. It focuses on readiness-for-school initiatives, such as preschool programs, and how schools in the SREB are advancing in this area. The report looks at student achievement, assessment of achievement, and how states are changing the tests they use to measure achievement. It examines the dropout rate and the successes in reducing student attrition, and discusses ways to further reduce the number of students leaving school. Significant progress has been made in cutting dropout rates and increasing enrollment, but it is unlikely that any SREB state will reach the goal of 90 percent of all students (25 and older) having high school diplomas by 2000. Higher percentages of high school graduates have completed a college preparatory curriculum. SREB states have raised standards for vocational students by increasing mathematics and science requirements. SREB states are also working to ensure that the percentage of adults attending college will equal or surpass national averages, and for those students who do attend college, SREB states will increase the quality and effectiveness of colleges and universities, with particular emphasis on the performance of undergraduate students. Central to these goals are efforts to improve teacher education, to improve teacher pay, and to enhance school effectiveness. (RJM)

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# SREB Educational Benchmarks 1998

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# Is Education Improving?

*“There needs to be no mystery about the quality of education in the year 2000. Education in the year 2000 depends upon our actions in each of the todays and tomorrows until the end of this century. What we do and do not do, not some uncontrollable chain of events, will determine the fate of education.*

*“We need goals for where we want to be in education and mileposts to indicate our progress in meeting them. If we are to instill public confidence and sustain the momentum for improving education, I believe that every state must set goals for education, measure progress in achieving them, report results to the public in clear terms and make a strong case for the support necessary to be successful.”*

Winfred L. Godwin  
Goals for Education (1988)

“... set goals ... measure progress ... report results ... make a strong case for the support necessary to be successful.” This was the straightforward message to state leaders 10 years ago in the SREB’s *Goals for Education*.

*Educational Benchmarks 1998* is the fifth biennial progress report on the 12 goals put forth by the SREB. Each SREB state has made progress, but each might have to conclude:

**We have made progress — and, in several areas, remarkable progress — but in no case can we claim that we have reached our goals.**

Every SREB state has taken actions aimed at getting youngsters ready for school; improving student achievement; reducing dropout rates and increasing the percentage of people who have high school diplomas; and better preparing students for college and work. Legislative actions have spurred schools and colleges to be more accountable and to report their progress to the public through “report cards.”

State leaders, teachers, school administrators and parents have reviewed school curricula and defined what all students should know and be able to do. States are phasing out the go-nowhere “general” curriculum and offering students the SREB’s *High Schools That Work* vocational programs with a stronger academic core. State assessment programs are being tied more directly to what students are expected to learn. States are identifying low-performing schools and high-performing schools. Then states are providing assistance to help low performers improve and are rewarding high performers and schools that are improving.

More SREB states base a portion of funding for higher education on performance. Several states have simplified the process of transferring from one college to another. States have tried to make higher education affordable by limiting tuition increases and expanding state-funded scholarship and loan programs.

SREB states can claim passing grades on policy actions to improve education. But what about the results? There are some signs that these policy actions are succeeding.

More children are in preschool and kindergarten programs; there are modest gains in student achievement, as measured by national and state assessments; the number of students taking challenging high school courses has increased; and more students are attending two- and four-year colleges.

The downside, however, is that SREB states' actions to improve education have not resulted in the dramatic improvements that many leaders had expected. For example:

- The school dropout rate is significantly lower than it was in the 1980s, but it has not changed since 1993.
- Adult literacy is still a major problem. More than 1.5 million young adults did not complete high school.
- There are still too many college freshmen who must take remedial courses, even though more students are taking college preparatory courses. State average scores on college admissions tests have improved only moderately.

Are the goals established by the SREB 10 years ago impossible to reach? I think not.

Reaching goals to reduce the dropout rate, raise student achievement and prepare more young people in postsecondary education programs is taking longer and is more difficult than most states assumed.

This difficulty is partly because so many aspects of education improvements are connected. Because students will be expected to take more challenging high school courses in college preparatory programs, middle schools must revise their programs. High schools have made real progress in getting many more students to take courses with challenging titles, but now the focus must shift more to what is taught in these courses. Remedial problems in the upper grades, and even in college, are connected to the early grades, particularly to reading and the skills learned in the first three grades.

Low expectations and low achievement are continuing problems, especially for students in urban schools and across the rural South. The last decade of education reform too often has left these students behind. Low achievement and high dropout rates remain perplexing, and modest gains leave us frustrated.

Some of the educational goals put forth by the Southern Regional Education Board are clearly within our reach; others will require more time and continued efforts. Kentucky serves as a good example of the time and persistence required to make lasting improvements in education. Perhaps no education initiatives have been more watched and studied than the sweeping education reforms adopted in Kentucky in 1990. Implementing these reforms has

taken years, and state leaders have shown the will to stay the course with the reforms while making adjustments as needed. In some cases it has taken several years after a policy's adoption for measurable improvements to begin to show. But Kentucky is seeing results.

Now is no time to flinch. The steps needed to reach educational goals have not changed. State leaders must be sure that there are comprehensive policies ensuring a balance between local control and state standards that demand accountability and public reporting of results.

We will not accomplish these goals without maintaining the needed investment in education. While the SREB states spend more on education now than 10 years ago, they have more students and, in fact, education now accounts for a smaller proportion of state and local budgets.

We urge state leaders to balance persistence and patience. The condition of education in the SREB states is better in 1998 than a decade ago. With hard work the condition of education will be better a decade from now.

**Mark Musick**  
**President**

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Permission is granted to reproduce this report in whole or in part. More detailed state-by-state data on many of the indicators used in the report can be found on the SREB Web site ([www.sreb.org](http://www.sreb.org)) under Education Data.

SREB

# Educational Benchmarks 1998

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# READINESS FOR SCHOOL

BY THE YEAR 2000—

## *All children will be ready for first grade*

The changes in early childhood education in the South may appear gradual, but the parent of a 5- or 6-year-old today would not recognize the early childhood education of 50 years ago, or lack of it. Public kindergarten was not widespread in the South a half-century ago. Compulsory school attendance began at age 7 or 8. State-funded prekindergarten programs did not exist.

Today, children must begin school at age 5 or 6 in two-thirds of the SREB states. Every SREB state provides access to public kindergarten; in more than half of the SREB states, 95 percent of first-graders have attended public kindergarten. The number of children in prekindergarten has more than doubled since 1990.

Success in school depends on a strong start. State leaders are doing the right thing when they ensure that children have access to quality preschool programs that provide a solid foundation for learning. SREB states are getting smarter about school readiness. They are building on the federally funded Head Start program — adding state programs to help children not served by Head Start or extending the half-day Head Start program to a full day.

In the SREB region during the 1990s:

- The number of children under 5 has outpaced national growth.
- Increases in the number of children in poverty have been slower than the national increase.
- Increases in publicly funded prekindergarten programs have outpaced the national increase. In fact, state-funded prekindergarten enrollment in the SREB states now accounts for half of the public prekindergarten enrollment in the nation.

Spending tax dollars on early childhood education is one of the wisest decisions state leaders can make. To meet the demand (and lower educational and social costs later on) states will need to invest even more. Too many youngsters who start life at a social, economic or educational disadvantage still are not being reached quickly enough to give them the early boost they need to do well in school from the start and to continue that success.

Getting children ready for school often overshadows the second part of this challenge — getting schools ready for children. That part of the challenge is particularly acute in urban areas, where many children come from poor, single-parent families, and in rural areas, where many live in poverty. It is especially important to provide early assistance to those children who are behind in reading and language skills when they enter first grade. Schools must be ready to provide intensive help for children who enter school with learning problems that have not been addressed in preschool.

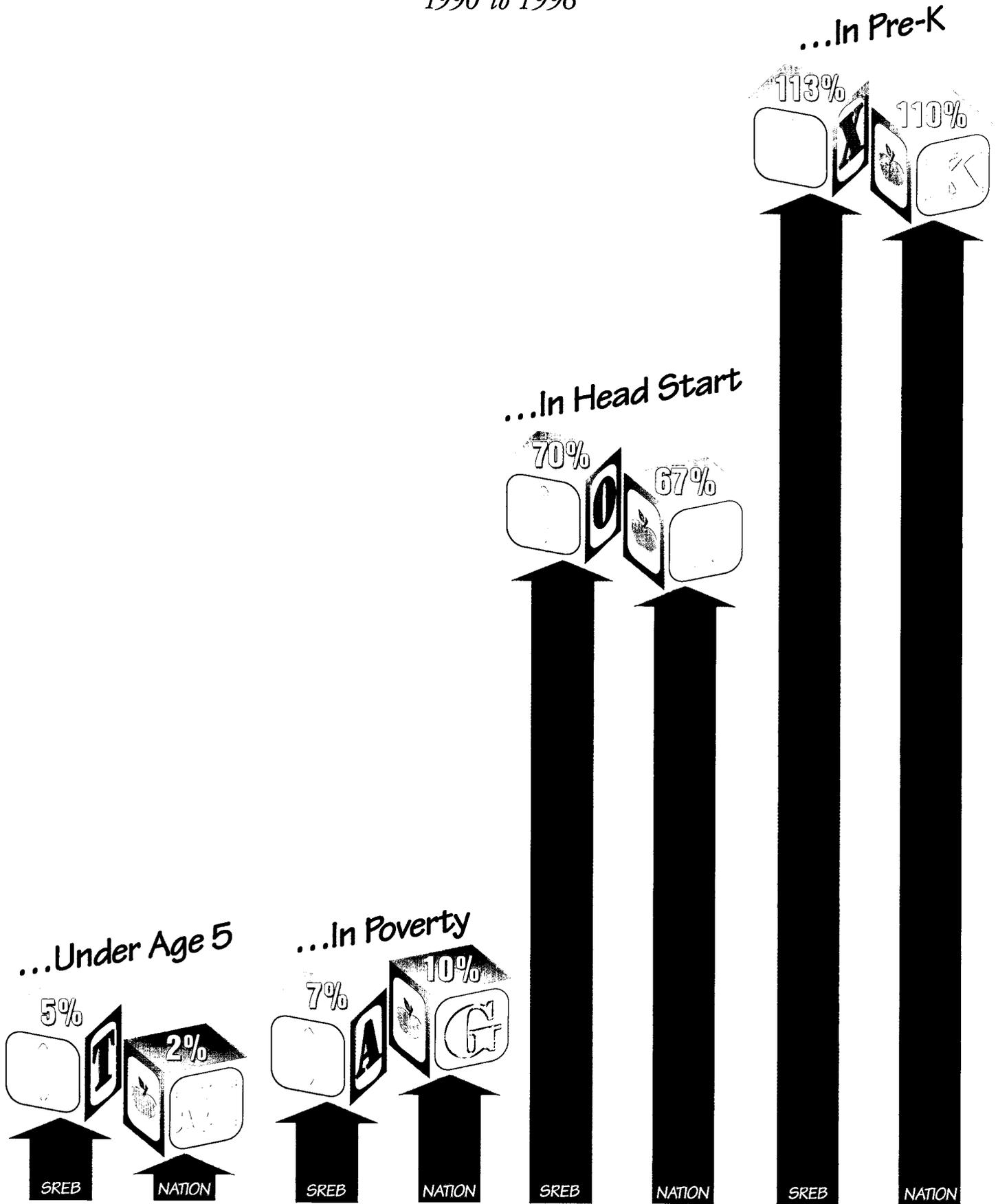
To improve students' skills and achievement in the early grades, schools also must be ready for children who come to them from high-quality preschool programs. If schools are not ready, the preschool gains can be lost. Better education in communities means less crime, less remedial education, less welfare and higher productivity for our states and nation.

## *How are SREB states doing?*

- ✦ Head Start enrollment in SREB states has increased by two-thirds since the mid-1980s. Almost 260,000 children are being served through Head Start programs. Even with the dramatic increases in the number and percentage of children served, Head Start programs provide services to only about 30 percent of the eligible children.
- ✦ In addition to Head Start, every SREB state has some kind of state-funded program for preschool children. These initiatives range from pilot programs (such as that in Alabama) to funding prekindergarten for all 4-year-olds in Georgia, America's most ambitious preschool program.
- ✦ State-funded preschool programs in Florida, Georgia and Texas now serve as many children as Head Start — or more. South Carolina's program serves almost as many. No SREB state could make that claim in the 1980s. These state-funded programs build on Head Start programs to provide extended services and to expand the number of at-risk children being served.
- ✦ Of the almost 3 million children ages 3 and 4 in the SREB region, about 24 percent live in poverty and about 22 percent attend public prekindergarten programs. The number of children attending prekindergarten programs exceeds the number of children living in poverty in Georgia, Kentucky, Maryland, Mississippi and Texas. Head Start and most state-funded programs serve children who are "at risk" because they are disabled or live in poverty.
- ✦ Every SREB state now makes public kindergarten available for all children. In the last decade, public kindergarten enrollment has increased by a quarter of a million in the SREB states. More than 90 percent of children who enter the first grade in every SREB state have attended public kindergarten. That was not the case 10 years ago.
- ✦ Several SREB states now have policies that aim to sustain progress children make in preschool and provide extensive early-intervention programs for children in primary grades.
- ▭ About 80 percent of children under 4 years old have received recommended vaccinations in 10 of the SREB states. While most SREB states have increased the proportion of children immunized to the national average or higher, almost 20 percent of children are not receiving recommended vaccinations. That means there is much work to be done. Immunization rates for children under 4 years old in the SREB states range from 70 percent in Oklahoma to 84 percent in South Carolina.
- ▭ Too few states monitor and report how many children are promoted or retained in their first years in school. Even in the absence of state policies on promotion and retention, it is important to know how young children are progressing in the early grades.
- ▭ Research shows that children who are not reading at grade level by the end of third grade will continue to fail. Even with the growing emphasis on reading in many states, more attention needs to be focused on intensive early help on reading skills.

# Percent Change in Number of Children...

1990 to 1996



### *What do we know about the importance of preschool programs?*

Children who live in poverty enter school less prepared than children from middle- and higher-income families. They are less likely to have the social and literacy skills of children from families with more advantages. High-quality preschool programs aim to help these children get ready for school.

Georgia's ambitious preschool program provides instructional services for all 4-year-olds and coordinates family services for low-income children. Georgia's Office of School Readiness oversees the program. A study that followed Georgia children who entered school after participating in the preschool programs showed positive effects. Children who were in the program were better prepared for school and had higher attendance and promotion rates than those who were not in the program.

Kentucky's preschool evaluation found that the program made a difference for low-income children. Based on teacher ratings of school readiness (academic and language skills), low-income students who participated in the program were as prepared for school as children who were not at risk. The Kentucky evaluation

also shows that children who were in the program continued to do as well as other children academically and socially as they grew older.

An evaluation of prekindergarten programs in Texas showed that students who attended prekindergarten were less likely than those who did not attend to be retained or to be referred for special education programs. Students who attended prekindergarten were closer to being on grade level in reading than those who did not. When compared with students with similar characteristics who did not attend prekindergarten, students who attended prekindergarten scored higher on the Texas Assessment of Academic Skills third-grade tests in reading and mathematics. Even so, these at-risk students were still below the average for all third-graders in Texas.

These and other studies document the benefits of prekindergarten programs. But some studies indicate that these benefits may fade over time, especially in the early years, unless schools have strategies to sustain the progress these youngsters make in prekindergarten programs.

### *What is done to help children who are not ready when they begin school?*

Appropriate assessments of young children can inform educators and families about the individual strengths and needs of children. In most SREB states, local districts and schools decide how to assess readiness for school. Several states provide local districts and schools with formal guidelines for assessing readiness. The results of these assessments are used to plan instruction, to place children in an appropriate curriculum and to assess the impact of programs designed to improve the percentage

of children who are ready for school. But different assessment techniques and definitions of readiness yield results that are not comparable, even within states.

In 1979 South Carolina began using a uniform method to assess the readiness of children when they enter school. The initial results were alarming. Only 60 percent of the children met the school readiness standard. Over the years, South Carolina has used the results of the readi-

ness assessment to find ways to increase the percentage of children ready for school, including initiatives that resulted in structured prekindergarten programs for 4-year-olds and family literacy programs. By 1997, 80 percent of first-graders met the school readiness standard.

One-on-one instruction, extended school days, transitional programs that allow children an extra year to develop and improve their skills, and programs that let children progress at their own pace from first through third

grade are among the strategies used to help students who enter school unprepared.

Research shows that the odds are heavily against any child not reading at grade level by the end of third grade. In 1997, legislatures in Arkansas, Florida, Louisiana, Oklahoma, South Carolina, Tennessee, Texas and Virginia took actions aimed at improving reading in the early grades. Much of the legislation focuses on intensive early intervention and ties promotion from grade to grade to students' reading levels.

*What should you know about school readiness programs in your state?*

- How does your state define an at-risk child?
- Using that definition, how many at-risk children are in your state?
- How many of these children are in programs that help them?
- Are programs that provide health, social and educational services for children and their families coordinated and easy to use?
- What are your state's early intervention strategies and practices for children? Are they working?
- Has your state implemented and funded staff development programs to better prepare staff for preschool programs? Are the programs working?

**Characteristics of Effective Preschool Programs**

- low child-to-staff ratio (10:1 recommended)
- staff trained in early childhood education and child development
- learning activities based on the latest research in early childhood education

## STUDENT ACHIEVEMENT

BY THE YEAR 2000—

*Student achievement for elementary and secondary students will be at national levels or higher.*

“We have made improvements. Student achievement scores are up a bit. Test scores are not lower. More students are scoring at higher levels. We are certainly not yet where we want to be.”

This statement may be an honest summary about student achievement in most SREB states. Every statement of progress seems to be followed by a “but.”

- More students in SREB states are scoring at the proficient level on the National Assessment of Educational Progress. North Carolina and Texas led the nation in gains on the most recent National Assessment of mathematics, and every SREB state that participated had increases over 1990 results, but most SREB states still trail the nation.
- The South has outpaced the nation for years in adding more students and schools to the Advanced Placement Program that offers college-level courses in high schools. But most SREB states need another decade of the kinds of gains made over the last 10 years to reach the national average in the proportion of high school students taking Advanced Placement examinations.
- In many SREB states, high school students are taking more challenging courses than do students in most other states across the nation, but scores on college admissions tests do not yet show the gains that would be expected as a result of more students' taking more college-preparatory courses.
- Average scores of black and Hispanic students on state and national tests are higher, but gaps between racial and ethnic groups are still unacceptably large.
- The national average is a moving target, and especially so for the South. For example, about one-third of the nation's public school students live in SREB states. A 10 percent increase in average student achievement in the SREB states will push the national average up by about 2 percent, even if all non-SREB states have no change.

Every SREB state can point to some measure of student achievement and show improvement compared with 10 years ago. SREB states have taken the lead in improving curricula, raising standards and expectations, and implementing policies aimed at better preparing students for work and college. Even with these improvements, student performance on national assessments continues to trail national averages.

### *How are SREB states doing?*

-  Most SREB states have raised average scores on statewide achievement tests during the 1990s, but there are few instances of dramatic increases in student achievement scores. State averages on the National Assessment of Educational Progress, college admissions tests and other national achievement measures are higher but continue to trail national averages.
-  Every SREB state has increased the percentage of high schools that offer college-level courses through the Advanced Placement Program. The number of students in SREB states who take Advanced Placement examinations almost doubled between 1990 and 1997, reaching a total of more than 155,000. In 1997 Texas had more students taking Advanced Placement examinations than did all SREB states combined in 1984.
-  Students earned scores high enough to earn college credit on almost 60 percent of the Advanced Placement examinations. That means more than 90,000 students in the SREB states entered college in 1997 with advanced standing — almost three times the number of students who took examinations in 1984.
-  All states report student achievement results by quartiles or percentiles or in other ways that help show more than average scores. This helps states monitor the progress of students at all levels and focuses attention on raising achievement for all students, not just raising an overall score.
-  Most SREB states have reviewed or are reviewing their curricula to develop standards in English, mathematics, science and social studies and to link statewide assessment programs more directly to these standards. Every SREB state has identified a list of competencies and skills in reading, writing and mathematics that all high school graduates should have, and every state says that it has (or is developing) ways to assess these competencies and skills.
-  Most SREB states have adopted policies that raise requirements for graduation by increasing the number of required courses in English, mathematics, science and social studies, by specifying that all students complete algebra 1 or its equivalent, and by eliminating the “general” curriculum. The South leads the nation in gains in the percentage of high school graduates completing four years of English and three years each in mathematics, sciences and social studies. Fifty-seven percent of high school graduates in the South completed these academic courses — four times the percentage completing them in the early 1980s. Nationally, 50 percent complete these courses.
-  The proportion of eighth-graders who score at or above the proficient level on the National Assessment of Educational Progress mathematics test is higher now than in 1990. Each SREB state that participated in the National Assessment of mathematics in 1990, 1992 and 1996 shows a higher percentage of eighth-graders at or above the proficient level (signifying solid academic performance at grade level and competency over subject matter), and a higher percentage of students are at the basic (partial mastery) level or higher. North Carolina and Texas led the nation in increases in the percentage of eighth-graders at or above the proficient level. One SREB state (Maryland) was above the national average in the percentage of eighth-graders who were at the proficient level.

-  Gaps in mathematics and science achievement between eighth-graders in the SREB region and those across the nation are troubling. For example, students from low-income families in the SREB states have lower National Assessment scores than low-income students across the nation; students in rural areas and small towns score significantly below students in rural areas nationwide.
-  Fourth-graders in SREB states do better comparatively than eighth-graders. Maryland, North Carolina and Texas had a higher percentage of fourth-graders meeting or exceeding the proficiency standard on the National Assessment than did the nation. More fourth-graders in North Carolina, Texas, Virginia and West Virginia met or exceeded the basic standard than was the case nationally.
-  SREB states also lag behind the nation in science achievement. Twenty-seven percent of the nation's eighth-graders met the proficient standard in science on the National Assessment of Educational Progress. Among the SREB states, Virginia reached the national average. Two-thirds of the SREB states had 20 percent or more at the proficient level.
-  There continue to be unacceptably large gaps in the achievement of students from different racial and ethnic backgrounds. For example, nationally only 4 percent of black eighth-graders and 8 percent of Hispanic eighth-graders reached the National Assessment's proficient level in mathematics, compared with 30 percent of white eighth-graders. This pattern is true in every SREB state.

### *Assessing student achievement*

Educators know more than ever about assessing student achievement. Among the most important lessons learned are:

-  Agreeing on what students should know and be able to do is the first step in deciding how to measure what they know and can do. States differ in how they develop standards for what they believe students should know in English/language arts, mathematics, science and social studies.
-  Every measure of student achievement has strengths and weaknesses. We understand both better than ever. Some tests are better than others, but whatever test is used should measure what students are expected to learn and what teachers are expected to teach. Once a valid, reliable measure is chosen, states must stay the course long enough to have the testing, the instruction and the professional development for
  -  teachers reinforcing each other. Then real improvements can be sustained.
-  Results from tests must tell us more than how a student compares with others. It may be important to know that the typical fourth-grader in your state scores better than 50 percent of the fourth-graders in the nation in reading. However, if most fourth-graders in the nation are not reading at a high level, students could be above the national average but not reading well enough.
-  Setting standards for “how good is good enough” can be controversial and political because standards involve judgments. Many SREB states have established standards by defining what it means to “pass” or be “proficient,” but these standards may not always be what the public, employers and colleges hope for. Comparing results

on state assessments among several states and to an external benchmark such as the National Assessment of Educational Progress can help state leaders answer the question “Are performance standards for student learning in our state high enough?”

- States should work toward setting academic standards high enough to ensure that high school graduates are prepared for work and college, rather than minimum standards that students can meet regardless of whether they are ready for future education or work.

### *How are states changing the tests they use to measure student achievement?*

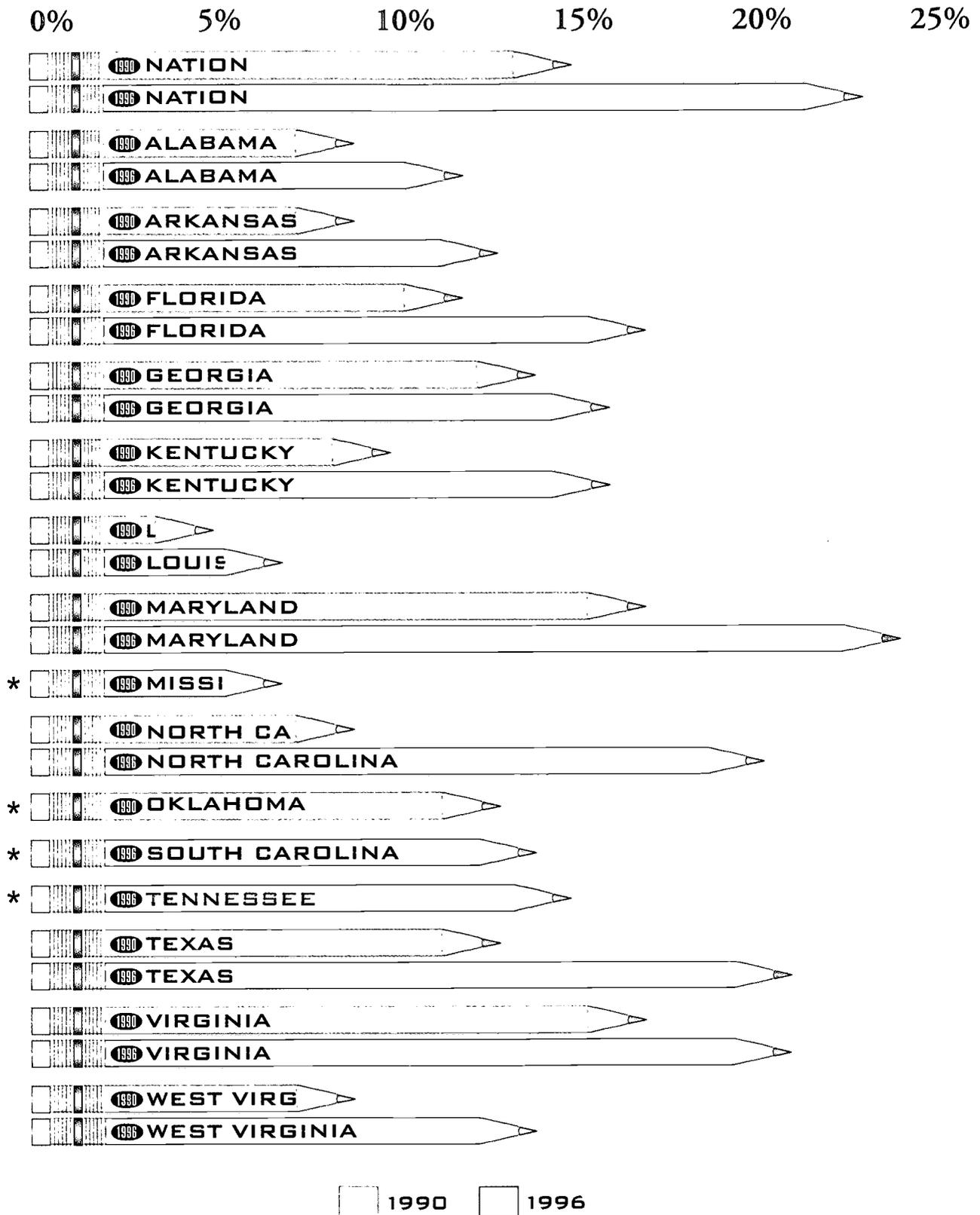
National and state assessments increasingly are comparing students’ performance with a specific standard rather than with each other’s results. Alabama, Arkansas, Maryland, Mississippi, North Carolina, Oklahoma, Tennessee, Texas and Virginia have in place or are developing end-of-course or end-of-grade assessments. These tests are designed to show whether students have mastered the content and skills specified by states for a particular grade or subject. They match a specific curriculum that spells out what students are expected to know and be able to do. Unlike traditional norm-referenced tests, they compare students against a standard of performance rather than simply with each other. Writing samples, short-

answer questions, portfolios and students’ performance on tasks and experiments are being added to make assessments more relevant to teaching and learning.

Tests that are linked directly to what students should know and be able to do after completing a grade or a course can give important information about curriculum and about student performance to teachers, students and parents. One frequently heard comment in states that have end-of-course tests is that courses have a more consistent focus across all districts. Teachers teach and students learn the concepts spelled out in the curriculum, and the test assesses what has been taught.

# How Many Eighth-Graders Are Succeeding in Mathematics?

*Percent of Eighth-Grade Students Who Scored At or Above the Proficient Level on the 1990 and 1996 NAEP Mathematics Assessment*



\*Mississippi, South Carolina and Tennessee did not participate in the 1990 National Assessment. Oklahoma did not participate in the 1996 assessment. Source: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990 and 1996.

# D R O P O U T   R A T E

BY THE YEAR 2000—

*The school dropout rate will be reduced by one-half.*

The South has led the nation in reducing the dropout rate over the last two decades.

Twenty years ago, 19 percent of young people in the South had dropped out of school, compared with 14 percent for the nation. By 1996, the South had reduced its dropout rate by one-third. That is good news and it is progress.

The bad news is that the progress has stalled since the mid-1990s. The most dramatic declines occurred by 1992, when the rate dropped to 12 percent. Even with continuing efforts and programs to reduce the rate further, the rates went back up and have been at 13 percent since 1993.

SREB states have provided local schools and districts with information and resources to develop dropout-prevention programs. We know more about who quits school and why. And we have learned some things about what makes such programs effective. First, it is important to identify students who are most likely to quit school and to help these students before they do. Second, dropout prevention must be a total school effort, not a special program set off to one side.

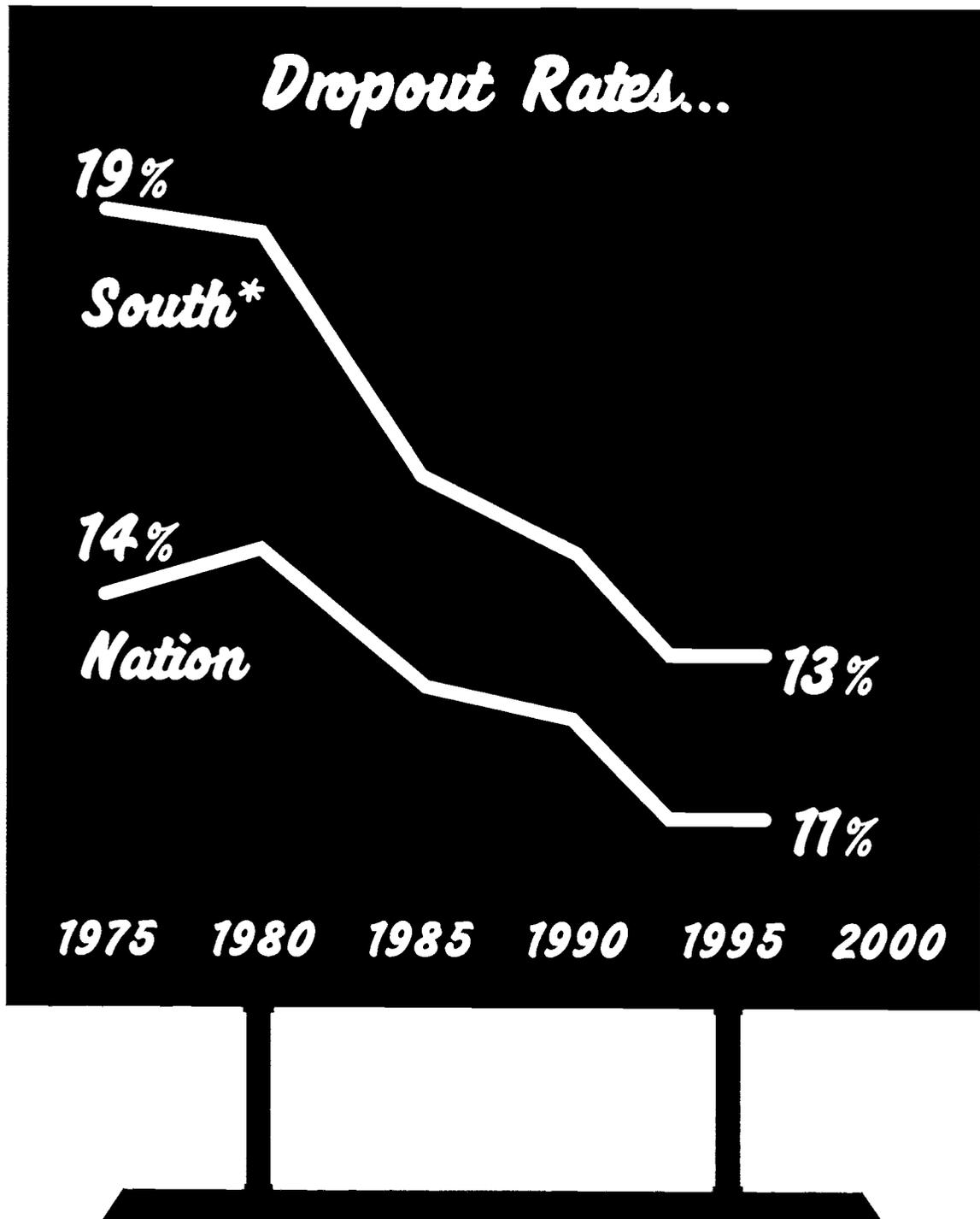
Progress begins by making sure each student has a challenging educational program and teachers who know how to use a variety of methods that help students learn. It is important to provide opportunities for those who drop out to return to school and earn diplomas. Solving the problem also requires the coordination of services among schools and other government and community agencies that work with children and families — coordination upon which state and local leaders have to insist.

Adults without a high school diploma will earn half as much as those with a diploma. They are more likely to end up on welfare or in prison. A high school diploma should signify that students have mastered the knowledge and skills required for success after high school — either in college or in the workplace. Young people with such a diploma will have more options and opportunities than those without one.

## *How are SREB states doing?*

- ✚ Almost all SREB states have seen an increase in the number of young adults who have a high school diploma. Since 1990, the percentage of young people who drop out of school has decreased from 15 percent to 13 percent across the South.
- ✚ All SREB states now disseminate to the public, teachers and schools information on who is most likely to drop out and ways to prevent students from dropping out.
- Of the 3.6 million young people in America not enrolled in or completing high school, 42 percent live in the South, but only about one-third of the nation's high school students are in the South.
- Dropout rates for white students in the South are double those for the Midwest and the North and one and a third times those in the West. Dropout rates for black students are also higher in the South than in other regions of the country. Dropout rates for Hispanic students in the South are lower than for those in the West and Midwest and about the same as for those in the North.
- ✚ All states include dropout rates on school "report cards." Several states report by race and gender. Most SREB states are reporting that fewer students are dropping out of school now than 10 years ago.
- ✚ In 1990, all SREB states were calculating their rates differently. The National Center for Education Statistics has established common definitions that allow states to report comparable data for calculating dropout rates. Now, all SREB states participate in this national effort to collect and report dropout and school-completion statistics according to the same definitions. In 1996, about half of the SREB states (Alabama, Arkansas, Georgia, Louisiana, Mississippi, Texas and West Virginia) were able to provide comparable data for calculating annual dropout rates to the National Center for Education Statistics. Among these states, the percentage of students in grades nine through 12 who were in school in 1994-95 but did not graduate or enroll in 1995-96 ranged from less than 3 percent in Texas to 9 percent in Georgia.
- ✚ Most SREB states provide training in dropout prevention for school administrators and teachers and provide information on successful dropout-prevention programs.
- ✚ Most SREB states have definitions for "truancy" or "excessive absenteeism" that aim to identify students whose lack of attendance makes them more likely to drop out of school.
- ✚ Most SREB states have established state goals for reducing the dropout rate.

# More Students Are Staying In School



\*South includes SREB states, Delaware and District of Columbia.  
Sources: U.S. Census Bureau; National Center for Education Statistics.

### *What do we know about students who drop out of school?*

Among low-income students, the percentage of black students and Hispanic students who drop out is higher than that of white students. But the majority of students who drop out of school are white.

Students who repeat one or more grades also face a greater risk of dropping out of school, as do those with limited English communication skills.

### *What is needed to reduce the dropout rate?*

Knowing who drops out and why is key in developing effective early-intervention programs. Studies show that students who drop out of school do so for many reasons, which fall into three categories:

- School-related: poor attendance, dislike of teachers, poor grades, lack of command of English language
- Job/work-related: finding work to support or assist family, joining the military
- Family-related: need to take care of their own children or younger siblings, marriage, pregnancy

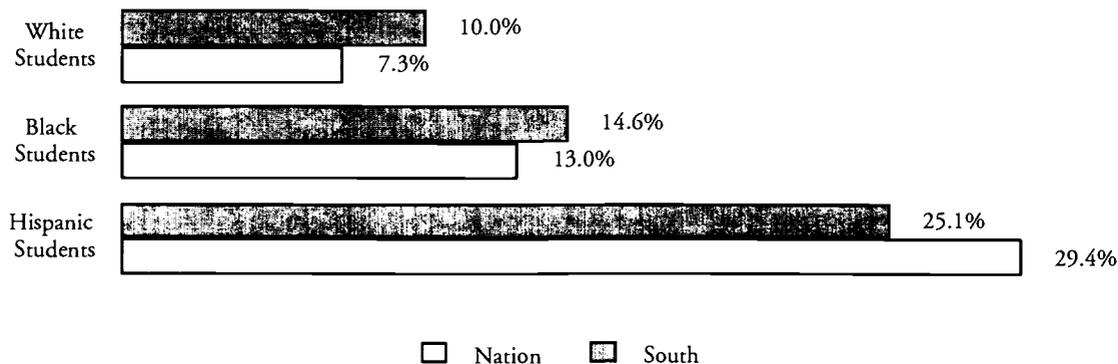
Dropout-prevention programs include most, if not all, of the following characteristics:

- Career training/counseling for students
- Adequate funding
- Training and information for teachers and principals
- Communications and linkages between schools and state and local agencies that serve at-risk students
- Evaluation of programs

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### Dropout Rates, 1996 The South and the Nation

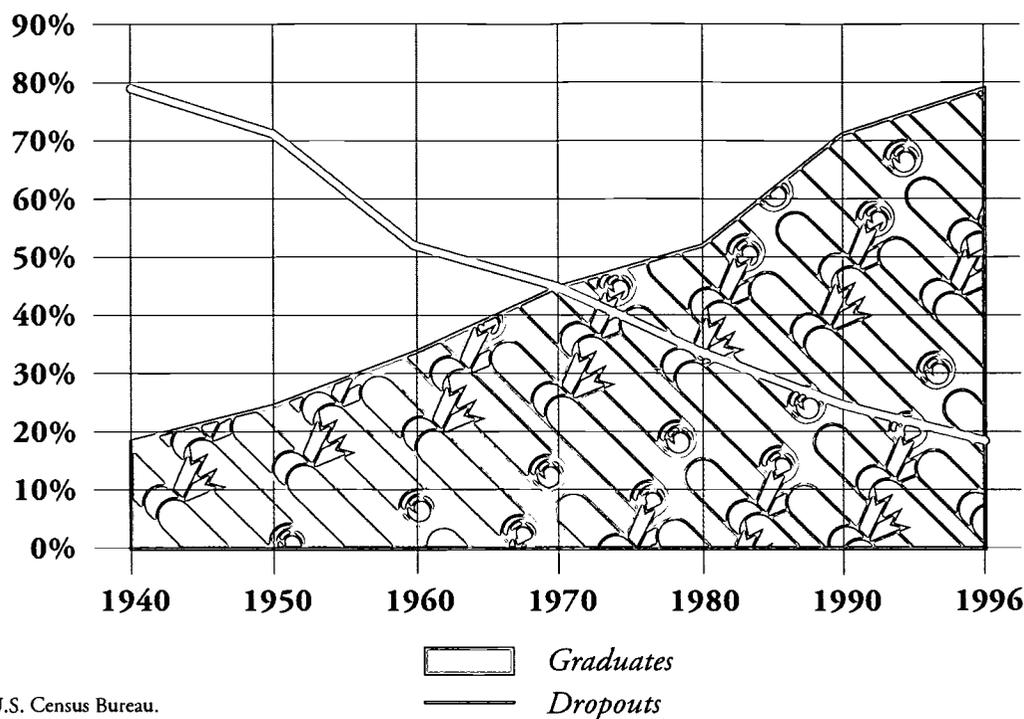
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Sources: National Center for Education Statistics; U.S. Census Bureau

# High School Graduates and Dropouts

*Adults 25 and Older in SREB States*



## *Actions in SREB states to lower dropout rates*

Most SREB states have programs that direct funds to dropout-prevention programs. Some states give recognition to districts or schools that have dropout rates lower than a certain percentage. Dropout rates are considered in the accreditation process and in school-accountability programs that impose sanctions or provide awards.

Workshops and conferences that help teachers understand how to identify and work with at-risk students are available in almost every SREB state. Alabama, Florida, Georgia, North Carolina, South Carolina, Texas and West Virginia conduct workshops in individual schools for teachers.

Several SREB states have policies that create links among different agencies that serve at-risk youths. Alabama, Arkansas, Georgia, Kentucky, Oklahoma, Tennessee, Texas, Virginia and West Virginia have policies that require school enrollment or adequate school progress in order for minors to obtain driver's licenses. Almost all SREB states have agreements with local judicial systems that will prosecute parents whose children are absent excessively. Tennessee has pilot projects under way to create partnerships with schools, courts and communities. Local judicial systems in Alabama, Arkansas, Florida, South Carolina and Tennessee aim to provide early-intervention services in excessive truancy cases. Texas

and Oklahoma have “dropout-recovery” programs that are independently reviewed and evaluated.

Alabama, Florida, Kentucky, Maryland, Mississippi, Texas and West Virginia have teams that routinely evaluate district or school dropout-prevention programs. It is important for states to be able to determine whether program efforts are effective and to build upon the evaluation process. Florida, Maryland, Mississippi and West Virginia require school systems to develop prevention plans and have them approved by the state department of education.

SREB states began these programs to reduce the dropout rates in the 1980s. The

steady decline in the rate from 1980 to 1992 indicates that many of these efforts worked. Yet the reduction in the dropout rate stalled, and the rate inched back up from 12 percent to 13 percent since 1992. What this means is uncertain. Perhaps the dropout-prevention initiatives of the 1980s and early 1990s have reached those students most open to help. Perhaps schools and communities are doing the right things, but not as effectively as possible. In any case, states need to search for ways to improve their efforts to identify those students who are most likely to quit school and to provide them with effective assistance and incentives to stay in school.

# ADULT EDUCATION

BY THE YEAR 2000—

*90 percent of adults will have a high school diploma or equivalency.*

In 1950, only 25 percent of the adult population (people 25 years old and over) in the SREB states had completed high school. Today, that situation has been reversed: Fewer than 25 percent have not completed high school.

SREB states tripled the percentage of adults who complete 12 or more years of schooling in less than two generations. The gap is closing between the levels of education for adults nationally and those in the South. The gap between the percentages of white and black adults with high school diplomas continues to narrow.

More adults in SREB states who did not graduate from high school are enrolling in programs that prepare them for the General Education Development (GED) examinations, and more are taking and passing the exams. States are supporting development of workplace literacy programs offered by business and industry in partnership with colleges and universities.

Significant progress has been made, but, despite successful efforts to cut dropout rates and to increase enrollment in adult education programs, it is unlikely that any SREB state will reach the goal of 90 percent of all adults (25 and older) having high school diplomas by 2000. It is likely 90 percent of young adults (18- to 24-year-olds) will have a high school diploma. That goal already has been achieved in Maryland, and in seven other SREB states 87 percent or more young adults have high school diplomas.

Studies show that half of the people on welfare did not graduate from high school. Half cannot read instructions on an appliance warranty, locate an intersection on a street map or complete an application for a Social Security card. Three of four welfare recipients cannot write a letter explaining a billing error or use a chart to calculate miles per gallon.

Despite efforts to increase participation in programs leading to a high school diploma, SREB states face serious challenges in significantly increasing the percentage of adults with a high school diploma or its equivalent. That challenge is all the more daunting because studies at the state and national levels show that many adults without a diploma do not have the basic skills that are expected at grade six. For example, Florida estimates that 20 percent of all adults there read at or below the fifth-grade level. In Texas, four of five adults participating in adult education programs did not have the reading, writing and mathematical skills necessary to begin secondary education studies. These examples reflect the challenges in most SREB states — increasing levels of basic literacy so that more adults will be prepared for programs leading to a diploma and then attracting them into those programs.

Increases in the number of GED diplomas issued and the establishment of programs to identify and attract adults into secondary education programs are good signs of progress.

## *How are SREB states doing?*

- ✚ In 1996, 78 percent of all adults age 25 and older in the SREB region had a high school diploma. The South is the closest ever to the national average, which stands at 82 percent. Four SREB states (Florida, Maryland, Oklahoma and Virginia) are at or above the national average. In 1940, no SREB state was at the national average in the percentage of adults with a high school diploma, and only Florida was at the national average in 1950.
- ✚ The region has made even more progress in increasing the percentage of young adults (18- to 24-year-olds) with high school diplomas. In 1996, Alabama, Arkansas, Maryland, North Carolina, Oklahoma, South Carolina, Virginia and West Virginia were at or above the national average. Only five states (Arkansas, Georgia, Maryland, Oklahoma and Virginia) were at or above the national average in 1990.
- ☞ 110,000 young adults (18- to 24-year-olds) in the SREB region earned General Educational Development (GED) diplomas in 1996 — 25 percent more than in 1990. The percentage of young adults without a high school diploma in the SREB states who passed the GED examinations increased from 1990 to 1996. But fewer than 10 percent of young adults without a high school diploma earn one through the GED program annually.
- ✚ Since 1980 the percentage of young black adults in the SREB region with a high school diploma has increased from 74 percent to 83 percent, and the corresponding percentage of young white adults has grown from 83 percent to 85 percent.
- ☞ Literacy levels for adults in SREB states are lower than for adults across the nation, and the national picture is a gloomy one. Florida, Kentucky, South Carolina and Texas have conducted surveys of adult literacy using the National Adult Literacy Survey. Adults in these states have lower literacy levels than those nationally.
- ✚ All SREB states have established workplace literacy programs to improve basic skills of working adults and to encourage those without a high school diploma to earn one through GED or other programs.

## *Increases in GED*

In 1996, the South led the nation in the number of people who completed the GED tests — the most widely used alternative route to earning a high school diploma. Since 1991, the SREB region has outpaced the nation in both the number of people tested and the number passing GED tests.

There are about 9 million young adults (18- to 24-year-olds) in the 15 SREB states. About 1.5 million of them (almost one of five) do not have a high school diploma. Even though 110,000 young adults in the SREB region earned GED diplomas in 1996, that number changed the total percentage of young

Table 1  
**GED Credentials Awarded to  
 Young Adults (18- to 24-year-olds)**

	1996	Percent Change 1990-96
Nation	266,920	20.1
SREB states	108,631	25.8
Alabama	4,581	6.6
Arkansas	3,243	10.1
Florida	18,354	13.3
Georgia	9,960	35.0
Kentucky	5,541	3.0
Louisiana	4,165	29.7
Maryland	2,923	-6.2
Mississippi	4,561	59.6
North Carolina	6,397	6.6
Oklahoma	3,708	48.1
South Carolina	2,495	-0.9
Tennessee	6,316	30.9
Texas	29,769	61.3
Virginia	4,387	-16.5
West Virginia	2,230	61.6

Source: American Council on Education

adults in the region with a high school diploma by only one percentage point.

Maryland, South Carolina and Virginia were the only SREB states in which fewer young adults were awarded GED diplomas in

Table 2  
**Percent of Adults with  
 High School Diplomas \***

	Ages 18 to 24 1996	Age 25 and older 1996
Nation	86	82
SREB states	83	78
Alabama	87	76
Arkansas	87	76
Florida	80	82
Georgia	81	77
Kentucky	82	74
Louisiana	82	75
Maryland	93	85
Mississippi	84	75
North Carolina	87	76
Oklahoma	87	84
South Carolina	88	74
Tennessee	83	79
Texas	79	76
Virginia	87	82
West Virginia	89	75

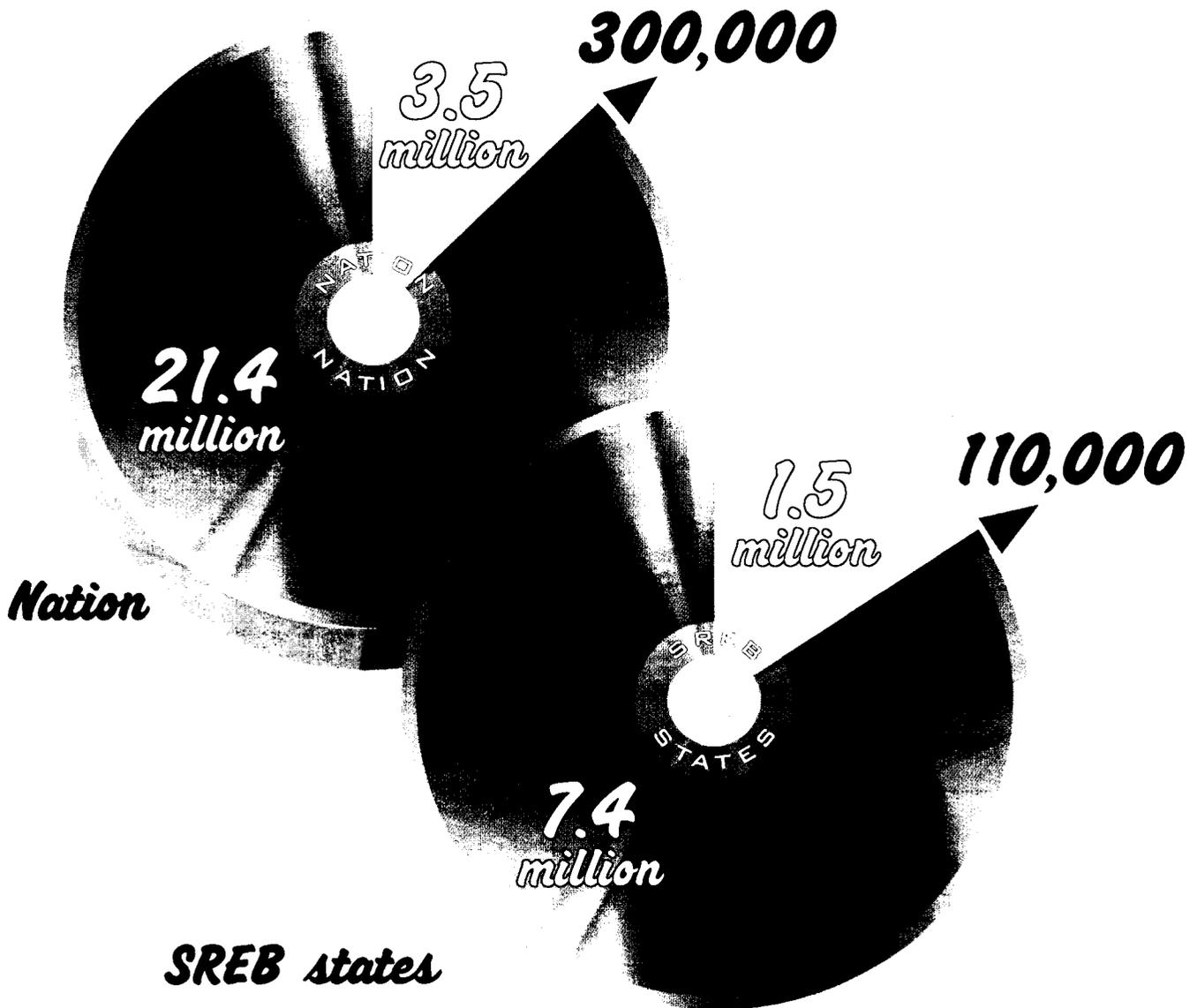
\* includes those earning GED certificates

Source: U.S. Census Bureau

1996 than in 1990. In these states, the percentage of 18- to 24-year-olds who have completed high school already is higher than the national average, and there also was a decline in the number of people in this age group in each of these states.

# Young Adults: Too Many Dropping Out; Too Few Earning GEDs

18- to 24-year-olds in 1996



□ Number with high school diploma

□ Number without high school diploma

■ Number earning GEDs, 1996

### *Efforts to increase adult literacy*

All SREB states have a variety of programs to serve adults without high school diplomas and to develop and serve workplace literacy sites. These actions include:

- Use of technology to provide training and staff development for teachers, administrators and volunteers in local communities
- Delivery of programs to help adults earn high school diplomas using distance learning technologies
- Programs that deliver customized instruction to work sites and use everyday work situations to teach basic skills
- Tax incentives to businesses and industries that support workplace literacy programs
- Special assistance for developing community-based efforts to coordinate educational services for adults
- Cooperative efforts among organized labor, schools and colleges to provide training for workers
- Services to link industries in need of workplace education with local adult-education programs and services

The need for redoubling efforts to increase literacy and to give people the skills and knowledge necessary to participate in a demanding workplace is clear. There must be a dramatic increase in the number of adults working for and obtaining GED diplomas if we are to reduce by any significant amount the percentage who do not have a high school diploma.

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*“... the responsibility for meeting the objective of a literate America must, in the end, be shared among individuals, groups and organizations throughout our society. ... Programs that serve adult learners cannot be expected to solve the literacy problem alone. Many institutions — ranging from the largest and most complex government agency to large and small businesses; from the public school system to the family — all have a role to play in ensuring that adults who need or wish to improve their literacy skills have the opportunity to do so. It is also important that individuals ... come to realize the value of literacy in their lives and to recognize the benefits associated with having better skills. Only then will more adults ... develop the literacy resources they need to function in society, to achieve their goals and to develop their knowledge and potential.”*

Governor Cecil Underwood, West Virginia

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BY THE YEAR 2000—

*Four of every five students entering college will be ready to begin college-level work.*

Compared with 10 years ago:

- Higher percentages of high school graduates have completed a college preparatory curriculum.
- Average scores on college admissions tests are higher.
- More students are entering four-year colleges ready for college-level work.

SREB states have strengthened the high school curriculum for students preparing for college. Many states and local school systems now require all students to complete either a college preparatory or career preparatory program that includes an academic core of English, mathematics, science and social studies courses. Most SREB states now require all students to complete algebra 1 to graduate from high school. Colleges and universities are more specific about what courses students should take in high school to be prepared for college-level work.

Even so, in most SREB states more than 20 percent of entering students at four-year colleges and half at two-year colleges will need at least one remedial course. Results on tests given to entering college students to determine whether they are ready for college-level courses in English composition and mathematics make it clear that too many students are not prepared.

As students take more college preparatory courses in high school, we expect improvements in scores on college admissions and college placement tests and an increase in the number of students ready for college-level courses. There have been improvements, but they are not dramatic. Why? Information from several states shows that most students in remedial education (especially those at two-year colleges) are adults in their 20s who have been out of high school for one or more years and need refresher courses in writing or mathematics. A smaller group, but a group that still is too large, is recent high school graduates who did not take a college preparatory curriculum, avoided a college-preparatory mathematics course in their senior year, completed a college preparatory curriculum with low grades, or completed a weak college-preparatory curriculum in a low-achieving school.

Two things are clear: (1) if states increase the percentage of students who meet high standards in a challenging core of academic courses and take a college-preparatory mathematics course in their senior year, fewer students will need remedial help in college; (2) some college remedial programs will be needed, especially in mathematics and writing, for those adults who do not enter college directly after high school and years later come to a community college.

## *How are SREB states doing?*

- ✚ Four-year colleges and universities in all SREB states have established admission standards that include a core of academic courses in English, mathematics (algebra 1 or higher), sciences, social studies, foreign languages and computer skills.
- ✚ A higher percentage of high school students in every SREB state takes a core college-preparatory program now than did 10 years ago. In the South, the percentage taking college preparatory courses has doubled since the mid-1980s — from 21 percent to 42 percent.
- ✚ More high school seniors are taking college admissions tests, and they are scoring as high as or higher than 10 years ago in almost every SREB state. This is true even though a larger percentage of high school seniors who are not in the top one-third, or even the top half, of the senior class are taking the tests.
- Half of the SREB states report at least 80 percent of the freshmen at public four-year colleges and universities are ready to do college-level work. Fewer states could make that claim 10 years ago, but progress toward this goal is slow.
- Large percentages of students entering two-year colleges need remedial help. The percentage of freshmen at two-year colleges assigned to a remedial mathematics course ranges from 28 percent in one state to 75 percent in another. But many of those taking remedial courses at two-year colleges are adults in their mid- and late 20s returning to college years after leaving high school. For example, in Tennessee two-thirds of the students placed in remedial courses at community colleges had not been enrolled in high school or college for a year or longer.
- Colleges and universities in SREB states provide reports to school districts and schools about the performance of their high school graduates in college, including the number who must take remedial courses, but neither schools nor colleges, nor the faculties in either, are using this information effectively. Unfortunately, this appears to be a case in which states have important information about “what works” but the information rarely is being used.

## *Challenging courses make a difference*

ACT and SAT scores increase in states in which more students take a college preparatory program. The SREB states that have had the largest increases in average scores on college admissions tests also had increases in the percentage of students completing a core of academic courses. Arkansas and Oklahoma have the largest increases in average ACT scores among the SREB states where that is the dominant

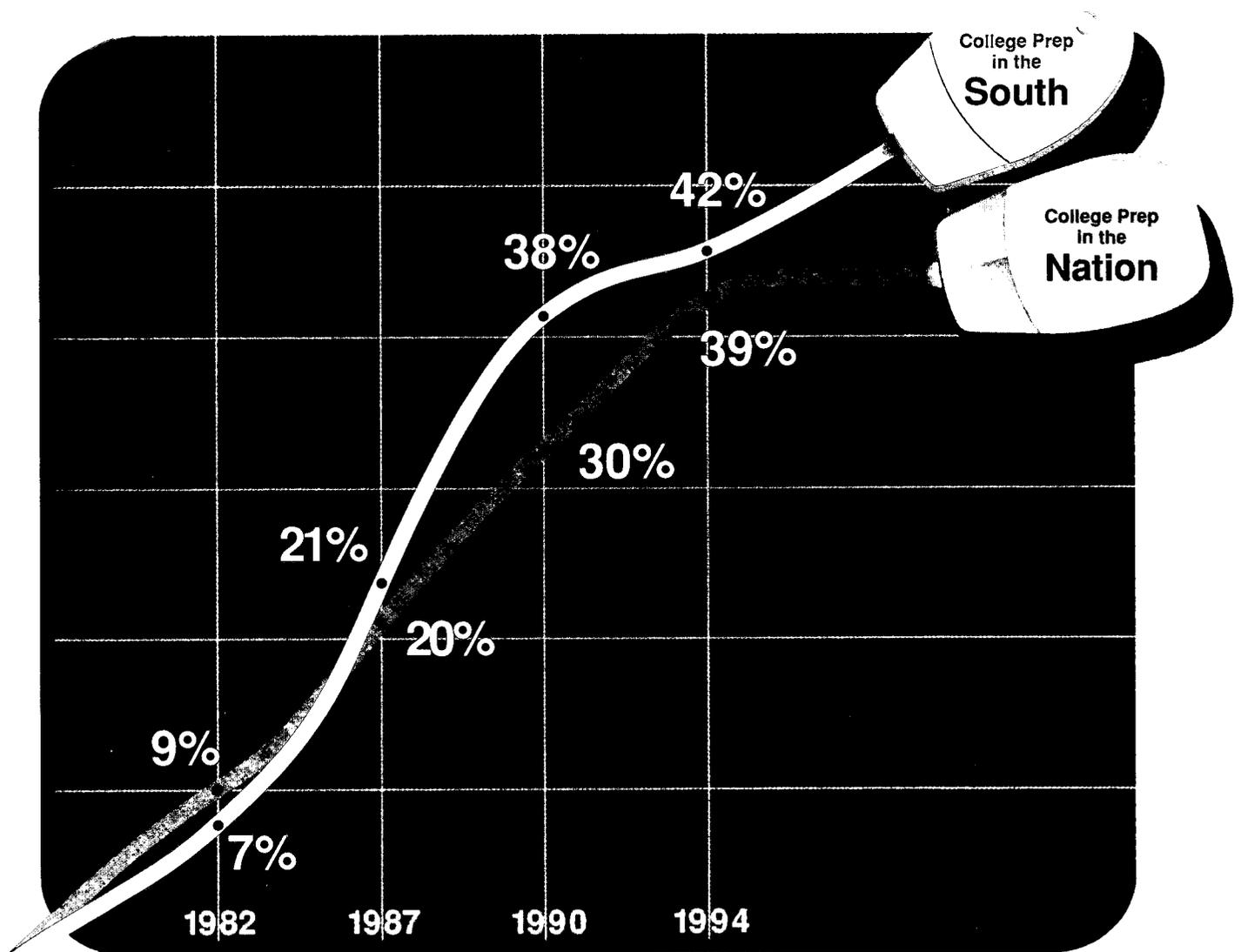
college admissions test. The percentage of high school seniors who took the ACT and completed college preparatory courses doubled in Arkansas to 73 percent and increased to 51 percent in Oklahoma.

Among the SREB states where the SAT is the dominant admissions test, Georgia, North Carolina, South Carolina and Texas show the greatest gains in average SAT scores over the

# Are Students Ready for College?

*Percent of High School Graduates Completing  
a College Preparatory Curriculum that Includes:*

- 4 English*
- 3 Social Studies*
- 3 Science*
- 3 Mathematics*
- 2 Foreign Language Courses*



last decade. In these states the number of college-bound high school seniors who completed 18 or more academic courses increased twice as

fast as the total number of students taking the SAT in these states.

*Fewer students who take challenging high school courses need remedial courses in college.*

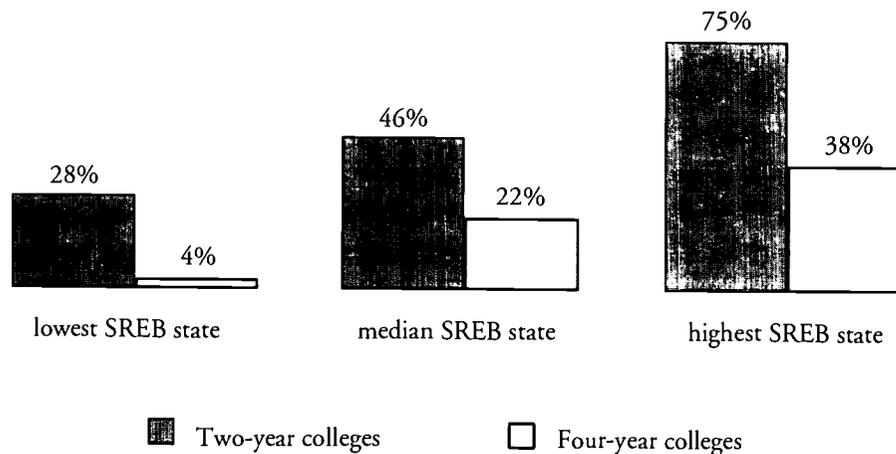
In Georgia, four of five recent high school graduates who did not complete a core of college preparatory courses had to take at least one remedial course when they entered public two- and four-year colleges. Only one of five students who completed a college preparatory program needed a remedial course.

Maryland's Higher Education Commission reports that fewer than 10 percent of Maryland high school graduates who completed a college preparatory program and entered public four-year colleges needed a remedial course. The rate was about twice as high for those who did

not complete a college preparatory program. The University of North Carolina found that 60 percent of students in remedial mathematics did not take a mathematics course in their senior year of high school.

Since implementing policies that require students to complete a more challenging college-preparatory program, Arkansas, North Carolina and Oklahoma report declines in the percentage of recent high school graduates who need remedial courses at public four-year colleges. By clearly telling high schools, students and parents what is necessary to succeed in

**Percent of Freshmen Taking Remedial Mathematics, 1996**



Source: SREB survey of state higher education agencies

college-level courses, colleges and universities play an important role in improving student achievement.

Examples of recent state initiatives to bring colleges and universities and public schools together to better prepare students for college are:

- In Florida, 10th-graders can take the college-entry placement tests to find out the subjects in which they need additional work to be prepared for college-level courses.
- Georgia's Postsecondary Readiness Enrichment Program focuses on helping students in middle schools and high schools get better prepared for college. It provides academic readiness skills, tutoring, instruction in technology and other services that help them complete a challenging academic program.
- Maryland's Partnership for Teaching and Learning P-16 aims to strengthen curriculum standards and assessments, student competencies, professional development and the connections between higher education and public schools. A council that represents businesses, communities and public and nonpublic education meets regularly to develop practices that will improve student readiness for college and the workplace.
- Oklahoma's Educational Planning and Assessment System evaluates eighth- and 10th-graders on how well they are on track to be prepared for college and careers. Students, parents, teachers, counselors and administrators use the results to plan and adjust programs of study, create more awareness of what is needed to succeed in college and careers, and improve student performance.

### *How many entering college students take remedial courses?*

Still too many.

About two-thirds of all remedial courses are offered in two-year community and technical colleges. There is no SREB state where the percentage of students entering public two-year colleges and taking at least one remedial course is less than 28 percent. More than half of the students entering two-year colleges in Arkansas, Georgia, Kentucky, Louisiana and Tennessee take at least one remedial course.

At public four-year colleges and universities, the percent taking one or more remedial courses ranges from 4 percent to 43 percent. The number of students taking remedial courses varies in part because of state and institutional policies and practices. For example:

- Some states assign responsibility for remedial instruction to the two-year colleges, and four-year colleges develop contracts with two-year colleges to provide remedial instruction. This results in lower percentages of students in remedial courses at four-year colleges.
- A few states have selected an assessment to be used by all public colleges and have established a minimum score that students at all institutions must meet to take college-level courses. In those states, the percentage of students taking remedial courses in four-year colleges is usually higher than in states where each college or university determines how students are assigned to remedial courses.

- Admissions policies also affect the number of students in remedial courses. Public four-year colleges and universities with more selective admissions policies have fewer students in remedial courses than those that traditionally have accepted most applicants.

In Arkansas, Georgia, Kentucky, Louisiana, Oklahoma, Tennessee and West Virginia the percentage taking remedial courses at four-year colleges is higher than 20 percent for a variety of reasons. Many of the four-year colleges in these states have a tradition of admissions policies that are relatively “open-door” — any high school graduate is admitted.

Arkansas, Georgia, Mississippi, Oklahoma and Tennessee have established common assessment procedures used by all institutions. For example, any student entering a college or university in Arkansas who scores below 19 on the ACT mathematics test must take remedial mathematics. More than 60 percent of the high school seniors in Arkansas and almost 50 percent of those in the nation who take the ACT score below 19 on the mathematics portion.

When the Oklahoma State Regents for Higher Education required all public colleges and universities to use the same standard for determining which students should take remedial courses, the percentage of freshmen who needed remedial courses jumped from 18 percent to 49 percent at the state’s regional four-year colleges. Since the initial year, the number in remedial courses has dropped to 36 percent. At the comprehensive universities, the number needing a remedial course increased to 32 percent in the initial year and has dropped to 23 percent. Results of the state regents’ initiatives to work with public schools to better prepare students for college are reflected in the declin-

ing percentage of recent high school graduates who need remedial courses.

In six SREB states (Florida, Maryland, North Carolina, South Carolina, Texas and Virginia), fewer than 20 percent of entering freshmen at public four-year colleges take one or more remedial courses in mathematics, writing or reading. The rates in these states are influenced by admissions policies of the four-year colleges, especially at institutions where the competition for spaces in the freshman class is intense. In Florida and South Carolina, four-year colleges contract with community or technical colleges to provide remedial instruction.

More high school students are taking challenging courses. But why are so many taking remedial courses?

More high school students are completing more college preparatory courses. But still only about 80 percent of students planning to attend college complete a minimum college-preparatory curriculum. States should be concerned if standards set by colleges and universities do not result in many students in remedial courses.

When large numbers of high school graduates attend college without taking a minimum college-preparatory curriculum, it is not surprising that one-third need a remedial course. If only half of those who attend college take a solid mathematics course in their senior year of high school, it is not surprising that more than one-third need remedial mathematics.

Typically in the SREB region:

- 42 percent of high school graduates take a minimum college-preparatory curriculum (four years of English; three years each in mathematics, science and social studies; two years of a foreign language)

- 25 percent take four years of college preparatory mathematics in high school
- and only 15 percent take precalculus mathematics

But more than 50 percent attend a two- or four-year college within 12 months of graduating from high school.

### *How successful are remedial programs?*

This is a key question. The answer is that most states do not know. A few states are collecting information from institutions about the success rates of students who take remedial courses. The information that is available shows that about half complete remedial courses successfully. Of those who do complete remedial courses, most do not enroll immediately in a regular college-level course. Studies show that students who do not continue into a regular

college-level course after completing a remedial course lose whatever gains they made. One state study shows that only about 20 percent of students who are placed in remedial mathematics, for example, will enroll in and complete a regular college-level mathematics course. Students who successfully complete remedial courses and enroll in regular college-level courses pass at about the same rate as other students.

## VOCATIONAL EDUCATION

BY THE YEAR 2000—

*Significant gains will be achieved in the mathematics, sciences and communications competencies of vocational education students.*

Too few high school students in the SREB states complete rigorous courses that prepare them well for work or for college, and too few vocational programs emphasize academic skills that are essential for job entry and continued learning. Studies show that fewer than 20 percent of students who complete a vocational program in high school are prepared for a career or for technical or community college study.

Vocational programs must be redesigned to teach more than early-20th-century trade skills and to prepare students for jobs as electricians, medical workers, office technicians, food service personnel and others needed to support the South's increasingly global economy.

SREB's *High Schools That Work* program demonstrates that traditional college-preparatory studies can be blended with quality vocational studies if schools follow certain key practices. The program has shown that career-bound students can achieve at significantly higher levels when high schools provide these students with a demanding curriculum. Students in *High Schools That Work* who complete the recommended curriculum score higher on academic skills tests than students in less challenging academic and vocational courses.

The decade-old *High Schools That Work* effort has shown that vocational students can meet high-quality performance standards when the school and community work together to establish a system of school and classroom practices proven to increase achievement. *High Schools That Work*, the nation's largest results-oriented high school improvement effort for vocational students, has grown from 60 sites in 1992 to more than 750 in 1998. Few states in the region have developed a statewide program. Few have analyzed the academic, technical and problem-solving achievement of vocational students over time. Kentucky and West Virginia have made SREB's *High Schools That Work* effort the centerpiece to creating such a statewide program.

There is no quick fix to improving vocational students' performance. To succeed, states must be willing to stay the course over at least a decade and assist schools, many of which may not see the need to improve, in sustaining and expanding their accomplishments.

## How are SREB states doing?

- ✦ More schools in more SREB states have raised standards for vocational students by:
  - increasing mathematics and science requirements
  - requiring students to select a vocational concentration
  - defining more clearly the credits required for a vocational diploma
  - establishing higher standards for vocational courses and for student performance
- ☞ Evidence from SREB's *High Schools That Work* suggests that students who complete a challenging vocational program can do as well on achievement tests as many students in a college prep program, but few states compare the academic performance of students in the two programs.
- ✦ In the SREB states, reading, science and mathematics achievement scores of students in the *High Schools That Work* program are higher now than in the early 1990s.
- ☞ Most SREB states do not collect information (at the state level) about how many students are completing challenging courses in reading, mathematics and science as part of either a college preparatory or vocational program.
- ✦ All SREB states are developing programs to help students connect what they take and how they perform in high school with what they do after high school. More SREB states have begun initiatives to expand youth apprenticeship and other work-site learning programs by strengthening the links between schools and business and industry.
- ☞ Few states have stepped up their vocational-teacher licensure requirements.

## Improving achievement through High Schools That Work

The most recent (1996) *High Schools That Work* assessment shows improvement in reading, mathematics and science achievement since the early 1990s. In all three areas, average scores are higher than the national averages for vocational students but still short of the SREB goals.

Reading scores improved in eight states (Alabama, Florida, Georgia, Kentucky, North Carolina, Tennessee, Texas and West Virginia). Mathematics scores improved in five SREB states (Alabama, Florida, Georgia, Kentucky and Texas). Science scores improved in Arkansas, North Carolina, Oklahoma,

Tennessee and Texas. Only Texas showed improvement in all three areas.

To achieve the *HSTW* goals, students must complete challenging courses in English, mathematics and science that are comparable to college preparatory courses and meet the performance goals on the *HSTW* assessments. Only two SREB states (Florida and North Carolina) had 50 percent or more of their students complete the recommended English courses and meet the performance goal in reading.

Most of the program's vocational students took the specified courses in mathematics, but in only four SREB states (Florida, North

## State Actions That Can Improve the Achievement of Vocational Students

- Use assessments that set high performance goals for schools
- Raise state graduation requirements
- Establish policies that support school leaders in making changes that lead to high performance of vocational students
- Help schools take advantage of funding sources that support improved academic and technical performance
- Increase the awareness of *HSTW* concepts across a majority of schools in the state
- Encourage business leaders to support *HSTW*
- Redesign state assistance to bolster schools striving to improve performance of all students

Carolina, Oklahoma and Texas) did at least half meet the performance goal in mathematics.

Only Florida had 50 percent or more of its participating students meet the performance goals in science, and only Alabama and North Carolina saw at least half of their students complete the recommended courses in science.

*HSTW* information shows that fewer students meet curriculum goals when:

- teachers do not teach the high-level content students need to excel
- mediocre performance by students is acceptable
- students are not motivated to do the work necessary to master challenging content
- students do not receive the extra help and time they need to learn

Challenging courses and academic performance matter to college admissions officers and employers. While further training and jobs also matter to vocational students, some do not see the connection between their high school

courses and what they do after graduation. Sixty-five percent of the region's sample of *HSTW* students continued their education after high school graduation; yet only 18 percent had completed the English, mathematics and science courses that prepared them for postsecondary education or careers.

Not surprisingly, only 17 percent of the participating vocational students received the *High Schools That Work* Award of Educational Achievement that attests they are prepared for postsecondary education or careers. Those students who qualified for the award equaled or exceeded the performance of students in the national sample who completed an academic program.

Several employers in SREB states are interested in waiving employment tests for vocational students with the *HSTW* award. A study of *HSTW* vocational students who enrolled in two- and four-year colleges showed that those who received *HSTW* awards were half as likely to need remedial courses as those who did not.

Table 3  
*High Schools That Work* Assessment Results \*

	Goals for <i>HSTW</i> Students	Average Scores for <i>HSTW</i> Students		National Average for Vocational Students
		1993	1996	
Reading	279	266	273	267
Mathematics	295	283	285	277
Science	292	281	283	267

\* Scale of 0 to 500

Source: *High Schools That Work*, SREB

Vocational students perform at a higher level when academic and vocational teachers work together to get them into challenging courses, establish high performance standards, motivate them and give them extra help. Most

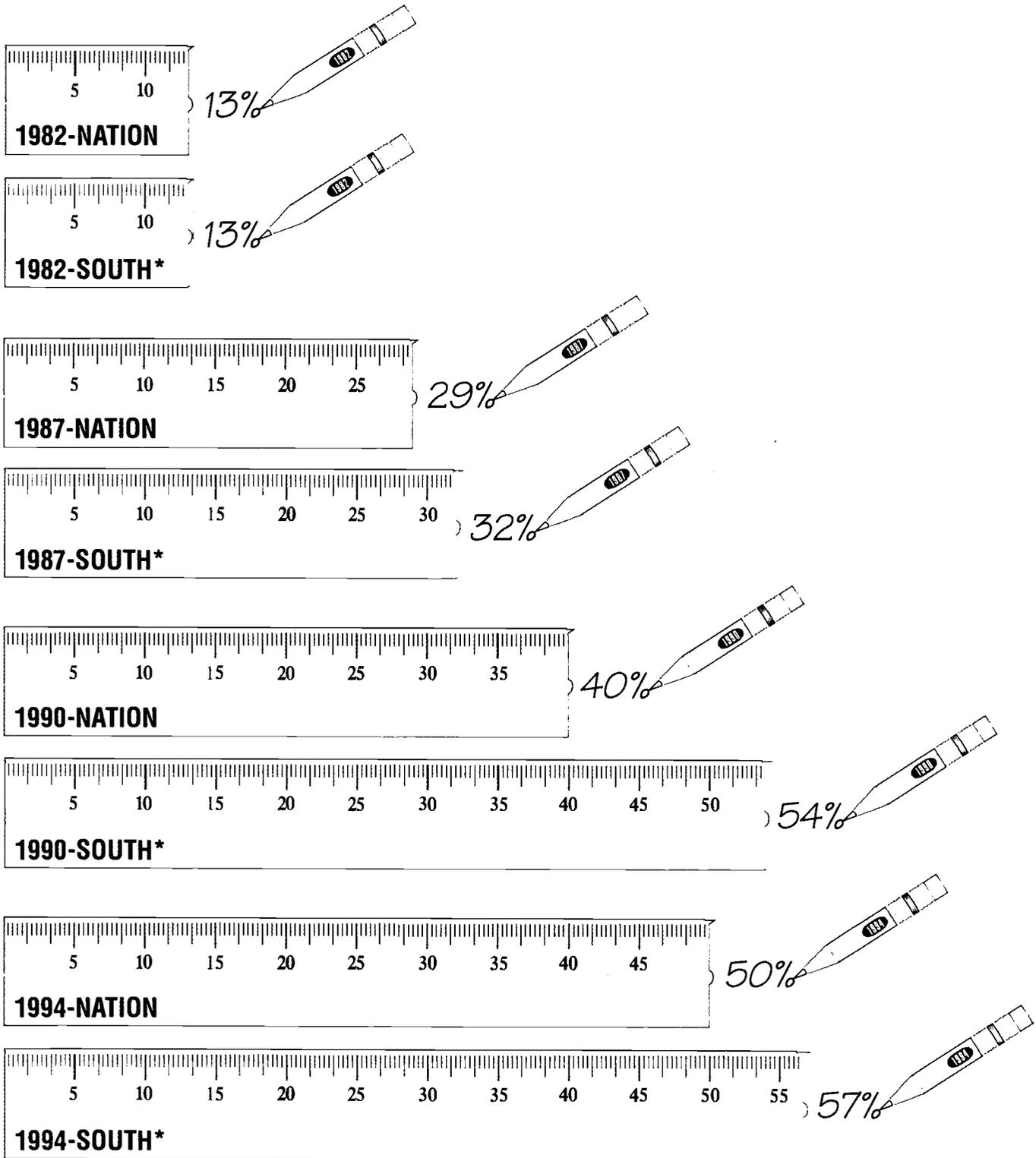
graduates of vocational programs say that their schools should have had a stronger emphasis on mathematics, science, computers and communications skills and should have required them to meet higher standards.

*What more can states do to improve the achievement of vocational students?*

- Measure the academic and technical achievement of vocational students and compare their performance with that of college preparatory students to understand how well the state’s high schools are preparing vocational students for postsecondary education.
- Require vocational students to complete four courses in college preparatory English and three each in mathematics and science (of which two in each area are equivalent to college preparatory courses for graduation).
- Help students connect their high school courses and their performance in the courses to what they will do after high school.
- Establish objectives for placing students who complete vocational programs into related jobs, the military or postsecondary education. Do follow-up surveys to find out where students are one year after they finish high school.
- Establish connections between educators and business leaders through statewide work-force education or school-to-career organizations and expand youth apprenticeship and other work-site learning programs.
- Raise licensure requirements for vocational teachers. Most states do not require vocational teachers to have four-year college degrees. Vocational teachers who have taken college-level courses in language arts, mathematics and science courses have a better foundation for helping students understand concepts in these areas than do teachers without such course work.

# The South Leads The Way

*More High School Graduates Earn At Least  
Four English, Three Social Studies, Three Science and Three Math Credits*



\*South includes SREB states, Delaware and District of Columbia.  
Source: National Center for Education Statistics.

## COLLEGE ATTENDANCE

BY THE YEAR 2000—

*The percentage of adults who have attended college or earned two-year, four-year and graduate degrees will be at the national averages or higher.*

The percentage of adults in the South who have attended college is higher today than the percentage who completed high school 50 years ago.

And today the percentage of adults in the South who have completed a four-year college degree is higher than the percentage who spent any time at all in college 50 years ago.

SREB states have made steady progress in providing access to college and are closing the gap in college attendance rates between the South and the nation. If these trends continue, we soon might see the day when high school graduates from the South will be just as likely as high school graduates in the North, Midwest and West to attend college. Much of this progress is the result of actions by SREB states to:

- expand the size and number of public colleges and universities to accommodate a rapidly growing population
- create systems of community colleges that bring higher education closer to where people live and work
- keep tuition and fees affordable and expand state financial aid programs
- enter into cooperative agreements to provide access to unique academic programs that not every state can afford

The *SREB Regional Contract Program* was established 50 years ago to provide residents of all SREB states with access to professional programs in medicine, dentistry, veterinary medicine, optometry and other specialties. Through arrangements with professional schools, member states provide access to these programs. The *SREB Academic Common Market* allows students in the SREB states to enroll in undergraduate and graduate programs that are not offered in their home state. These programs are models of interstate cooperation to increase access to colleges and universities at reduced costs to students and the states. Now the *Southern Regional Electronic Campus* is providing the next step in bringing higher education to people through distance learning and new technologies.

In 1961, SREB's Commission on Goals for Higher Education in *Within Our Reach* outlined major objectives for higher education and the steps necessary to reach them. Among the recommendations was the establishment of state systems of two-year colleges. Now, nearly all SREB states have community colleges and technical institutes that put affordable higher education within geographic reach of most residents.

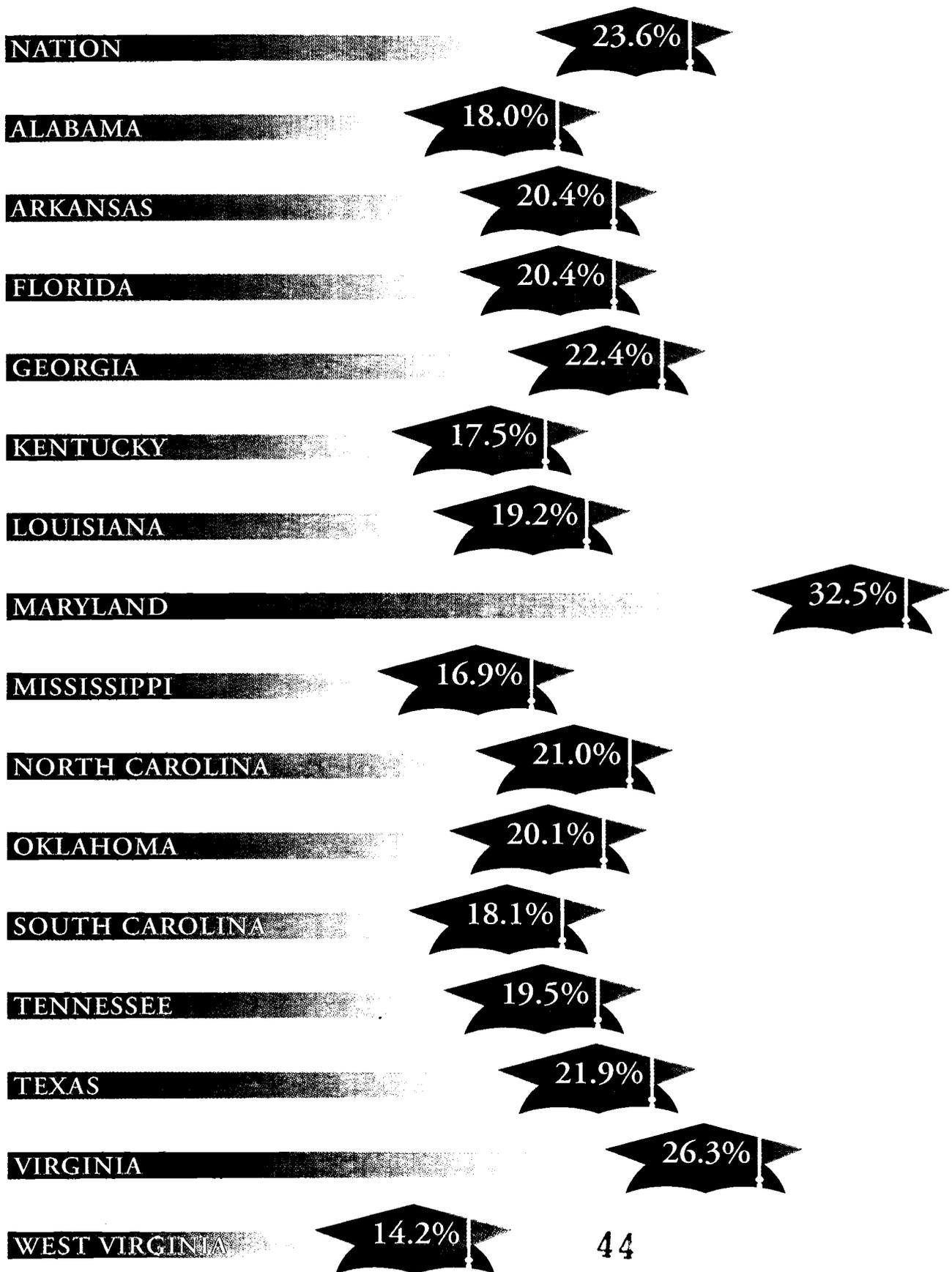
Even with these successes and the resulting increases in college attendance, there are still some large gaps between where SREB states want to be and where they are.

*How are SREB states doing?*

- ✚ Young adults in the South are more likely to attend college now than they were 10 years ago.
- ✚ More than half of the high school graduates in two-thirds of the SREB states enter college within a year after completing high school. Nationally, about 59 percent of high school graduates enroll in college within a year of graduating.
- ☞ The gaps in the rates among people of different races and ethnic groups who attend and graduate from college are smaller now than 20 years ago, but in recent years the gaps have not narrowed and remain too large.
- ☞ The percentage of adults with four-year college degrees is higher now than in 1990 in every SREB state, but only Maryland and Virginia are above the national average.
- ☞ There has been little change in the percentage of students who earn a bachelor's degree within six years of entering college. Nationally, about 55 percent complete a degree within six years. At many four-year colleges and universities in SREB states and throughout the nation, fewer than 40 percent of full-time college freshmen graduate within six years. The percentage of those who enter two-year colleges and earn a bachelor's degree within six years is even lower.
- ☞ In the SREB states, the state averages of students who enter and complete a degree at the same four-year college within six years range from 26 percent in Louisiana to 61 percent in Virginia. Virginia, Florida, Maryland, North Carolina and South Carolina are the only states with six-year graduation rates higher than 50 percent.
- ☞ Nationally, about 24 percent of students who complete 12 or more credits at two-year colleges transfer to four-year colleges or universities. In those SREB states that calculate transfer rates in the same way that the national rate is calculated, the rates range from 10 percent to 25 percent.
- ✚ SREB states now have systems to collect and analyze information about how many students complete college degree programs and how long it takes them.

# Percentage of Adults with a Bachelor's Degree, 1996

25 Years Old and Older



### *Encouraging better preparation for college*

- SREB states are establishing incentives for students to become better prepared for college. Georgia's HOPE Scholarship program is the nation's largest state merit-scholarship program and is a model that other states are following. Lottery funding for the program will reach almost \$218 million in 1998-99. HOPE Scholarships are motivating more Georgia high school students to take college preparatory courses and to earn a B average. Florida's Bright Futures, Kentucky's Commonwealth Merit and Louisiana's Tuition Opportunity Program for Students are new merit-based scholarship programs that provide incentives for academic achievement. Maryland's General Assembly approved a scholarship program for B-average students who study science, engineering or computer science.
- Programs such as Georgia's Postsecondary Readiness Enrichment Program and Oklahoma's Educational Planning and Assessment System are cooperative efforts between higher education and public schools to encourage students in middle schools and earlier to take the right courses and learn the skills necessary to succeed in college.

### *Making college affordable*

- Rising costs and a shift in federal financial aid away from grants to loans can affect some students' access to college and their choices of college. The "buying power" of a federal Pell Grant, available to only the neediest students, has been cut in half. Twenty years ago the maximum Pell Grant would have paid for 72 percent of the costs of attending a public four-year college; now it pays for only 31 percent. The shift

Table 4  
Participation in Higher Education, 1996

	Percentage of adults who have attended college		Percentage of adults who have a bachelor's degree	
	Nation	South	Nation	South
All adults	48	45	24	21
White adults	49	47	24	23
Black adults	39	36	14	13
Hispanic adults	27	27	9	11

Source: U.S. Census Bureau

from grants to loans also increases the amount of debt that students have when they graduate.

- In the last 10 years, state-funded student aid in the SREB region grew faster than the national average. More than \$540 million in state scholarships and grants is available to students in SREB states.
- In recent years, several SREB states have limited tuition and fee increases.

- To provide more ways for families to plan for and meet future college costs, SREB states created college savings plans, prepaid tuition programs or both. These programs help parents demonstrate to their children a commitment to supporting college attendance and get parents involved in planning for college early.

### *Increasing graduation rates*

As higher-education accountability legislation has focused attention on the percentage of entering students who graduate and the time it takes to earn a degree, colleges and universities and state systems of higher education are implementing plans to:

- improve the effectiveness of remedial programs for students who are not fully prepared when they enter college
- simplify procedures for transferring between two- and four-year colleges (Alabama, Florida, Kentucky, Maryland, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia)
- establish a common core of general education courses that meet degree requirements at both two- and four-year colleges and universities (Arkansas, Florida, Kentucky, Georgia, Maryland, North Carolina, Oklahoma, Tennessee, Texas and West Virginia)

- establish policies and practices that encourage students to complete their programs in a timely manner and to review degree programs and determine whether the number of credits required is appropriate. Florida limits most bachelor's degrees to 120 hours and associate's degrees to 60 hours. To discourage students from taking unnecessary courses, North Carolina requires students who exceed the number of hours required for an undergraduate degree by 15 percent to pay the full cost of the additional courses. Texas has a similar policy.

Increasing the percentage of adults who attend and complete college is not a job for colleges and universities alone. Increased participation in higher education is the result of steps taken by states to improve student achievement from kindergarten through high school and to increase high school graduation rates. Colleges and schools must work together to accomplish this goal.

## COLLEGE EFFECTIVENESS

BY THE YEAR 2000—

*The quality and effectiveness of colleges and universities will be regularly assessed, with particular emphasis on the performance of undergraduate students.*

*Performance, accountability and quality* are the most frequently heard words in discussions of higher education in the 1990s. Legislatures have called for changes in the way higher education does business. They are asking questions about how much time and money students spend in completing college degrees, how much time faculty members spend in classrooms and with students, and whether students are being prepared for the challenges of an information age and a global economy.

Legislators are emphasizing clearer missions for colleges and universities, eliminating unnecessary duplication and rewarding colleges and universities that accomplish stated goals. State leaders also recognize that higher education is challenged by new demands. Enrollments are growing, more students are at different levels of preparation for college and more adults need retraining. Technology could change the way higher education is delivered to students.

In the last few years, legislatures in most SREB states have:

- called for studies of undergraduate education, its affordability and accessibility, how long it takes students to complete programs and how satisfied alumni and their employers are with the preparation of college graduates
- given colleges and universities more flexibility in how to use their funds and faculty positions
- required institutions to evaluate mission statements and develop plans to fulfill them
- urged more and better coordination of resources and services

In *Changing States: Higher Education and the Public Good*, the SREB Commission for Educational Quality urged higher education to face the public's questions about accountability and effectiveness and to set clear and measurable goals. The commission said that in return state leaders should "provide the resources and flexibility that college and university leaders must have to get a maximum return on investment."

## *How are SREB states doing?*

- ✚ Most SREB states now are issuing periodic reports on performance measures and on progress toward achieving higher education goals. Many states have adopted legislation that identifies what kinds of information institutions must include in their reports.
- ☞ Too few states report what entering college students or rising juniors know and can do based on a common assessment used by all institutions. Individual colleges and universities periodically review courses and programs, but most states have not made a systematic effort to judge how much students know and can do after completing the core freshman and sophomore curriculum.
- ✚ More than half of the SREB states now require institutions to set goals for the percentage of graduates who will pass licensure and certification examinations. These states include information about passing rates in their higher education accountability reports.
- ✚ Colleges and universities in most SREB states have established goals and developed plans for increasing the percentage of students who continue in college from year to year and graduate.
- ☞ Few states have established “achievement targets” for graduate programs. Some have specified minimum numbers of students to be enrolled and numbers of degrees to be awarded.
- ✚ Federal support for research and development in the SREB states now exceeds \$3.2 billion. Twenty-nine universities in the region (21 public and eight independent) are among the nation’s top 100 recipients of federal support for research and development.

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*“We want our higher education institutions to be centers of change that really prepare our students for the challenges they encounter. ... Our colleges and universities must regularly ask whether our programs are adequately preparing our students for today’s workplace.”*

Former Governor Gaston Caperton, West Virginia

*“Change is difficult, but we can’t improve without change. Our businesses are telling us that Kentucky’s postsecondary education system isn’t delivering the workers they need. Our students are telling us their educational opportunities are not adequate. ... We want Kentucky to set a new standard of excellence in postsecondary education. That is our priority.”*

Governor Paul Patton, Kentucky

### *Indicators of higher education performance*

Annual state higher-education reports on performance include measures of:

- how well entering students are prepared (scores on entrance examinations, number and percentage in remedial courses, percentage of applicants meeting admission standards)
- student enrollment and progress toward graduation (enrollment trends and percentages of students continuing from year to year, transferring and completing degrees)
- student achievement as reflected in the percentage of students passing certification and licensure tests, average scores on entrance examinations to graduate schools and professional schools, and job placement rates for graduates
- program quality as assessed by surveys of alumni and/or employers, accreditation and internal program reviews and percentage of lower- and upper-division courses taught by full-time faculty, part-time faculty and graduate assistants
- program productivity as indicated by student credit-hours produced, how many hours classrooms are used, analysis of student demand for courses and expenditures per student
- faculty and staff productivity as reflected in student-to-faculty and student-to-staff ratios, number of hours of instruction, results of faculty workload surveys, and faculty contribution to research and community service

All SREB states collect data from all public colleges and universities for reporting on these categories of performance, but the specific information collected and the measures used vary.

Proponents of higher-education “report cards” argue that the reports can provide useful information and lead to more public support. Others view attempts to get information that is comparable among institutions as “more regulation” rather than a way to assess progress. How the indicators affect teaching and learning on individual campuses is a key issue.

### *Which states link assessments and accountability to budgeting?*

Performance funding in higher education has received much attention in SREB states. In 1996, South Carolina passed the most ambitious performance-funding legislation in America and set a three-year timetable to develop and implement a funding system that moves away from funding based primarily on student enrollment. By the year 2000, all state funding is to be based on indicators of college and university effectiveness.

Tennessee was the first SREB state to tie some university funding to performance. That

was almost 20 years ago. Since the program began, more than \$250 million has been earned by public colleges and universities on the basis of performance measures. Public colleges and universities can earn up to 5.5 percent over their operating budgets by meeting goals on 10 performance indicators.

Kentucky’s newly created Council on Postsecondary Education is to establish criteria for allocating money in six incentive trust funds to advance postsecondary education goals for adult education and literacy, regional

university excellence, financial aid, facilities, research and postsecondary work-force development.

West Virginia requires each university governing board to set goals, refocus its missions and reallocate resources. Increased funding is tied to progress toward meeting the goals. Florida's legislature directed the State University System Board of Regents to continue per-

formance-based budgeting. Texas' legislation calls for each university governing board to adopt a process for evaluating tenured faculty at least every six years.

Virginia's governor has asked a commission to make recommendations on performance funding. The legislature also has appointed a study committee to report on performance funding in time for the next legislative session.

BY THE YEAR 2000—

*All institutions that prepare teachers will have effective teacher-education programs that place primary emphasis on the knowledge and performance of graduates.*

Better preparation of first-time teachers and continued professional development for veteran teachers are among the biggest challenges facing SREB states as they strive to raise student achievement. If student achievement is going to improve, teachers will need to know their subject matter; how to incorporate research on learning into classroom practices; how to use technology effectively; and how to work with parents and the public to set higher standards for students. A recent survey of professors in schools of education by Public Agenda found that only 27 percent of the professors think their programs place enough emphasis on “teaching prospective teachers how to communicate with parents.”

Colleges and schools must continue to seek the best ways to prepare and continue the development of teachers. Teacher preparation programs can be revitalized by creating more opportunities for prospective teachers to train in actual school settings and by increasing content knowledge in rigorous arts and sciences courses. More than 80 percent of professors in schools of education believe that they personally should spend more time in elementary and secondary school classrooms. The Public Agenda report, *Different Drummers: How Teachers of Teachers View Public Education*, says that this lack of a connection between college faculty and elementary and secondary schools means that future teachers often are not prepared to meet the challenges in today’s classrooms.

SREB states have initiated many programs to increase the supply of quality teachers. But there have been too few efforts to improve the entire system. As leaders in one state noted, “we have many programs but no system.” SREB states need to work harder to tie together the pieces of teacher education reform. That means college and university presidents, chief state school officers, local superintendents and legislators need to take the lead in ensuring cooperative efforts between schools and colleges and within colleges to improve the quality and diversity of the teaching force.

The best measures of a state’s interest in any reform are the money and attention lawmakers and education leaders give to the issue. By that measure, reforms in teacher preparation are not high priorities in most states.

## *How are SREB states doing?*

- ☞ Teacher licensure standards remain low.
- ✚ States are placing more emphasis on the performance of their graduates when they review teacher preparation programs.
- ☞ While more than half of the SREB states now require academic majors for those who plan to teach in high schools, few require academic majors for elementary teachers. Too many teachers have inadequate backgrounds in the subjects they teach.
- ☞ Involvement of arts and sciences faculty in the preparation of teachers has not increased dramatically at most colleges and universities.
- ☞ More than 80 percent of teachers in the SREB states are women. Other than South Carolina, SREB states are making little progress in recruiting more minority teachers. Too few men are entering teaching and remaining in the classroom.
- ✚ More than one-third (about 300) of the teachers certified by the National Board for Professional Teaching Standards live in the SREB states. North Carolina leads the nation with more than 200 National Board-certified teachers.

## *Changes in teacher preparation programs*

SREB states emphasize the performance of graduates in their reviews of programs to prepare teachers more than they did just five years ago. And states increasingly report to the public about characteristics of those who enter and graduate from such programs and become employed as teachers.

Six states now report passing scores on teacher licensure tests, and several states either use or plan to use reports on graduates' performance as one factor in assessing teacher preparation programs. Alabama, Florida, Louisiana and Tennessee use feedback on performance of recent graduates in their reviews of teacher education programs. A new law in Florida mandates that reviews of teacher education programs include factors such as graduation rates,

costs of instruction, graduates employed full time and credits taken by students in excess of the 120 hours normally required for a degree.

In 1997 North Carolina passed legislation calling for "report cards" for colleges of education. Colleges and universities offering education degrees must report on the quality of students entering and graduating from schools of education and whether they remain in teaching positions and are successful.

Three-fourths of the SREB states have had major reviews of teacher education in the last five years. Despite these efforts, questions linger about academic rigor and whether these programs prepare teachers to help students meet the higher standards that schools now expect.

### *Do teachers know their subject matter?*

A recent study in Maryland showed that future elementary teachers had few opportunities in their teacher preparation programs for intensive upper-division study in regular academic courses and generally had only one mathematics course designed for teachers. The most recent national study shows that many mathematics teachers in the SREB states did not major in mathematics. Seventy-one percent of eighth-grade math teachers in the SREB states hold standard certificates for math; nationally, 78 percent do.

Preparing future teachers in mathematics, social studies and science is a concern in every state. A national survey of science and mathematics teachers showed that 60 percent of elementary teachers felt “well-qualified” to teach math and social studies, but fewer than 10 percent felt “very well-qualified” to teach physical science.

States are working to change this situation. For example, the Texas Higher Education Coordinating Board requires all students to complete an academic major as part of their preparation for teaching and calls for six to nine hours each in math and science beyond

the academic core for elementary teachers. In Oklahoma, every prospective teacher must demonstrate listening and speaking skills in a foreign language before entering the classroom and elementary teachers must take 12 hours each in English, mathematics, science and social studies.

Louisiana’s Collaborative for Excellence in the Preparation of Teachers program and the Louisiana Systemic Initiative aim to increase student achievement in mathematics and science by strengthening the preparation and continuing education of classroom teachers. The programs have combined state and federal funding to establish partnerships between schools and colleges; to redesign courses that prepare teachers to teach mathematics and science; to emphasize working to help improve public schools as part of the review process for promotion and tenure at colleges and universities; and to get more teachers certified in mathematics and science. Results on statewide tests of mathematics and science achievement show that students of teachers participating in the programs score better than other Louisiana students.

### *Involving arts and sciences faculty in preparing teachers*

Schools of education and schools of arts and sciences have been slow to work more closely to prepare future teachers. Florida, Kentucky, Oklahoma, Texas and Maryland recently have emphasized the importance of arts and sciences faculty’s involvement in

teacher preparation. Maryland reports that the academic core for elementary teachers is watered-down, and the Maryland Higher Education Commission calls for college and university presidents to lead change in schools of education and arts and sciences.

Table 5  
**Percent of Secondary School Teachers  
 Without a Major in Main Assignment**

	English	Math	Science	Social Studies
Alabama	25	11	27	20
Arkansas	22	30	34	30
Florida	17	24	52	86
Georgia	18	18	32	10
Kentucky	27	21	45	20
Louisiana	35	37	43	33
Maryland	14	27	14	8
Mississippi	34	28	27	17
North Carolina	13	21	27	12
Oklahoma	22	26	38	29
South Carolina	22	28	26	28
Tennessee	27	41	48	19
Texas	29	35	30	33
Virginia	7	31	33	16
West Virginia	26	20	24	17

Source: School and Staffing Survey, National Center for Education Statistics, as reported by Council of Chief State School Officers, State Education Indicators, 1997

### *Developing college and school partnerships*

Several states are emphasizing partnerships between colleges and schools. North Carolina's legislature gave funds to colleges and universities to develop school-college partnerships. In Texas, professional development centers continue to integrate technology and teacher preparation and are supported by colleges and schools. Maryland has established professional development schools to promote learning about teaching in a school classroom instead of the university classroom. But even with that emphasis,

only 15 percent of the students in Maryland's teacher education programs complete work in a Maryland professional development school.

Since the 1980s the calls for joint efforts by colleges and schools to provide support for teachers in the early years resulted in more rhetoric than action, but recently half of the SREB states have taken actions such as lengthening internships and funding mentor programs.

Table 6  
**State-Established Passing Scores on  
 Professional Assessments for Beginning Teachers, 1997-98  
 The Praxis Series, Education in the Elementary Schools**

	Passing score established by states	Percent of national test-takers scoring below the state-established score
<b>SREB states</b>		
Arkansas	500	3 %
Florida	560	11
Kentucky	510	3
Louisiana	550	9
Maryland	550	9
Mississippi	540	7
North Carolina	540	7
South Carolina	540	7
Tennessee	520	4
Virginia	520	4
<b>Other states using this test:</b>		
Indiana	520	4
Missouri	520	4
Ohio	510	3

Source: Educational Testing Service

### *State licensure and certification*

To obtain a license to teach in most states throughout the nation, prospective teachers must pass a written test or performance assessment or both. Standards for licensure are being upgraded in several states, and scores needed to pass licensure tests are being raised. However, the reality is that those who score very low on licensure tests can receive teaching licenses in most SREB states.

For instance, 13 states use a national examination, the Education in the Elementary School test in the Praxis series, to license elementary school teachers. Each state establishes

its passing score. The passing scores seem low because a high percentage of teacher education graduates in the nation reach them. For example, more than 95 percent of the 73,870 graduates who took the test for elementary education licensure scored high enough to be licensed in half of the states requiring the test. At least 90 percent scored high enough to be licensed in all states that required the elementary education test.

That statistic alone may mean that all teacher education graduates are well-prepared. But, considering the percentage of teachers

who have too little preparation in the academic subjects they are teaching and the performance standards expected of students, states need to take a hard look at licensure requirements and whether the assessments used and the passing scores set for licensure are appropriate.

Some states have revised expectations for beginning and veteran teachers that are linked

to new content and performance standards for students. Florida outlines principles and indicators for three stages in an educator's career. Oklahoma, Texas and Virginia recently revised standards for teachers to reflect changes in student standards.

### *Certification by the National Board for Professional Teaching Standards*

Certification by the National Board for Professional Teaching Standards continues to receive attention not only in the SREB states but also across the nation. Twelve SREB states now provide incentives for teachers to take national board examinations and/or reward them for receiving national board certification, but a very small number of teachers actually have received certification in most SREB states. North Carolina, where the governor has placed an emphasis for several years on national board

certification, leads the nation with more than 200 nationally certified teachers. In all, more than one-third of the teachers with national board certification live in the SREB region. SREB states should continue to encourage teachers to pursue national certification. By providing incentives and rewards, states can ensure that the proportion of teachers receiving national certification in the SREB states meets or exceeds the national rate.

### *A supply of quality teachers*

States are not succeeding in recruiting and retaining male and minority teachers, despite continued efforts to do so. South Carolina is the only SREB state to report long-term success in recruiting minority teachers. In 1997, 20 percent of all teachers licensed in South Carolina were minorities, compared with 14 percent two years ago. The South Carolina Teacher Recruitment Center was established 12 years ago and is a model for similar centers throughout the country. The center's programs include activities to interest middle school students in teaching by helping them improve their academic and study skills and a teacher cadet program in high school. South Carolina's long-term commitment and success in increas-

ing the number of new minority teachers is not matched by any other SREB state.

Keeping new teachers is also a problem. Data from nine states participating in the SREB supply-and-demand study show a "revolving door" in the first five years of teaching. First, fewer than half of the graduates of teacher education programs are employed in their home state within two years of graduating. Further, only 62 percent of new teachers remain as teachers for five years. Female teachers with only a few years of experience, especially those who teach elementary or special education, are the most likely to change districts or to move across state lines.

Half of the SREB states have alternative certification programs that enable people from other careers to become teachers, and more people are receiving certification through these programs. For example, the number of teachers

certified through the alternative program in Texas has doubled in five years. The program has brought more minorities into teaching than were being certified through traditional routes.

### *Questions to ask about teacher preparation and licensure in your state*

- How many high school or middle school students are being taught by teachers who do not have a major or minor in an academic subject?
- What knowledge of content in mathematics, English or biology is required to be licensed as a teacher? What must teachers know and be able to do to pass licensure tests?
- What kinds of changes have been made in programs to prepare elementary teachers?
- What actions have college and university leaders taken to involve both arts and sciences and education faculty in improving teacher education programs?

# SCHOOL EFFECTIVENESS

BY THE YEAR 2000—

*All states and localities will have schools with improved performance and productivity demonstrated by results.*

Ultimately, changes in education and in student achievement happen classroom by classroom. Legislation in many SREB states recognizes schools as “where the action is.” Most SREB states now evaluate school performance, and every SREB state reports to the public each year about how schools or school districts measure up.

While state leadership in establishing curriculum and performance standards and ways to assess student achievement remains crucial, responsibility for deciding how to implement reform and improve schools is being shifted to local districts and school buildings. Local superintendents and school boards are being authorized to make many of the decisions that once were made at the state level. But shifting authority for school reform to local schools without expanding the capacity for professional development of teachers and for development of effective school leaders is not likely to produce positive results.

Improving schools is a complex task that involves:

- agreeing on what students are expected to know and do
- establishing levels of student achievement and school performance against which progress can be measured
- developing reliable ways to assess what students know and can do
- reporting results to the public in clear, understandable terms
- establishing incentives that balance rewards for good performance and sanctions for poor performance
- targeting technical and financial assistance to low-performing schools
- providing continuous improvement and development of teachers, school leaders and members of school boards

Higher expectations of students must be accompanied by higher expectations of teachers and principals. Teachers and students cannot be held responsible for student achievement if they do not know what is to be taught and learned. Tests must measure what teachers are expected to teach and what students are expected to learn. Results of schooling need to be illustrated clearly for parents, community and business leaders and the general public. Pre-service and in-service training for teachers and principals must be connected to what students are expected to learn. School boards, administrators, teachers and parents must have adequate training to develop plans to improve and to focus on results.

Incentives, sanctions and targeted assistance that are not connected to improving the curriculum or to teaching and learning are unlikely to be effective.

### *How are SREB states doing?*

- ✚ Every SREB state produces accountability reports. Only eight did in 1990. These reports provide state and district results and information on individual schools. Arkansas reports state and district results, but not results for individual schools.
- ✚ Most SREB states have or are developing systems to identify low- and high-performing schools. Rewards are given to high-performing or improving schools, while low-performing schools or those with declining performance may be placed on probation. Help is provided to low-performing schools through technical assistance and staff development.
- ☞ Effective schools have effective leaders, but leadership development programs in SREB states are not a high priority and are not well-funded.
- ✚ Most SREB states assist school systems in building community involvement in the schools. Partnerships between schools and businesses continue to grow in every state. These partnerships promote academic achievement, community service projects and students' passage from school to work and to higher education.

### *Recent state initiatives for school improvement and accountability*

Since 1996, SREB states have taken several actions to hold schools accountable.

- Charter school legislation allows the creation of new types of schools with increased flexibility but a focus on specific results. Nine SREB states have passed charter school legislation, and six of those states have opened a combined total of more than 140 charter schools.
- North Carolina is implementing the ABC legislation (passed in 1996) that establishes a school accountability model to improve student performance and to increase local control and flexibility. The ABC program includes assistance to schools that do not meet expectations and rewards to those that do. Legislation in 1997 calls for the North Carolina State Board of Education to develop a plan to revise content standards in the core subjects and to develop corresponding exit examinations aligned with those standards. Teacher and principal evaluations will be tied to student achievement, and professional development programs for teachers and principals will be strengthened.
- Virginia funded development of its new content standards for core subjects and training for teachers.
- Maryland rewarded high-performing schools each of the last two years. The state also assists low-performing schools.
- Texas funded awards to schools and districts that meet standards for being rated as "recognized" or "exemplary." Schools that demonstrate significant gains in student performance also receive cash awards. In addition to financial awards, schools that are exemplary are exempt from certain requirements and regulations.

Table 7  
**At a Glance**  
**Accountability Programs in SREB States, 1997-98**

	Financial Rewards	Sanctions/ Intervention	School-by-School Report Cards
Alabama	—	districts, schools	yes
Arkansas	—	districts	no
Florida	schools	districts, schools	yes
Georgia	schools	—	yes
Kentucky	districts, schools	districts, schools	yes
Louisiana	under development *	under development *	yes
Maryland	schools	schools	yes
Mississippi	—	districts	yes
North Carolina	schools	districts, schools	yes
Oklahoma	—	schools	yes
South Carolina	schools	districts	yes
Tennessee	schools	districts, schools	yes
Texas	schools	districts, schools	yes
Virginia	—	under development	yes
West Virginia	—	districts, schools	yes

\* action expected by state board in summer 1998

- Most SREB states have the authority to intervene in low-performing school districts.
- Florida passed legislation in 1997 that gives districts more flexibility to meet high standards. New standards require all students to complete algebra 1 and to maintain a higher grade-point average (2.0 on a 4.0 scale) for high school graduation. The state also created a program to reward faculty and staff in schools that maintain high performance or show improvement.
- West Virginia's Jobs Through Education program calls for rigorous skills-development and higher academic expectations.
- Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee and Texas continue to provide financial rewards to schools that raise student achievement.

## SCHOOL EFFECTIVENESS

When schools are expected to make progress toward performance objectives established at the state level, the results most frequently sought are:

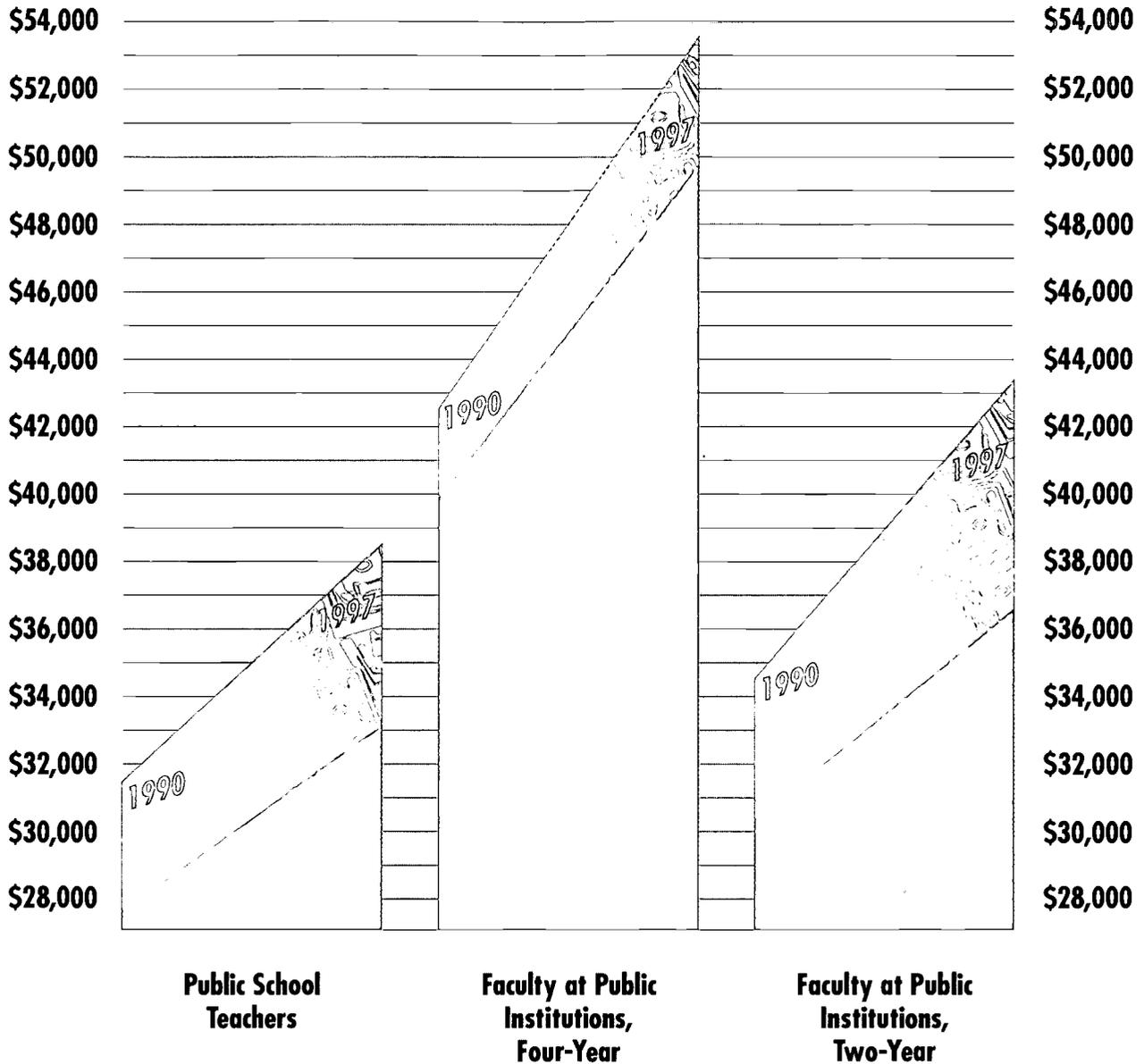
- gains in student achievement as measured by a statewide examination
- improved graduation and dropout rates

- reduced absenteeism
- more high school graduates continuing their education

In determining schools to receive awards or sanctions, some states require them to meet an absolute goal; others emphasize progress over time. Some states use both measures.

# The Salary Gap

*Average Salaries in the Nation and the SREB States,\*  
1990 to 1997*



Nation

SREB States

\*Salaries are for full-time teachers and faculty.

Sources: National Education Association; American Association of University Professors; SREB Data Exchange.

# SALARIES

BY THE YEAR 2000—

*Salaries for teachers and faculty will be competitive in the marketplace, will reach important benchmarks and will be linked to performance measures and standards.*

Increasing salaries for teachers and faculty is a big-ticket item for states and localities. The cost of a 1 percent pay raise for teachers ranges by state from \$7 million to more than \$80 million. For full-time faculty at public two- and four-year colleges, a 1 percent raise ranges by state from \$1 million to \$9 million. Employee benefits add to these costs.

In the 1980s, SREB states made aggressive efforts to raise salaries for teachers and faculty. By the late 1980s, salaries for public school teachers in the South were at 88 percent of the national average and college faculty salaries were at 94 percent of the national average. Even with significant increases in salaries during the 1990s, average salaries for both teachers and college faculty have lost ground relative to national averages.

All SREB states except Maryland trail the nation when comparing average salaries for teachers. Only Maryland and Virginia are above the national average for four-year college faculty, and only Maryland is above the national average for public two-year colleges.

Two factors have made it difficult for SREB states to make significant gains. First, since 1987, half of the nation's enrollment growth in public elementary and secondary schools occurred in SREB states. Growing enrollments in elementary and secondary schools, combined with state actions to reduce class sizes, created almost 200,000 new teaching jobs in SREB states over the last decade — more than 50 percent of all new teaching jobs in the nation.

Second, reaching national, regional and peer group averages is difficult because those averages do not stand still. To catch up, states below the average must make up not only the current gap but also any salary increases made by states that are already above the national average.

SREB states are not tying teacher salaries to performance. Some states experimented with career ladders and performance incentives, but, for the most part, teacher incentive-pay programs no longer exist. Incentive programs now are more likely to be a part of school improvement efforts and to emphasize school awards based on student achievement. Salaries for college and university faculty are tied more closely to performance because peer evaluations and judgments more heavily influence promotions and salary increases.

Improving salaries for teachers in our schools and colleges will remain an uphill struggle. As long as the only question is whether there will be a 1 percent, 3 percent or 5 percent across-the-board pay raise, states are not likely to discover workable incentive plans for teachers in schools and colleges.

## How are SREB states doing?



Average salaries for teachers in public schools, colleges and universities have increased in every SREB state since 1990. The typical 1997 salary is 21 percent higher for public school teachers than that in 1990, 25 percent higher for public four-year college faculty and 22 percent higher for public two-year college faculty.



Compared with national averages, salaries for teachers and faculty in the SREB states are lower than they were at the beginning of this decade. Since 1990, the typical salary in the region for public school teachers and college faculty has slipped by about two percentage points relative to the national average.

## Salaries for public school teachers

Since 1990 increases in average salaries for public school teachers in Alabama, Arkansas, Georgia, Kentucky, Oklahoma, Tennessee and West Virginia have outpaced national increases. Salary increases in the other SREB states have failed to keep pace with national increases. The typical teacher's salary in the SREB states is 86 percent of the national average, ranging from 72 percent of the national average in Mississippi to 107 percent in Maryland.

Average salaries are affected by the employment of new teachers and faculty at the lower end of the pay scale and the retirement of higher-paid, experienced ones. For example, 24 percent of eighth-grade mathematics teachers in the nation have at least 25 years of experience, but only 12 percent of those in SREB states do.

SREB states have established goals to increase teacher salaries. In South Carolina the goal has been for average salaries to equal the average of Southeastern states. In 1997-98 South Carolina teachers received pay raises of 2.7 percent to maintain the state's average salary at the Southeastern average. Mississippi aims to raise teacher salaries by 10 percent over three years. Georgia and North Carolina began multi-year initiatives to reach national averages.

Table 8  
Average Salaries for Public  
School Teachers, SREB States

	1996-97	Percent Change 1989-90 to 1996-97
Nation	\$ 38,611	23
SREB states	33,325	21
SREB states as a percent of nation	86.3%	
Alabama	\$ 32,549	29
Arkansas	30,319	36
Florida	33,889	18
Georgia	35,596	27
Kentucky	33,797	29
Louisiana	28,347	17
Maryland	41,148	13
Mississippi	27,720	14
North Carolina	31,286	12
Oklahoma	30,369	32
South Carolina	32,830	21
Tennessee	34,222	27
Texas	33,038	20
Virginia	35,837	16
West Virginia	33,257	46

Source: National Education Association

Four years ago Georgia's governor stated his intention to raise the average teacher salary in Georgia to the national average. Georgia now has the third-highest average teacher salary among the SREB states. The state may meet the governor's goal in 1998-99 because the Georgia legislature recently appropriated funds for a fourth consecutive pay raise of 6 percent.

Since 1990, Oklahoma increased beginning teacher salaries and expanded the state minimum-salary schedule to compensate experi-

enced teachers. Texas expanded its minimum-salary schedule and increased salaries for new teachers. Future salary increases for Texas' teachers will be tied to per-student increases in state funding for education.

Between 1996 and 1997, the typical salary in the region increased 2.7 percent, compared with a national increase of 2.5 percent. Increases in average salaries in nine SREB states (Alabama, Georgia, Kentucky, Louisiana, North Carolina, Oklahoma, South Carolina,

Table 9  
Average Salaries for Full-Time Faculty at Public Four-Year Colleges, SREB States

	1996-97	Percent Change 1989-90 to 1996-97
Nation	\$ 53,512	25
SREB states	49,781	25
SREB states as a percent of nation	93%	
Alabama	\$ 45,800	27
Arkansas	43,603	28
Florida	52,031	18
Georgia	52,637	30
Kentucky	49,420	33
Louisiana	45,872	39
Maryland	53,405	20
Mississippi	44,849	28
North Carolina	52,954	28
Oklahoma	45,249	24
South Carolina	48,619	26
Tennessee	49,226	26
Texas	50,415	21
Virginia	53,897	15
West Virginia	43,827	35

Sources: SREB Data Exchange; American Association of University Professors; National Center for Education Statistics

Table 10  
Average Salaries for Full-Time Faculty at Public Two-Year Colleges, SREB States

	1996-97	Percent Change 1989-90 to 1996-97
Nation	\$ 43,297	26
SREB states	36,620	20
SREB states as a percent of nation	85%	
Alabama	\$ 38,093	25
Arkansas	32,119	23
Florida	38,199	22
Georgia	39,567	26
Kentucky	35,767	35
Louisiana	36,479	36
Maryland	46,552	22
Mississippi	35,669	34
North Carolina	30,124	21
Oklahoma	34,111	25
South Carolina	33,184	24
Tennessee	35,858	24
Texas	37,415	16
Virginia	38,904	13
West Virginia	35,346	41

Sources: SREB Data Exchange; American Association of University Professors; National Center for Education Statistics

Virginia and West Virginia) exceeded the national average increase. Estimated increases

from 1997 to 1998 range from 2 percent to 6 percent among the SREB states.

### *Salaries for college and university faculty*

Average salaries for public four-year college faculty in the SREB region dropped from 94 percent of the national average in 1990 to 92.6 percent in 1997. Only Virginia remained above the national averages in 1997, but averages for public four-year college faculty in Florida, Georgia, Maryland and North Carolina are within striking distance of the national average.

For two-year college faculty, average salaries in the region have increased by 20 percent

since 1990 but dropped from 88 percent to 85 percent of the national average over the same period. About half of the SREB states are closer to the national average now than in 1990. Maryland's average salary for two-year college faculty remains above the national average but has dropped closer to it. Virginia was near the national average for public two-year college faculty in 1990 but dropped to about 90 percent of the national average by 1997.

# FUNDING

BY THE YEAR 2000—

*States will maintain or increase the proportion of state tax dollars for schools and colleges while emphasizing funding aimed at raising quality and productivity.*

Between 1990 and 1997:

- Expenditures for public schools in SREB states increased by more than 50 percent.
- Funding for higher education grew by about 25 percent.
- The number of students in public schools increased 16 percent.
- The number of college students grew 10 percent.
- The Consumer Price Index jumped 32 percent.

Expenditures for health care, corrections and public welfare grew much faster than total state spending, while expenditures for education increased at a slower rate.

In addition to these challenges, schools and colleges must grapple with increased expectations, including: serving more students with complex needs; implementing new technologies; developing new ways to deliver instruction; and contributing to economic development through research.

Recent increases in education funding have made it a higher budget priority than in the early 1990s, but in most SREB states education is a lower budget priority than in the mid-1980s.

In the 1990s, new money for education has been targeted to accomplish specific objectives that include:

- funding significant salary increases to reach regional or national salary goals
- funding increases in enrollments
- establishing merit scholarship programs
- creating prepaid college tuition and tuition savings programs
- expanding use of technology in schools and colleges
- reducing class sizes for students in early grades
- strengthening reading programs in the early grades
- funding incentives and rewards based on performance for schools and colleges

These recent actions show that state officials are most likely to support exceptional funding increases for schools and colleges when this funding is linked specifically to raising quality and improving productivity.

## *How are SREB states doing?*

- ✦ Since 1990, eight SREB states (Alabama, Florida, Georgia, Kentucky, Oklahoma, Tennessee, Texas and Virginia) have increased spending for public schools faster than the national average. Nationally, spending for public schools is 46 percent higher now than in 1990. For the SREB region, spending is 53 percent higher.
- ◡ Even with these dramatic increases, public schools are a lower priority in the total state budget today than a decade ago in half of the SREB states (Alabama, Arkansas, Florida, North Carolina, South Carolina, Texas, Virginia and West Virginia).
- ✦ Funding for higher education in the SREB states grew faster than the national average in the 1990s — growing by 24 percent for the SREB states, compared with 16 percent for the nation. The percent change in funding is higher than the national average for Alabama, Arkansas, Florida, Georgia, Maryland, Mississippi, North Carolina, Tennessee and West Virginia.
- ◡ As with the public schools, higher education's priority in state budgets is lower than it was a decade ago. Higher education now receives a smaller percentage of the budgets in 13 SREB states.
- ✦ Much of the increase in funding for education in the SREB states has been necessary to keep up with growing enrollments — 16 percent more students in public schools and 10 percent more in higher education than at the beginning of the decade.
- ◡ Tuition has jumped to 26 percent of the average public-college budget, compared with 16 percent in the early 1990s. This means students and their families are having to carry more of the financial loads. For six of every 10 families (those earning below \$42,000), it now takes an additional 5 percent of their income to cover student costs at public four-year colleges.

## *Spending education dollars*

How much money is spent for education is important, but equally important is how the money is spent. The pattern of how public schools spend their funds has changed little since the late 1980s. In SREB states, about 60 cents of every dollar spent for public schools goes for instruction — about the national average. About 5 cents goes for curriculum development, staff training, libraries, and media and computer centers. About 9 cents goes for administration of the schools, including administrators' salaries and benefits. Student

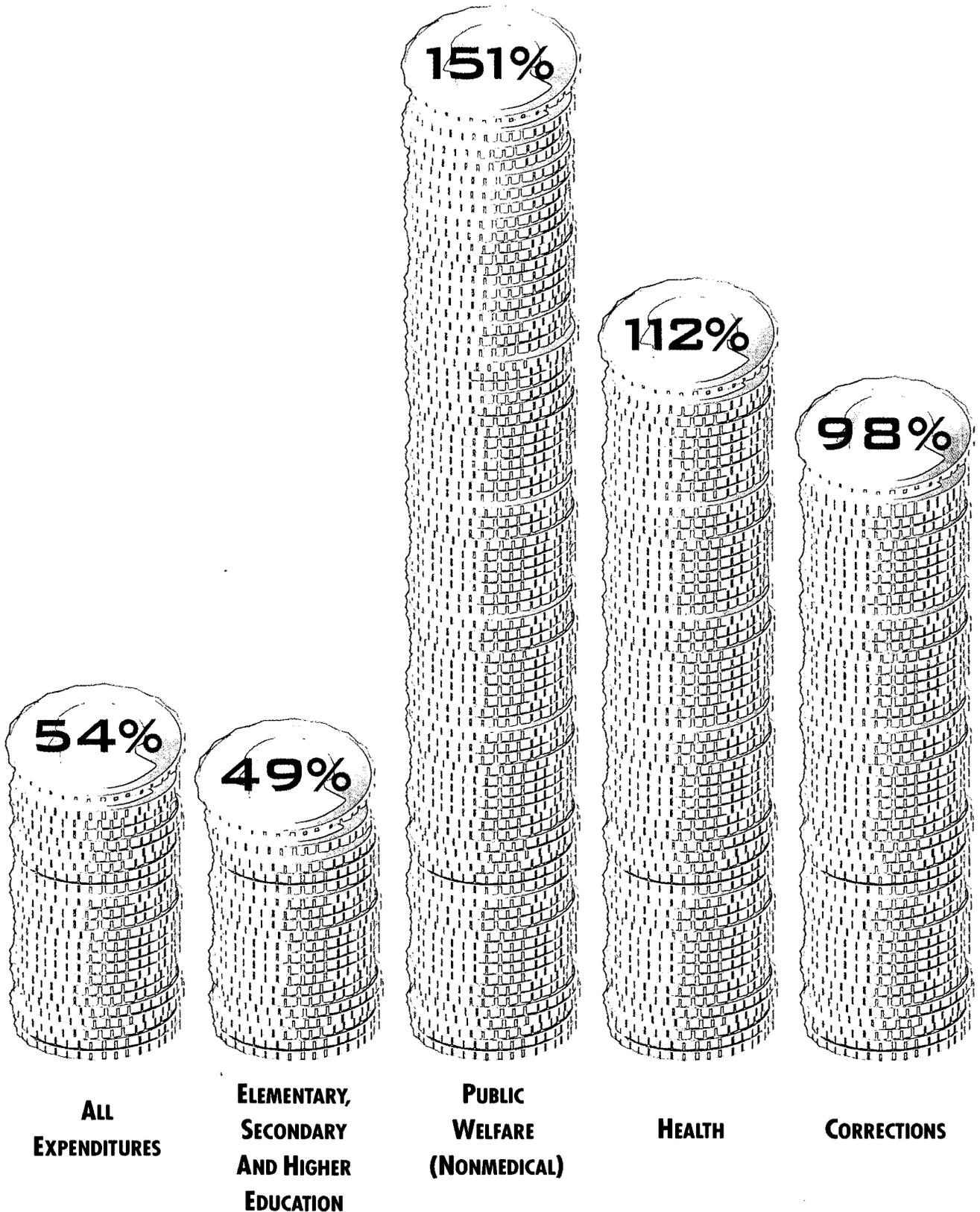
transportation, operation and maintenance of physical facilities, food services, and other support services for students account for the rest.

There is little variation in education spending among the SREB states. For example, the percentage spent on instruction ranges from 58 percent in Florida to 63 percent in Georgia.

In higher education, spending patterns tend to change slowly for instruction, research, public service, academic and administrative support, student services, plant operation and maintenance, and scholarships and fellowships.

# Where The Money Went

*Increases in State and Local Government Spending  
in the SREB States, 1988-1994*



But significant shifts in spending have occurred since the 1980s. Colleges and universities spend a smaller share for instruction and academic support and a larger share for research and public service now than a decade ago. About 39 percent of the money spent goes for instruc-

tion; about 21 percent goes for academic support, student services and administrative support; and about 23 percent goes for research and public service. The rest goes for scholarships, fellowships and plant operations and maintenance.

### *Funding actions in the 1990s*

- Georgia, Kentucky, Louisiana, North Carolina, Oklahoma and West Virginia had special funding initiatives for large salary increases for teachers.
- Tax increases for education were passed in Arkansas, Kentucky, Mississippi, Oklahoma and Tennessee.
- New merit-scholarship programs for high school graduates were created in Georgia, Florida, Kentucky, Louisiana and Maryland.
- Several states gave special attention to significantly boosting funding for community colleges (Arkansas, Florida, Kentucky, Maryland, Mississippi and Texas).
- Georgia, Kentucky, Louisiana, Maryland, North Carolina, Virginia and West Virginia made special efforts to expand the use of technology in schools and colleges.
- Florida, Georgia, North Carolina and Virginia expanded their prekindergarten programs, and South Carolina expanded kindergarten programs.
- Multiyear efforts to reduce class size in the early grades are under way in Alabama, Florida, North Carolina, Oklahoma, Tennessee, Texas and Virginia.
- Several states focused on incentive or performance funding for higher education. South Carolina is in the first year of a three-year plan to implement performance funding legislation passed in 1996. Florida continues performance-based budgeting. The University of North Carolina system has developed performance indicators. West Virginia ties budget increases to the progress of colleges and universities toward goals in strategic plans. Kentucky established investment and incentive trust funds for adult education and literacy, regional university excellence, research, financial aid and work-force development. Tennessee continued its performance funding program.
- Florida, Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee and Texas funded financial rewards to schools that improve student achievement.

These actions reflect state leaders' interest in targeting new funding to specific objectives. Clearly, increasing the future funding base for education will be linked to progress toward achieving educational goals.

*Questions to ask about funding education in your state*

- Has overall spending for education increased or decreased compared with last year? Compared with five and 10 years ago?
- Have enrollments in public schools and higher education changed?
- Are we spending a lesser or greater share, or the same share, of our state's tax dollars on education?
- Has inflation-adjusted per-student funding gone up or down?
- Are we encouraging education to spend money in effective, innovative ways?
- Do funding policies reward schools and colleges for improvement?
- Does funding make it possible for more students to continue their education after high school?



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