

Charting a Course to 2030

SREB

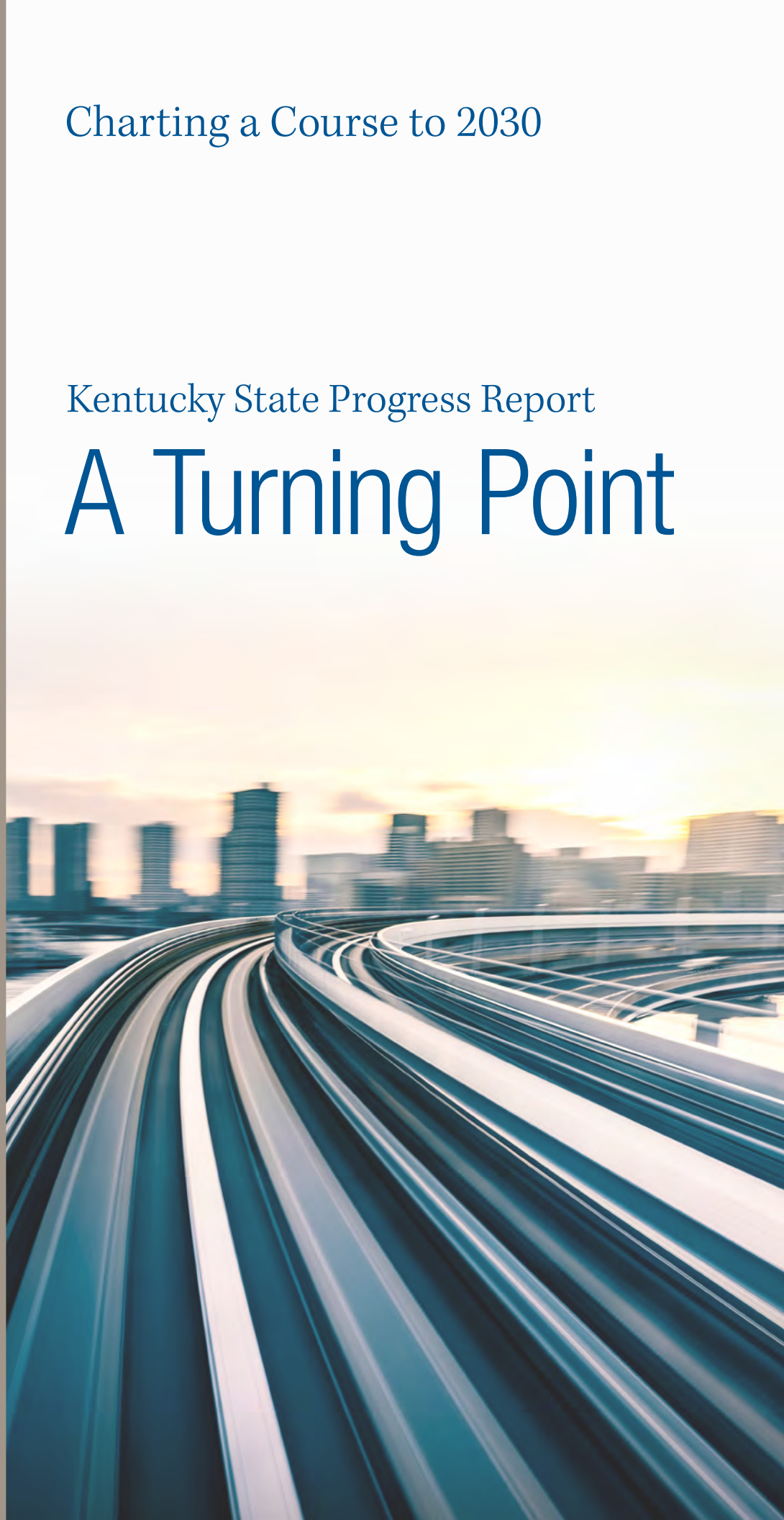
Kentucky State Progress Report

# A Turning Point

2020

Southern  
Regional  
Education  
Board

[SREB.org](http://SREB.org)



SREB's  
Challenge to Lead 2020  
**Goals for Education**

All children **entering school** will exhibit the knowledge and the social and developmental skills needed for success in first grade.

Student achievement for all groups in the **early grades** will exceed state standards and national averages — at rates that close achievement gaps between groups.

Student achievement for all groups in the **middle grades** will exceed state standards and national averages — at rates that close achievement gaps between groups.

Eighty percent of ninth graders will graduate from **high school** ready for college and career training. (This likely means more than 90% will need to graduate from high school and more than 80% will need to meet readiness standards for college and career training.)

Sixty percent of working-age adults will have a **postsecondary** credential: an associate or bachelor's degree, or a career certificate. Public postsecondary institutions will make it a top priority to help states meet state needs by increasing graduates, public service and research.

Increasing percentages of **adults** without high school or postsecondary credentials will pursue opportunities to earn high school alternative certificates, college degrees or career certificates.

# Kentucky

## A Turning Point: Charting a Course to 2030

**2020 State Progress Report**  
on the Challenge to Lead 2020  
Goals for Education

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# A Message From the President of SREB

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SREB's *Challenge to Lead 2020 Goals for Education* have provided benchmarks and timelines for assessing educational progress in our states since 2012. The biennial state progress reports help policymakers stay informed on how well their states have performed on key education outcomes from pre-K through adult learning and how much progress they are making toward the 2020 goals.

This check-in on our progress comes at a time when the coronavirus pandemic has upended teaching, learning and state economies — perhaps for just a few months, but potentially for much longer. The effect of this disruption on students is not yet known. In our SREB task forces on how schools and colleges will reopen, we hear clearly that educators are committed to the challenge of keeping all students, of all ages, on track for achievement.

That work has never been more important to the future of our states. The pandemic may accelerate the workforce disruptions already well underway thanks to automation and artificial intelligence. Conservative estimates from before the pandemic show that between 23% and 44% of all work activities will likely be automated over the next decade, considerably changing the way people work.

As lower-skilled, repetitive tasks are automated, we expect the demand for higher skills to increase. This shift threatens to displace many of the lowest-skilled adults — those with a high school diploma or less — unless states can reskill them for future positions. Others could be stuck in low-wage positions, struggling to support their families and unable to effectively launch the next generation.

Over 40% of people in the South's workforce were highly vulnerable to these changes before the pandemic. Without significant effort, the number of adults *and their children* who might be unemployable by 2030 could rise above the 18 million reported in *The SREB Region's Economic Outlook*. We know that children of parents with low skills are 10 times more likely to have low skills themselves. Today's 25- to 35-year-olds are raising 2030's high school graduates. A decade from now, the lowest-skilled of these adults could be struggling with employment just as they are trying to help their children pursue a better future through postsecondary education.

SREB states have an opportunity to interrupt this cycle of unemployability and poverty. If we can help these adults raise their skill levels, we can help keep them in the workforce. If we don't, we're going to have an even bigger problem. We have more work to do to determine what will work to meet the challenges before us. Each SREB state is different, but if states work together and share ideas, they can meet their goals.

This report details where **Kentucky** stands in education. You and your state can take pride in these highlights of key outcome measures and policy implementation.

## Notable outcomes in Kentucky

- The state exceeded the nation's rate in access to state-funded pre-K for 3-year-olds.
- Fourth graders and eighth graders outpaced the nation in math gains on NAEP at the Proficient benchmark.
- Fourth graders and eighth graders outperformed the nation in reading achievement on NAEP at the Basic benchmark.



Millions of workers and their children could be unemployable if we do not prepare them for the future workforce.

# A Message From the President of SREB (continued)

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- The high school graduation rate outpaced the region in growth — and exceeded the regional rate.
- The high school graduation rate increased for all student groups.
- The percentage of graduating seniors who met all four ACT benchmarks matched the region in 2019.

But I also see four major challenges in the pages of these reports that warrant our attention.

- **Despite SREB states' efforts to increase the educational attainment of working-age adults in our region, too many still do not have the credentials they need for success in the workplace.** In 2017, 7.9 million adults in SREB states did not have a high school credential, and another 17.2 million had a high school credential but no postsecondary education.
- **While more students in our region are graduating from high school on time, far too few are ready for postsecondary study when they graduate.** The gap in readiness for college and careers shows up once again in the ACT results for the class of 2018. In the median SREB state, 87% of the 2018 class graduated from high school on time while only 19% of those who took the ACT met its four college-readiness benchmarks.
- **Most SREB states did not make progress toward the early grades or middle grades targets for NAEP performance at or above the Basic level between 2009 and 2019.** More than half of SREB states were further away from meeting these performance targets in 2019 than they were in 2009. This indicates that increasing percentages of students are performing very poorly in reading and math and require additional support.
- **High quality pre-K programs are still not available to all children who need them.** Pre-K provides a critical foundation for children who would likely fall behind in school without it. While some SREB states lead in pre-K access and quality, others have a long way to go to ensure that high quality programs are available to the children who will benefit the most.

Today we stand at *a turning point*. Policymakers have an opportunity to help their states meet future education, economic and workforce goals. Not doing so will put Southern states and their residents at risk. SREB is committed to working with states to ensure that progress continues.

The 2022 state progress reports will provide a decade's look back on the progress that states have made toward the 2020 goals. Then it will be time to turn our sights once again toward the future with goals for 2030. It is time to shift from preparing our students for everything to preparing students *and* adults for anything, so they can be lifelong learners and continue to adapt and succeed.



Stephen Pruitt

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# Foreword

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In **A Turning Point**, SREB's ninth biennial report to states on their progress in meeting the Challenge to Lead goals for education, SREB focuses on **Charting a Course to 2030** — evaluating how well states are preparing their workforces for the future economy. As in previous years, this publication provides a customized progress report for each SREB state. The reports document advancement on both measurable outcomes and state policies. But in this issue, SREB takes a different approach: drilling backward through the education system, from adult workforces to early childhood education, to illuminate how well states in the SREB region are preparing for the fourth industrial revolution.

To remain competitive in a swiftly changing global economy, SREB states need more adults to earn postsecondary degrees and credentials, and must prepare more K-12 students to do the same. The South trails the nation in preparing for the workforce of tomorrow, and the United States' education and workforce preparation efforts lag those in other developed countries.

SREB's 2017 report *Ready to Read, Ready to Succeed: State Policies That Support Fourth Grade Reading Success* warned that if young students are not reading well by the third grade — and many aren't — they face an uphill battle to be prepared for success in high school and beyond. *Early Math Matters: Factoring in Teacher Knowledge and Practice*, published in 2019, added that early math proficiency is as important and indicative of overall academic success as reading. Both subjects provide a critical foundation for learning in the middle grades and high school. Despite increased high school graduation rates, postsecondary completion rates have not advanced nearly enough to indicate that graduates are college- and career-ready or that SREB states are prepared to compete in the global economy. Actions that can change this reality have to start in the earliest grades if students are to continue their education beyond high school.

But the problem doesn't exist only in K-12 education. In 2019, SREB published two reports, *Unprepared and Unaware: Preparing the Workforce for a Decade of Uncertainty* and *The SREB Region's Economic Outlook: The Potential Impact of Automation and AI*, that discussed how technological advancements are threatening economic stability across the South, throughout the nation, and around the globe. Automation and artificial intelligence will displace many of the lowest-educated adult workers as technology increases the demand for higher skills in the workplace. Lower-skilled workers with low levels of attainment will likely face higher rates of unemployment, earn less, and contribute less in taxes. Businesses will have more positions they cannot fill because workers lack the necessary skills. And states will face a growing burden to provide additional social services with limited resources.

SREB estimates that by 2030, 18 million or more workers and *their children* will be unemployable or stuck in low-wage jobs, and in a perpetual cycle of poverty. Children's educational attainment directly relates to that of their parents. And family income has been shown to be one of the biggest factors in educational attainment overall. SREB states need to take aggressive action to prepare students and adults for the higher-skilled positions of the future so they can remain employed, earn higher incomes, and support the educational progress of future generations.

The *Challenge to Lead Goals for Education* established 10 bold educational goals for the region in 2012. These goals were updated in 2016. Through effective policy implementation, the goals can help states drive improvements in student achievement, college completion and workforce readiness. SREB promised to help states achieve the goals by monitoring, measuring and reporting on outcomes for each state and by benchmarking policy implementation. The reports showcase progress on the educational milestones students must reach at each stage and at each transition between stages.

SREB states need to take aggressive action to prepare students and adults for the higher-skilled positions of the future.



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Policymakers have come to expect SREB to report on such key measures as results on the National Assessment of Education Progress, high school graduation rates and college enrollment rates of recent graduates. These measures give a picture of progress — how well current students are performing as they move through school and what challenges SREB states face in helping students make critical education transitions. Whenever possible, the reports show outcome measures in national and regional contexts and over time so that policymakers can determine how students in their states stack up with students elsewhere and whether they are making gains.

The 2020 progress reports begin with a glimpse of the potential economic impacts of low adult attainment in the South. They then move from adult and postsecondary education through high school, the middle and elementary grades, and early learning to highlight where SREB states can focus their efforts to prepare adults and students for the future workforce. They also include demographic and economic perspectives to situate SREB states in their regional and national contexts.

Policymakers will also find information about whether — and how — important policies are implemented in their states. The tables, charts and maps throughout the reports include elements recommended by the latest SREB commissions. They give policymakers an indication of where their states stand on critical, emerging issues and help readers take a deeper dive into their state's progress.

Having reached a turning point in the push to prepare for the future, Southern states are realizing that they face greater challenges than the rest of the nation. It is now time to chart a course that will take us to 2030. The following are some important themes states should be focused on as they direct their efforts to prepare tomorrow's workforce:

- By 2030 there will be more young children and retirement-age adults dependent on social services across the region than there will be working-age adults to support them.
- The South's population has become more racially and ethnically diverse and is growing faster than that of other regions.
- Parents' educational attainment greatly affects that of their children, and family income is the single most reliable indicator of children's future success.
- Too many working adults do not have postsecondary credentials, and younger generations face additional challenges in earning these credentials despite an increased need to do so.
- Too many students still struggle with transitions — especially as they enter high school and again when they move on to postsecondary.
- Substantial gaps in achievement and graduation rates still exist for many students of color, students from low-income families, students with disabilities, and English learners.
- Too few children have access to high quality pre-K programs, and too many children in the earliest grades perform at low levels in reading and math.

Each of these themes plays a vital role in determining whether students and adults will be prepared for the technologically advanced workforce of tomorrow. For policymakers who wish to change the narrative in their state's report, it is not too late to adjust policies and programs to make a difference. It's time to recognize the speed at which a new, uncertain future is approaching and work vigorously to prepare as many students and adults as possible. SREB's policy commissions have already made recommendations that can help. It's time to be sure they are implemented well.

SREB will continue to help states as they progress toward meeting the Challenge 2020 goals and chart their courses to 2030, keeping its commitment to measure outcomes and benchmark progress on policy.

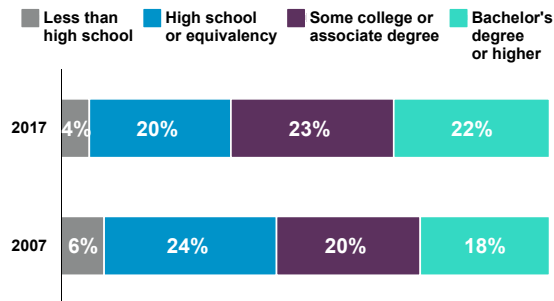
# Workforce

Helping adults earn a postsecondary certificate or degree is imperative for states, now more than ever. Rapid advancements in automation and artificial intelligence may increasingly displace adults with low levels of education, transforming some positions while eliminating others. Most new jobs — especially ones that pay well — will require education beyond high school.

New employment opportunities are shifting toward candidates with postsecondary education, a trend visible in the distribution of jobs in the labor market. In the SREB region between 2007 and 2017, the percentage of jobs held by adults with a high school diploma or less decreased by 1.5 points, while the share of jobs held by adults with a bachelor's degree or more increased by 3.4 points.

## Job Share by Education Level

Percentage of All Adults 25-64 in Kentucky



Note: Percentages may not add to 100% due to rounding.

Source: U.S. Census Bureau

## Related SREB Publications

*Unprepared and Unaware: Upskilling the Workforce for a Decade of Uncertainty* (2019)

*Three Federal Statutes, One State Plan: Coordinating ESSA, Perkins V and WIOA to Address Rapidly Evolving Education and Workforce Needs* (2019)

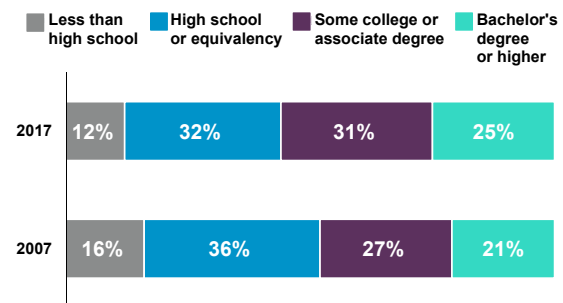
*The SREB Region's Economic Outlook: The Potential Impact of Automation and AI* (2019)

*Designing a Ready Workforce: Opportunities for state leaders to align ESSA, Perkins V and WIOA funds* (2020)

This job shift may be partly attributable to more adults having credentials beyond high school. In SREB states, the percentage of working-age adults with at least some postsecondary education increased 5.5 points between 2007 and 2017. But, across the region in 2017, 40% of working-age adults still had a high school diploma or less, compared with 37% of U.S. adults.

## Educational Attainment

Adults 25-64 in Kentucky



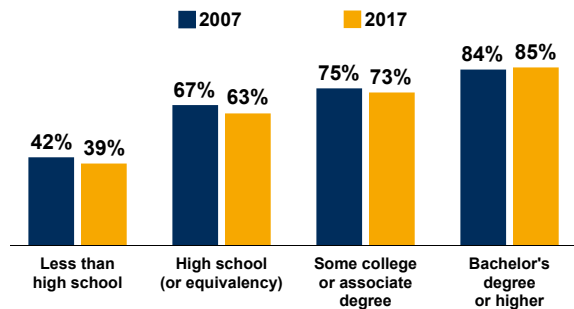
Note: Percentages may not add to 100% due to rounding.

Source: U.S. Census Bureau

Even with fewer low-skilled adults in the workforce in 2017 than in 2007, their employment rate decreased as they were displaced by adults with higher levels of education. In fact, employment rates for adults with high school credentials decreased in every SREB state over the 10-year period. Conversely, in 13 SREB states, adults with a bachelor's degree or more were employed at higher rates in 2017 than in 2007.

## Employment Rates by Education Level

Percentage of All Adults 25-64 in Kentucky



Source: U.S. Census Bureau

## Challenge to Lead 2020 Outcome Measures

- The percentage of adults ages 25 to 64 who have postsecondary degrees or career certificates (from programs of at least one year) increases to 60%
- Advanced degrees, especially those in high-need fields, increase to meet state needs

These shifts in education and employment point to a dire situation for low-skilled adults — those most vulnerable to technological advancement.

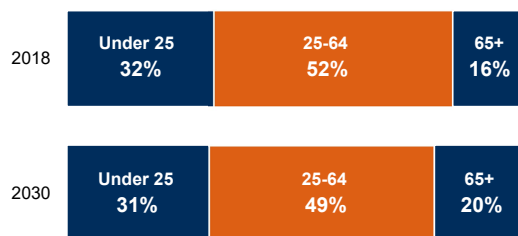
Without additional education and training, some 18 million SREB adults and their children could be unemployable by 2030. Helping adults earn credentials beyond high school will be especially critical for 25- to 44-year-olds, who are early- or mid-career and will face job changes while trying to support families and save for retirement.

Technological progress and low educational attainment in the workforce are not the only challenges facing states, however. By 2030, every SREB state will also have more dependent-age individuals than working-age adults. In some states, this shift will happen sooner.

The percentages in the following chart represent individuals in *each age group* only. There are many adults in the 25-64 age range who will be either unemployed or out of the labor force entirely in 2030, so the gap between working adults and dependents will likely be even wider.

### Working-Age Adults vs. Dependent Population

Percentage of the Total Population in Kentucky



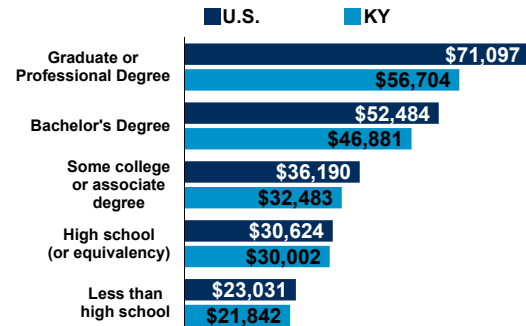
Notes: Working age is 25 to 64. Percentages may not add to 100% due to rounding.

Source: SREB Fact Book, U.S. Census Bureau

This worker-dependent gap could be aggravated by increasing poverty rates for many working adults, regardless of their attainment level. Between 2008 and 2018, poverty rates for adults with any post-secondary education increased in 15 SREB states. And for adults with only a high school diploma, poverty rates increased in every SREB state.

### Earnings by Education Level

For the Population 25 and Older in Kentucky, 2017

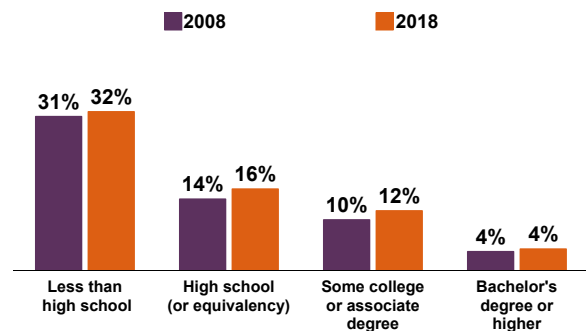


Source: U.S. Census Bureau

However, adults with higher credentials are less likely than their peers with less than a high school education to earn wages below the poverty threshold — \$12,060 for an individual with \$4,180 for each additional person in 2017. In the median SREB state, adults with a bachelor's degree earned \$19,915 more than those with a high school credential.

### Percentage of Adults in Poverty by Attainment

Adults 25 and Older in Kentucky



Source: U.S. Census Bureau

With technological advancements, a growing dependent population, and rising poverty rates for adults at nearly every level of education, SREB states are facing considerable challenges in meeting future workforce needs. States that coordinate thoughtful partnerships and strategic investments to help adults raise their skills will help create a thriving workforce in the future.

# Workforce

## ESSA, Perkins V and WIOA Alignment

Adapting education and workforce development to help more people prepare for jobs in a rapidly changing economy will be a continuing challenge for states over the coming decade. To assist states, three federal statutes — the *Workforce Innovation and Opportunity Act of 2014*, the *Every Student Succeeds Act of 2015* and the *Strengthening Career and Technical Education for the 21st Century Act of 2018 (Perkins V)* — enable states to take powerful actions to unite their K-12, career and technical education and workforce development systems into a more efficient preparation pipeline.

### Establish a single unified goal for improving the workforce.

- With a single unified goal, leaders can align the goals of work in K-12, CTE and workforce development and establish targets that build toward the vision.
- Perkins V and WIOA both require states to set goals for preparing an educated and skilled workforce that meets the needs of employers.
- ESSA requires goals that support high school graduates' preparedness for the workforce: academic achievement in English and math, high school graduation rate and English language proficiency for English learners.

### Take advantage of fortuitous timing to align ESSA, Perkins V and WIOA plans.

- The newly reauthorized statutes enable states to coordinate their work across all three sectors to build a unified approach to raising achievement, helping more individuals find well-paying jobs, and meeting the workforce needs of businesses and industries.
- In 2020, states finalize their new Perkins V and WIOA plans that will guide work through 2023.
- In 2020, states can update their ESSA plan to align with the new Perkins V and WIOA plans.
- States can update their plans annually for ESSA and Perkins V and every two years for WIOA.

### Take advantage of governance overlaps.

- The K-12 state education agency administers ESSA. The agency can also be one of the state entities funded under Perkins V and can be represented on the WIOA state workforce development board.

- The state workforce development board administers WIOA and can also be a funded entity under Perkins V.
- A state higher education system such as the state community college system can be funded under both Perkins V and WIOA.
- The governor must review all three plans before the state submits them to the federal government.

### Work together to identify shared challenges.

- Under all three statutes, states must assess the needs of students, educators and businesses, design supports to help local providers prepare each student for the next stage of his or her education or career and close gaps in achievement and career attainment.
- Perkins V and WIOA require states to conduct a detailed analysis of the workforce needs of employers and their alignment to the current CTE and workforce systems.

### Collaborate with shareholders to design more effective programs.

- All three statutes require state and local leaders to engage several of the same groups of shareholders — people with an interest in improving public education and workforce development systems — in planning, implementing and evaluating efforts.
- These shareholders include elected officials, business and industry leaders, relevant state agencies, educators, parents, community and social service organizations, and individuals representing the populations served.

### Improve programs and services by collaborating to meet the needs of overlapping populations.

- Under ESSA and Perkins V, educators serve students in K-12 public schools.
- Under Perkins V and WIOA, educators in community and technical colleges, adult education programs and industry training settings serve youth and adults seeking high school equivalency, postsecondary credentials and advanced technical skills.

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### **Help students master rigorous, relevant content.**

- WIOA and Perkins V require programs to integrate rigorous academics aligned to the state's standards for K-12 English language arts and math with the technical content of CTE and job training programs for the state's in-demand occupations.

### **Coordinate career pathways to prepare individuals for success in the state's in-demand occupations.**

- Career pathways can begin while students are still in the early grades (for example, with career exploration and field trips). Pathways support students through secondary and postsecondary CTE programs of study and later through job training and workforce development activities.
- Industry sector partnerships — required by Perkins V and WIOA — bring together business leaders, educators, community organizations and others to identify workforce gaps and develop career pathways that prepare students to fill them.
- Perkins V and WIOA require states to support development of career pathways for in-demand industries. ESSA funds the expansion of key elements of pathways: rigorous courses, CTE and early postsecondary opportunities.
- States can support consistently high-quality pathways by establishing criteria and processes to guide their development and implementation.

### **Coordinate work-based learning opportunities give individuals experience in in-demand fields and support businesses in recruitment and retention.**

- Use ESSA funds to provide young learners with opportunities to explore their interests, visit workplaces, interact with industry professionals and develop plans for education and careers after high school.
- Use Perkins V funds to increase and improve work-based learning opportunities in CTE programs.
- Use WIOA Job Corps funds to provide work-based learning within workforce training programs for the state's in-demand occupations and in programs for individuals with disabilities.
- Support industry sector partnerships to develop work-based learning opportunities in the state's in-demand fields and help educators increase the participation of students in special populations.

### **Focus on shared expectations and accountability.**

- Each statute requires that, to the extent possible, states align their performance indicators with those established under the other two statutes.
- States can set aligned expectations for academic achievement, secondary and postsecondary credential attainment, work-based learning and employment.
- States must report disaggregated performance data from the indicators for the state and for local education agencies, schools or programs.

### **Work together to use data and research for continuous improvement.**

- Plan programs and services based on trends and gaps identified in data.
- Select and design strategies and programs based on evidence that they are effective or show promise.
- Track implementation, address challenges and adjust accordingly.
- Support educators in using data and research to plan, test ideas and receive feedback.

### **Streamline efforts for equity.**

- Meet the instructional needs of each student: Coordinate the uses of funds across statutes to help individuals who are underperforming, from low-income families, those with disabilities, English learners, those facing barriers to employment and those from racial or ethnic minorities. Help educators integrate academic and technical course content, differentiate instruction, increase participation in advanced coursework and in-demand career pathways, and use digital resources.
- Support services: All three statutes require coordinating services to the extent practicable. Consistent supports including tutoring, mentoring, mental health programs, nutrition and housing support, transportation and childcare can help more people move through K-12 education, CTE and workforce training so they can get jobs and advance in careers.
- Data: Communicate across state agencies and with educators, businesses and communities to use the data for accountability and continuous improvement to focus everyone on improving opportunities and outcomes for every individual.

# Postsecondary

## Key Terms

**Federal Pell Grants:** financial support for low-income students — whose total family income is \$50,000 or less — that does not have to be repaid.

**Net price:** the total cost of college attendance (includes tuition and fees, room and board, books and supplies, and transportation) minus the average state, federal, and institutional scholarship, grant aid, and any other aid students expect to receive.

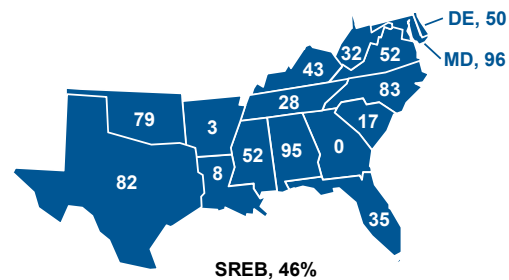
**Expected Family Contribution:** the share of the net price of college attendance expected to be paid by a student’s family. It is based on a family’s taxable and nontaxable income, family size, the number of members going to college that school year and the student’s financial aid information.

Adults with education after high school are more likely to be employed, to earn incomes above the poverty level, and to be able to support their children’s academic growth. However, as the need to earn a postsecondary credential increased, so has the cost of attaining one.

Across the nation, the average total cost for first-time, full-time undergraduates at public four-year institutions increased 13% from 2013 to 2018, compared with 27% in the SREB region. Meanwhile, the percentage of students whose financial needs were fully covered by grants and federal subsidized loans decreased by 8% nationwide and 5% in SREB states. Earning a higher education credential has become almost a prerequisite for future well-being, but paying for one is complex. Postsecondary institutions must go beyond federal mandates and increase their efforts to help more students enter college and complete programs.

## Need-Based Undergraduate Grant Aid

Portion of State Financial Aid, 2017-18



Source: National Association of State Student Grant and Aid Programs

The strategies states use to increase the number and diversity of students in certificate and degree programs vary. Most SREB states provide some combination of need-based and merit-based aid. **Need-based financial aid** remains an important tool to help students and their families overcome the affordability gap between what college costs and what families can afford. But between 2013 and 2018, need-based aid decreased as a portion of total state aid in nine SREB states. Changes in the portion of need-based aid ranged from a 29% increase to an 18% decrease.

Students from low-income families may also receive **Federal Pell Grant** funding to help pay for college. Most Pell money goes to students with total family incomes below \$20,000 per year. From 2013 to 2018, the average Pell award per recipient at public colleges increased from \$3,464 to \$3,925 nationwide. In 2018 the average Pell Grant award in SREB states ranged from \$3,549 to \$4,364.

## Change in Cost for Full-Time Undergraduates at Public 4-Year Colleges in Kentucky

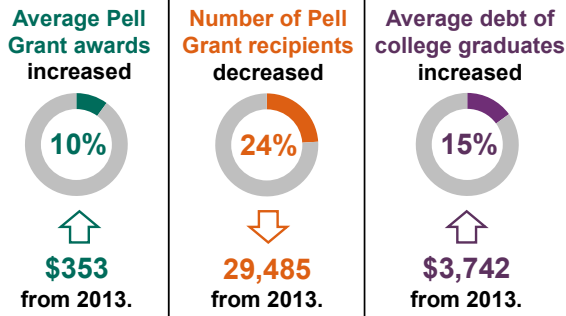
	2012-13	2017-18	Change
Tuition and fees (in-district/in-state) for first-time undergraduates	\$8,457	\$10,409	23%
*Gross total cost of attendance (living on-campus) for first-time undergraduates	\$20,100	\$24,830	24%
*Gross total cost of attendance (living off-campus) for first-time undergraduates	\$20,739	\$25,840	25%
Percentage whose needs were fully met with grants and federal subsidized loans	16%	13%	-19%

\* Gross total cost includes tuition and fees, room and board, books and supplies, and personal transportation and expenses for one full academic year or the length of the largest program (for colleges with nontraditional schedules)

Source: *The Institute for College Access & Success, College Insight*

- More recent high school graduates enroll in postsecondary
- College enrollments reflect the diversity of the state’s recent graduating class

**For the Class of 2018 in Kentucky:**



Sources: SREB Fact Book and The Institute for College Access & Success

Even though the average Pell Grant award increased in the SREB region, the number of students receiving money declined by 570,917 from 2013 to 2018. During the same period, the proportion of college costs covered by Pell also declined in every SREB state. In fact, Federal Pell Grants are at their lowest purchasing power in over 40 years.

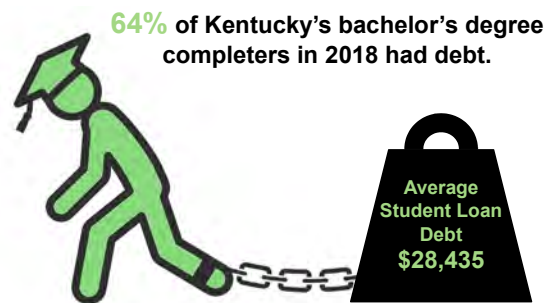
The **net price** for an undergraduate student to attend a public four-year institution for one year in SREB states ranged from \$8,386 to \$25,503 in 2017.

Students’ families are expected to pay a share of the net-price cost for attending college according to their annual **Expected Family Contribution**. EFC varies dramatically across the five income levels established by the Integrated Postsecondary Education Data System at NCES: families with yearly incomes of less than \$30,000, from \$30,000-\$48,000, from \$48,000-\$75,000, from \$75,000-\$110,000, and \$110,000 and above.

Families in the lowest income bracket are expected to contribute less than families in other brackets; even so, their contribution represents a much larger portion of their annual earnings. Student loans can help cover this gap, but loans stretch out the cost with interest added — requiring students to make payments that can span a decade or more beyond graduation.

**Bachelor’s Graduates with Student Loan Debt**

Public and Nonprofit Four-Year Institutions in Kentucky



Source: The Institute for College Access & Success

In 2018, 65% of U.S. college seniors graduated with student debt. Their average debt increased 3 points from 2013 — to \$29,200. Across SREB states, 56% of seniors graduated with debt. Their average debt ranged from \$24,428 to \$34,144. Faced with the prospect of so much debt, many families may decide that college is just too expensive.

**Related SREB Publications**

- Shared Responsibility for College Affordability* (2016)
- Workforce-Driven Financial Aid: Policies and Strategies* (2019)
- State College Affordability Profiles* (2020)

**Percentage of Annual Income Needed to Pay the Net Price at Public Colleges in Kentucky, 2017**

Annual Income Level	Families in This Level	Average Income in This Level	Two-Year Colleges		Four-Year Colleges	
			Net Price	Income Needed	Net Price	Income Needed
\$0 - \$30,000	26%	\$16,732	\$4,774	29%	\$13,596	81%
\$30,000 - \$48,000	18%	\$39,170	\$5,023	13%	\$14,620	37%
\$48,000 - \$75,000	22%	\$60,830	\$7,160	12%	\$17,297	28%
\$75,000 - \$110,000	17%	\$91,331	\$9,708	11%	\$21,265	23%
\$110,000 or more	17%	\$183,822	\$10,142	6%	\$22,458	12%

Source: SREB, *College Affordability Profiles*

# Postsecondary

## Key Terms

**First-year persistence rate:** the percentage of freshmen in the first-time, full-time, bachelor's degree-seeking cohort who were enrolled at the institution they first attended or transferred to another college or university the next fall.

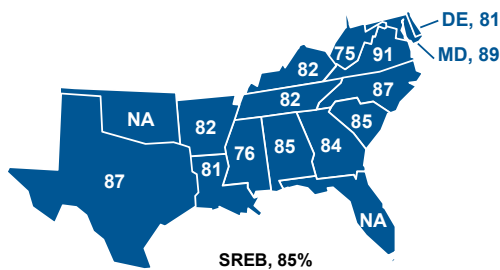
**Three-year and six-year graduation rates:** the percentage of first-time freshmen who enter college in the fall term, remain at the same institution, and graduate within three years (at two-year institutions) or six years (at four-year institutions).

**SREB student progression rate:** the percentage of first-time freshmen who complete a bachelor's degree or remain enrolled or transfer to another institution after their initial enrollment.

SREB states monitor their college freshmen's **first-year persistence rates** as a predictor of college completion. Unlike other persistence rates used across the country, this SREB rate is calculated with data submitted to the SREB-State Data Exchange.

## First-Year Student Persistence Rates

Public Four-Year Colleges and Universities, 2017 to 2018



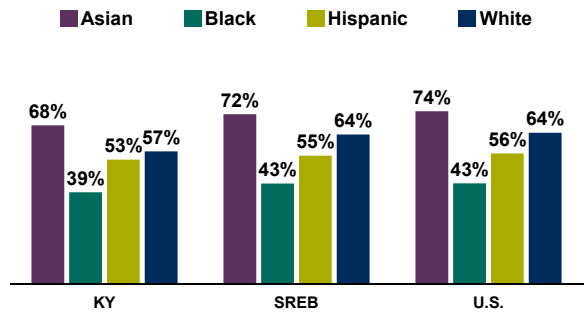
Source: SREB-State Data Exchange

For freshmen students entering in 2017, the average persistence rate at public four-year institutions in SREB states was 85% — four points lower than for their 2012 peers. Across the region, rates for the 2017 cohort ranged from 75% to 91%. Of the 14 SREB states that reported data for the 2017 cohort, 13 saw their persistence rates fall from the cohort of 2012, with decreases ranging between two and 11 percentage points.

Key performance outcome measures for states include the **six-year graduation rate** for four-year colleges and universities and the **three-year graduation rate** for two-year colleges. Institutions must report these rates to the U.S. Department of Education. The rates do not account for students who enroll at later dates, part-time students, or those who transfer from other institutions. Thus, they provide a partial picture of college graduation rates.

## Six-Year Graduation Rates

Public Four-Year Institutions in Kentucky, 2018



Note: First-time, full-time freshmen who entered in fall 2012 and graduated by 2018  
Source: SREB-State Data Exchange

In 2018, the SREB region's six-year college graduation rate was 59%, up 2.6 percentage points from 2014. It trailed the nation by 2.6 points. Six SREB states had graduation rates that exceeded the national average of 61% for students who enrolled in 2012.

The six-year graduation rate for Hispanic students in seven SREB states exceeded the rate for their peers nationwide. In six of these seven states, black and white students also exceeded the rates for their respective peer groups nationwide. In the SREB region as a whole, graduation rates for black students ranged from 28% to 59%. For Hispanic students, the range was 43% to 73%.

In 2018, the three-year college graduation rate for the SREB region was 24%, up 7.7 percentage points from 2015; it trailed the national average by 2.5 percentage points. Five SREB states had three-year graduation rates that exceeded the national average for students who graduated by 2018.

Three-year graduation rates for Hispanic students in six SREB states exceeded the rates for their peers nationwide; black and white students exceeded the rates for their peer groups nationwide in six and five SREB states, respectively. Graduation rates for black students in the



**Challenge to Lead**  
**2020 Outcome**  
**Measures**

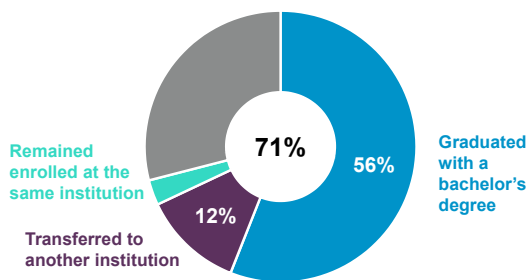
- First-year persistence rates increase
- More college students progress beyond the second year
- More college students graduate on time, from all programs

SREB region ranged from 9% to 29%. For Hispanic students, the range was 10% to 37%.

The Data Exchange partners with SREB states to track students for up to 10 years from the year they enter college to calculate an **SREB student progression rate**. This rate provides states an indicator of the progress a cohort is making toward graduation.

**SREB Student Progression Rate**

Status of 2012 Entering Students in Kentucky, 2018



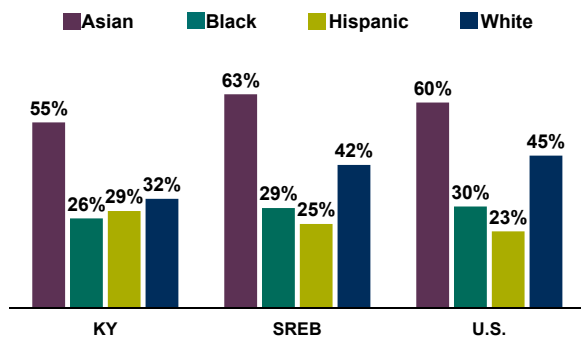
Notes: First-time, full-time freshmen in public four-year institutions within 150% of normal time. Percentages smaller than 5% are not labeled.  
 Source: SREB-State Data Exchange

In 2018, the SREB progression rate was 79% after six years for students who entered public four-year colleges and universities in 2012: 58% had graduated, 17% had transferred to other institutions and 4% remained enrolled.

The Challenge 2020 adult **educational attainment** goal calls for 60% of working-age adults in SREB states to earn a postsecondary credential. Postsecondary certificates, as well as associate and bachelor's degrees, count toward

**Associate Degrees or Higher**

Adults 25 and Older in Kentucky, 2017

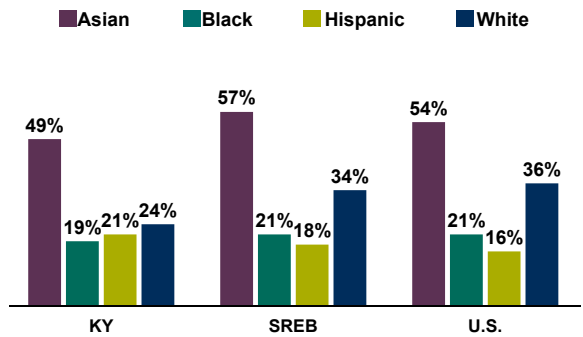


Source: U.S. Census Bureau

the goal. In the SREB region, 38% of working-age adults, ages 25 to 64, had earned an associate degree or higher by 2017 — three percentage points below the nation. Three SREB states matched or exceeded the national average of 41%.

**Bachelor's Degrees or Higher**

Adults 25 and Older in Kentucky, 2017



Source: U.S. Census Bureau

In 2017, the percentages of black or Hispanic working-age adults with an associate degree or higher exceeded their respective peer groups nationwide in five and seven SREB states, respectively. This was true for both groups in Maryland and Virginia. The percentage of white working-age adults with an associate degree or higher exceeded the nation in four SREB states.

States and institutions should consider ways to better support students so that more graduate. For example:

- Provide greater support for Pell Grant recipients to ensure their success
- Provide support for transfer students to ensure they graduate
- Provide rewards for postsecondary institutions that meet or exceed completion performance targets
- Align postsecondary education and workforce needs to provide incentives to students

**Related SREB Publications**

*Community Colleges in the South: Strengthening Readiness and Pathways* (2015)

*Fact Book on Higher Education* (2019)

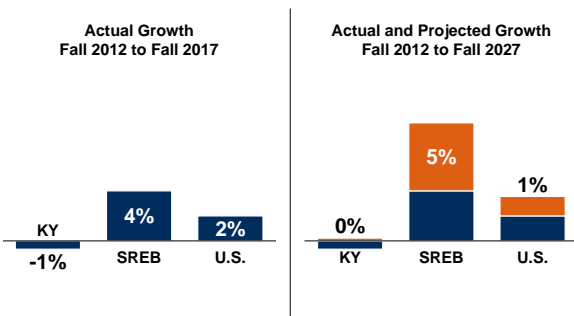
# Demographics

The Challenge to Lead 2020 goals are ambitious, targeting high achievement for *all* groups of students and emphasizing the need for states to close stubborn achievement gaps. Efforts to meet these goals are complicated by rising enrollment and dynamic population changes: more students in public schools, more families struggling economically, and more children whose primary language is not English.

The SREB region has been home to more than a third of the nation's population for decades and continues to grow. Growth in the region represented more than half of the nation's total population growth between 2007 and 2017. The overall population in SREB states rose 5% from 2012 to 2017, so it is no surprise that public elementary and secondary school enrollment also grew. Enrollment in SREB states increased by almost 4% over this period, double the nearly 2% growth in enrollment nationwide.

## Enrollment Changes

Public Elementary and Secondary Enrollment in Kentucky



Source: SREB, based on data from the National Center for Education Statistics

Twelve SREB states had higher enrollment in fall 2017 than in fall 2012. The other four states saw enrollment decline. The changes ranged from a 6% increase to a 4% decrease. More students means more schools, teachers, buses and books — in short, larger education budgets just to meet the growing demand for basic education services.

Nationally, public school enrollment is projected to increase at a slightly slower rate from 2017-18 to 2027-28. While three SREB states may continue to experience decreases in enrollment through fall 2027, enrollment projections for the SREB region suggest an overall increase of 5% over the same ten-year period.

## In Kentucky:

**681,000**

PK-12 students in 2017

The percentage of children living in poverty

**fell by 2 points**

from 2013 to 2018

**264,450 households**

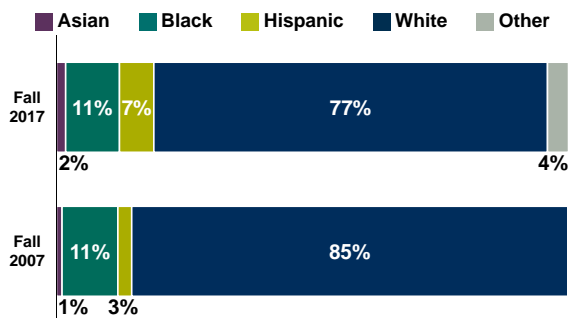
experienced food insecurity in 2016-2018

Over the past decade, overall growth in public school enrollment has been coupled with increased diversity. In fall 2017, 48% of public pre-K-12 students in the United States were white — down 8 points from fall 2007. The proportion of black students also declined slightly, to 15%. But the proportions of Asian and Hispanic students rose over the 10-year period, to 5% and 27%, respectively.

Racial and ethnic diversity also increased in SREB states between 2007 and 2017. In fall 2017, American Indian, Asian, black and Hispanic students made up more than half — 54% — of public school enrollment in the SREB region. Hispanic students, the fastest-growing group, increased as a proportion of student enrollment in the region by 6.5 points during this time.

## Public Elementary and Secondary Enrollment

Racial Composition in Kentucky



Source: SREB, based on data from the National Center for Education Statistics

The U.S. Department of Education projects that this trend of rising diversity will continue. The proportion of white public school students in the nation is expected

## Key Terms

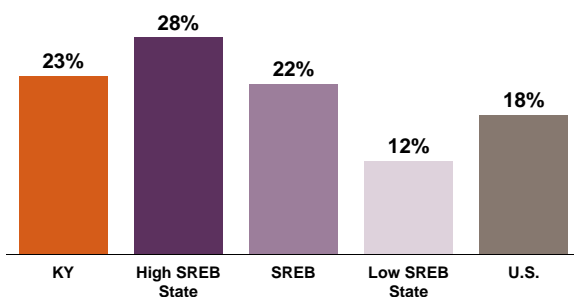
**Poverty:** The U.S. Census Bureau measures poverty by income and household size. The poverty threshold in 2018 was \$25,465 in annual income for a household with two adults and two children.

**Food insecurity:** Defined by the U.S. Department of Agriculture as households that are uncertain of having, or unable to acquire, at some time during the year, enough food to meet the needs of all their members because they had insufficient money or other resources for food.

to continue to decline from 2017 through 2027. On the other hand, the proportions of Asian and Hispanic students and students who identify as multiracial are projected to increase further.

## Children Living in Poverty

Percentage of Residents Under 18 Years Old in Poverty, 2018



Source: The Annie E. Casey Foundation

Some groups of students experience circumstances that create barriers to learning. For example, children growing up in households whose incomes are near or below the poverty line face an increased likelihood of poor outcomes, including academic struggles. Research indicates that low family income can result in poor nutrition, inadequate health care and weak family engagement with schools — all factors that affect student achievement.

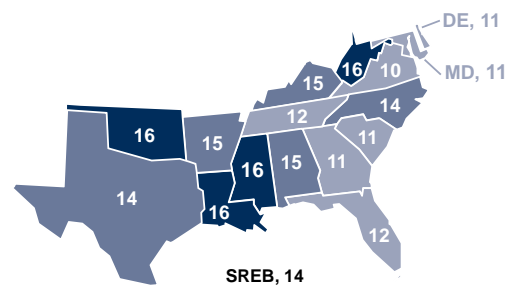
While child poverty rates have fallen since the Great Recession, almost 13 million children under 18 years old in the United States lived in **poverty** in 2018 — about 18% of all children in the population. More than 44% of all children living in poverty in the nation resided in SREB states. The good news is that the percentages of

children living in poverty decreased from 2013 to 2018 in both the nation and the SREB region. This percentage fell in 15 SREB states and rose in one. However, 14 SREB states still had higher childhood poverty rates than the nation in 2018. These rates ranged from 12% to 28% of all children in states across the region.

One challenge low-income households often face is **food insecurity**. In 2016 to 2018, food-insecure households numbered 15.3 million in the nation and 6.3 million in the SREB region. In the median SREB state, 14% of households reported experiencing food insecurity, compared to 12% for the nation as a whole. Rates in SREB states ranged from 10% to 16%.

## Household Food Insecurity Rate

Percentage With Low or Very Low Food Security, 2016 to 2018



Source: Food Research and Action Center

Some students, including English learners and students with disabilities, require specialized supports to succeed in school. In fall 2017, 12% of students in the SREB region received special education services. Researchers have found that 80% to 90% of students with a learning disability are affected by dyslexia and require more intensive and comprehensive reading instruction than their peers. States across the nation are working to improve reading instruction for all students, which can help ensure that students with dyslexia never struggle to the extent that they require special education services.

Increasing enrollment in public schools means that the number of students who need special services and support is also increasing. These additional supports are costly to schools, but necessary for all students to be successful. Policymakers will need to ensure that adequate funding is available to schools and seek cost-effective program and policy solutions to meet the needs of all students in their states.

# High School

## Key Terms

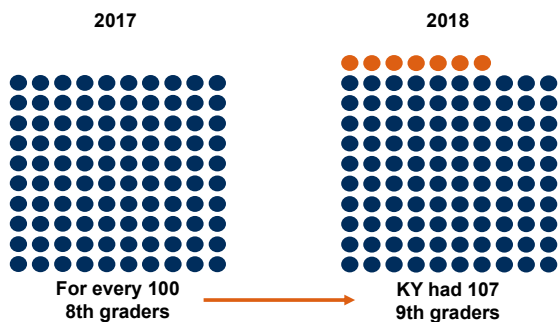
**Ninth-grade bulge:** A possible indicator that too many middle graders were underprepared for high school. Ninth grade public enrollments that exceed that cohort's eighth grade enrollments could be due to ninth grade retentions, drop-outs, transfers, or newly enrolled former home-school students.

**Grade-level progression:** The percentage of students who successfully advance from one grade to the next.

Making a successful transition from eighth to ninth grade is key to student success in high school. But this transition proves difficult for many students. In the SREB region, 109 ninth graders were enrolled in public schools in 2018 for every 100 eighth graders in 2017. The bulge ranged from three to 15 more students in ninth grade across SREB states.

## 9th Grade Enrollment Bulge

Kentucky

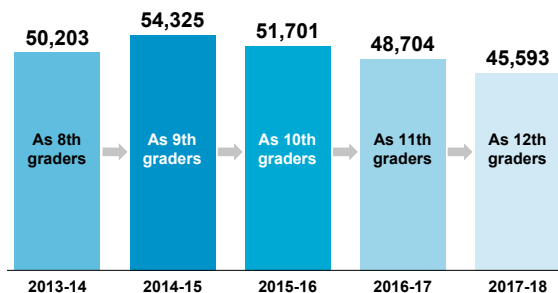


Source: SREB, based on data from the National Center for Education Statistics

Students can struggle with transitions as they advance through high school as well, potentially putting them at risk of failing a grade or dropping out, although states have seen some improvement. From 2011 to 2018 the percentage of ninth graders who reached 12th grade on time increased eight percentage points to 83%, trailing the nation by seven points. In 2018 the high school progression rates in SREB states ranged from 75% to 92%.

## Grade-Level Progression

Enrollment for the Class of 2018, Kentucky



Source: SREB, based on data from the National Center for Education Statistics

Several factors influence both the ninth-grade bulge and high school progression rates. Monitoring students' progression into and through high school can help school staff identify students at risk of failure and show state leaders where state policies and programs can support student success.

Between 2016 and 2018, the region's graduation rate rose by 0.6 points to 86.9%. Fourteen states saw their high school graduation rates rise during this time, by between 0.4 and 4.9 percentage points.

The median graduation rate gains for Asian and black students, English learners and students from low-income families outpaced those made by all students in the region. English learners had the greatest overall gains, with graduation rate increases in 11 SREB states.

Amid overall gains in graduation rates, significant gaps remain among student groups. Black and Hispanic students, students with disabilities, those from low-income families, and English learners continued to graduate at rates lower than their Asian and white peers.

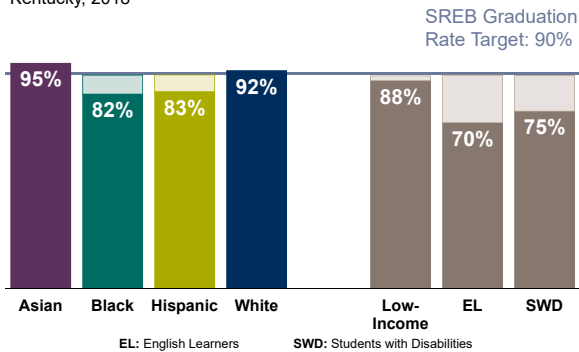
In 2018, 83% of black students in SREB states graduated from high school, improving in 14 states, by between 0.1 and 8.6 points. Hispanic students, whose graduation rate was 82% across the region, made the least progress, with rate decreases in five states.

## Challenge to Lead 2020 Outcome Measures

- Rates of on-time progression through high school will increase to above national averages
- 90% of students will graduate from high school in 4 years

### High School Graduation Rates

Kentucky, 2018



Source: State departments of education

At the same time, students from low-income families graduated from high school at a rate of 82%, with gains in 12 states. English learners graduated at a rate of 71%, and students with disabilities trailed with a rate of 69%.

In addition to graduating students from high school, states need to focus on preparing students for the transition to college and careers. The Challenge 2020 goals call for states to increase access to accelerated programs, such as Advanced Placement, International Baccalaureate, and dual enrollment.

One recommendation is that students take AP exams while in high school. Research shows that students who take AP courses in high school and attempt the related exams are more academically successful as college freshmen. This is true even if the students do not earn a score of 3 or higher on the test — considered passing and generally sufficient to earn college credit.

### Advanced Placement in Kentucky

Student group	Number of tests taken		Percentage of tests with scores 3+	
	2009	2019	2009	2019
Asian Students	1,574	3,615	65%	69%
Black Students	1,249	2,431	31%	30%
Hispanic Students	669	3,003	45%	42%
White Students	26,672	42,169	51%	54%

Source: College Board, Inc.

### In Kentucky:

The high school graduation rate in 2018 was



up 4 points from 2013.



of ninth graders advanced to 12th grade on time — 2 points more in 2018 than in 2014.

Of all the AP tests taken in 2019,



received a score of 3 or higher, trailing the nation by 6 points.

Sources: College Board, Inc., NCES, and state departments of education

In 2019, seven SREB states had a higher percentage of 11th and 12th graders enrolled in AP courses than the national average. The regional participation rate was 26%, compared with 27% in the nation, with SREB state rates ranging between 13% and 37%.

### SREB online tool on High Schools to College and Careers

These profiles look at policies — by topic and by state — that affect students as they make their way from middle grades to high school graduation and into college and careers. View online at <https://www.sreb.org/state-policies-high-school-graduation-and-postsecondary-readiness>

# High School

## Key Terms

**Dual enrollment:** Courses taken during high school in which students receive both high school and college credit.

**Early College High Schools:** Organized programs of study in which students earn no less than 12 transferable college credit hours that count toward their high school diploma at no cost to students or their families.

While increasing high school graduation rates is important, the focus of the SREB 2020 goal for high schools is on college- and career-readiness. Like Advanced Placement, **dual enrollment** courses may help prepare students for college and career training beyond high school.

Recently, states have paid increased attention to dual enrollment programs to provide greater access to postsecondary for more students. And there is some evidence that these programs can encourage students to enroll in college and help them be successful, though research findings are mixed.

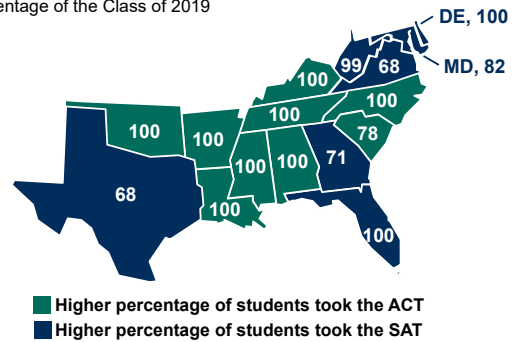
Many of the positive outcomes attributed to dual enrollment were observed in **Early College High Schools**, and due to data and sampling limitations, findings from such studies are not generalizable beyond the original program(s) or location(s). Researchers have also been unable to determine whether participation causes the positive outcomes or if they are simply associated with dual enrollment due to other factors (such as student characteristics or programmatic variations).

To help states answer these questions, SREB began a Dual Enrollment Initiative in 2019. Over the coming years, the initiative will help states learn how such programs can help more students complete postsecondary credentials, gain life skills, and be better prepared to meet workforce needs.

Student performance on national assessments such as the ACT and SAT provides states with critical information about how students may perform after high school. Both assessments set college readiness benchmarks that help students and their advisors make final high school course choices.

## ACT and SAT Participation Rates

Percentage of the Class of 2019



Sources: ACT, Inc. and College Board, Inc.

Nine SREB states required students in the class of 2019 to take one of these tests, generally in their junior year. Of these states, five required the ACT and one required the SAT. Arkansas had full participation on the ACT even though the test was not required, and the same

## Earning Postsecondary Credit During High School in Kentucky

Policy Elements	Details
State offers multiple ways for students to earn postsecondary credit in high school	Yes: 2
Term for courses in which a student earns secondary and postsecondary credit	Dual Credit
State requires dual credit courses to be offered in high school	Yes
Grades in which students may participate in dual credit courses	9-12
Public postsecondary institutions are required to accept credits	Yes

Source: Education Commission of the States and state departments of education

**Challenge to Lead  
2020 Outcome  
Measures**

- Percentages of students taking and passing accelerated learning courses will increase and rates will exceed national averages
- State average scores on national college admissions exams will exceed national averages

was true in Florida with the SAT. In 2019, West Virginia began requiring that all juniors take the SAT unless they take the West Virginia Alternative Summer Assessment.

Among SREB states, the percentage of students taking these admission tests differs greatly, and the proportion of students taking them has shifted in recent years. In Florida, North Carolina and South Carolina more than half of the class of 2019 took both tests. Of those states remaining, seven had 50% or more participation on only the ACT, and six had 50% or more participation on only the SAT.

In the SREB region, 63% of the class of 2019 took the ACT, down from 73% for the class of 2017. This decrease largely resulted from more students taking the SAT in several states. SAT participation for the 2019 class was 59%, up 10 percentage points from the class of 2017.

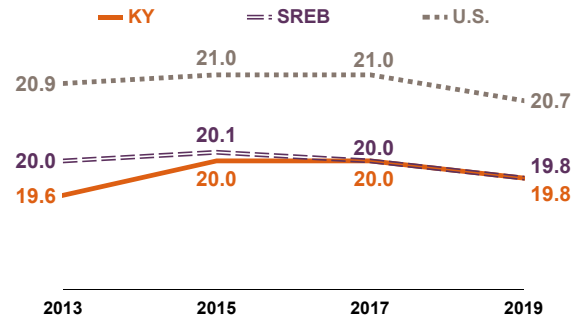
**Kentucky class of 2019**

- ACT participation has been 100% for each class since the class of 2013.
- The average ACT composite score for females was 0.7 points higher than for males.
- Females scored 1.2 points higher than males in reading; males scored 0.3 points higher in math.

SREB's 2020 goals call for states to reach national averages on the ACT and SAT. The average ACT composite score for the SREB region for the class of 2019 was 19.8, compared with the national average of 20.7. Since 2013, both the national and regional averages fell by 0.2 points. For the ACT, 0.1 point is considered statistically significant.

In the SREB region, the average composite ACT score for black, Hispanic and white students in the class of 2019 dropped compared with the class of 2017. In 2019, black students in the region met their national peers' score of 16.8. Asian and Hispanic students trailed the nation by 0.2 points each, and white students trailed the nation by 0.7 points.

**Average Composite ACT Scores**  
Graduating Classes, Kentucky



Source: ACT, Inc.

The 2019 SAT results cover two sections: Evidence-Based Reading and Writing, and Math. While this test is derived from previous ones, it was greatly revised in 2017 so previous scores do not directly correspond to current and future ones. The SAT has set empirically based benchmarks of college readiness for each section: 480 for ERW and 530 for Math.

In SREB states, the average SAT score for the class of 2019 was 1036, 7 points lower than in 2017 and 23 points lower than the national average.

**Difference from SAT Benchmark Scores  
SREB Region, Class of 2019**

Student Group	Benchmark	
	ERW: 480	Math: 530
All Students	+47	-21
American Indian	-14	-80
Asian	+112	+89
Black	-2	-76
Hispanic	+18	-49
White	+84	+14

Note: ERW means Evidence-Based Reading and Writing.

# High School

## Key Terms

**ACT and SAT readiness benchmark:** the minimum scores that indicate students have a high probability of success in college courses.

- ACT: a benchmark score indicates a student has about a 50% chance of earning a B or better and about a 75% chance of earning a C or better in the corresponding college courses.
- SAT: a benchmark score indicates a student has about a 75% chance of earning a C or better in the corresponding college courses.

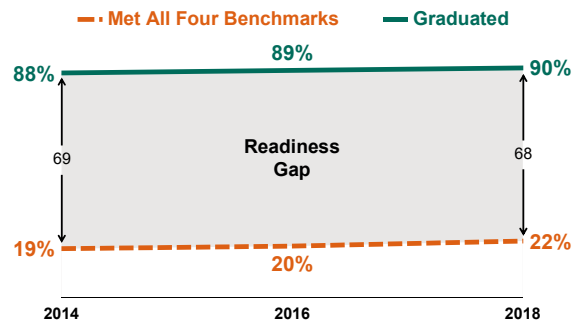
**Readiness gap:** the gap between high school completion rates and the percentage of students meeting college-readiness benchmarks.

States can use various measures to gauge their students' progress toward the SREB college- and career-readiness goal. These include the ACT, SAT, state assessments and indicators such as graduation rates and completion of dual enrollment courses and industry certifications.

SREB states have significantly increased their high school graduation rates since 2002, but ACT and SAT college-readiness results show that too many graduates are leaving high school unprepared for college coursework. This **readiness gap** comes at a time when labor projections suggest that nearly two-thirds of future job openings will require candidates with postsecondary credentials.

## Graduation Rates vs. College Readiness

Graduating Seniors Meeting All ACT Benchmarks, Kentucky

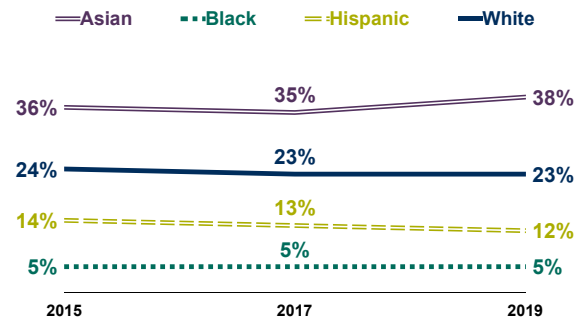


Sources: ACT, Inc., U.S. and state departments of education

Nationwide, of the students in the class of 2019 who took a college-readiness assessment, 26% met all four ACT benchmarks and 45% met both SAT benchmarks. In SREB states, 20% and 40% did, respectively.

## Percentage Meeting All Four ACT Benchmarks

Graduating Class by Subgroup, Kentucky

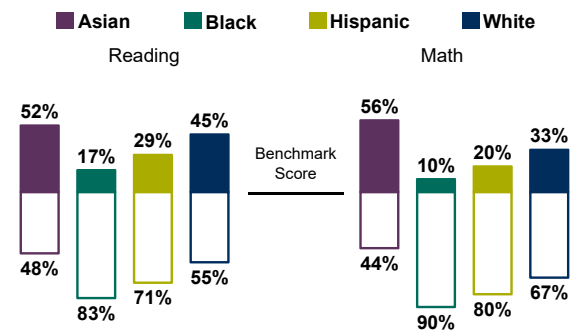


Source: ACT, Inc.

A closer look at ACT and SAT benchmark results shows wider performance gaps in meeting the benchmarks for black and Hispanic students than for Asian or white students.

## Class of 2019 Meeting ACT Benchmarks

Students in Kentucky by Subgroup



Source: ACT, Inc.

Across the SREB region in 2019, ACT benchmark results showed: 49% of Asian and 28% of white students met all four college-readiness benchmarks; 14% of Hispanic students and 5% of black students did.

The pattern of results was similar on the SAT. In 2019, 72% of Asian and 55% of white students met both SAT benchmarks, but only 28% of Hispanic students and 19% of black students did. Fewer than half of black



## Challenge to Lead 2020 Outcome Measures

- SREB students will pass graduation tests at rates higher than other students across the nation
- 80% of high school graduates will meet college-readiness benchmarks and be ready for college and career training

students and 58% of Hispanic students met at least one of the SAT benchmarks, compared with 82% of white students and 88% of Asian students.

According to ACT results, students are particularly underprepared in STEM — science, technology, engineering and mathematics. Nationwide, 20% of students in the class of 2019 who took the ACT met the STEM benchmark, compared with 15% in the SREB region. While 38% of Asian students and 17% of white students in the SREB region met this benchmark, just 3% of black and 8% of Hispanic students did.

In the eight SREB states with 100% ACT participation for the class of 2019, 1-3% of black students and 5-8% of Hispanic students met the STEM benchmark; 13-19% of white students and 27-41% of Asian students did.

According to SREB’s 2017 publication, *Valuing Both C’s in College- and Career-Readiness Accountability Systems*,

industry leaders already struggle to find workers who possess a broad mix of workplace skills, including STEM and industry-specific technical skills. Employers have expressed a need for workers who also have essential employability skills like the ability to communicate well, read technical manuals, work in teams and solve complex problems.

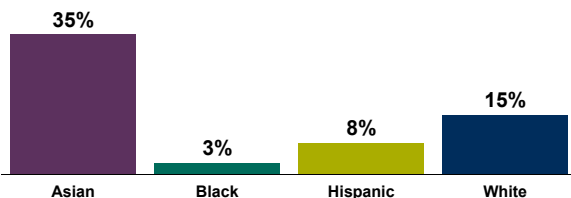
To prepare more students to graduate with the skills needed to meet workforce needs, states offer career and technical education courses, often as part of defined pathways or programs of study. Career pathways that connect to college-ready courses and career opportunities teach critical technical and employability skills, but they also keep students engaged and achieving at higher levels, preventing dropouts and promoting transitions beyond high school.

CTE courses can be funded using federal Perkins V awards that require each state to report data on at least one of three program quality indicators. Most SREB states report how many students attained a recognized postsecondary credential — an industry recognized certification, apprenticeship or degree. The other two available indicators are students who attained postsecondary credits and those who participated in work-based learning.

### Percentage Meeting ACT STEM Benchmark

Graduating Class in Kentucky, 2019

Participation Rate = 100%



Source: ACT, Inc.

### Related SREB Publications

*Credentials for All: An Imperative for SREB States* (2015)

*Valuing Both C’s in College- and Career-Readiness Accountability Systems* (2017)

## Career and Technical Education in Kentucky, 2016-17

Enrolled high schoolers who enrolled in CTE	75%
Enrolled high schoolers who were CTE concentrators	18%
CTE concentrators who met performance goals for technical skills	73%
High school graduation rate for CTE concentrators	98%
CTE concentrators who earned a postsecondary credential after high school	81%
“Good jobs” held by workers without a bachelor’s degree*	48%

\*Note: “Good jobs” have median annual earnings of \$55,000 and pay no less than \$35,000 for adults under age 45.

Source: *Advance CTE*

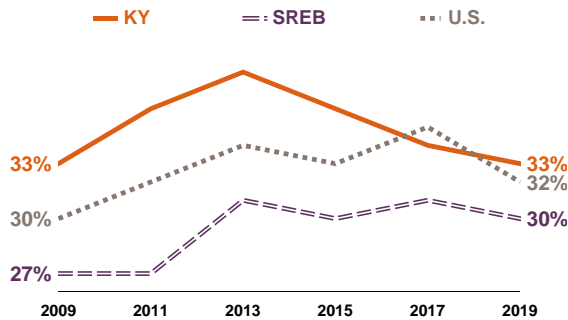
# Middle Grades

The National Assessment of Educational Progress — also known as the Nation’s Report Card — measures student achievement every two years, most recently in 2019. The NAEP **Basic** level indicates that a student demonstrates partial mastery of grade-level knowledge and skills. The **Proficient** level is most closely associated with college and career readiness. The term “benchmark” in this text refers to the percentage of students performing at or above a given level.

Overall, the percentages of eighth graders in both the nation and SREB region scoring at or above the NAEP Basic level were lower in 2019 than in 2009. In **reading**, these rates dropped by 2.2 points for the nation and 1.9 points for the region. In **math**, they dropped by 3.4 points and 2.7 points, respectively.

## 8th Grade NAEP Reading

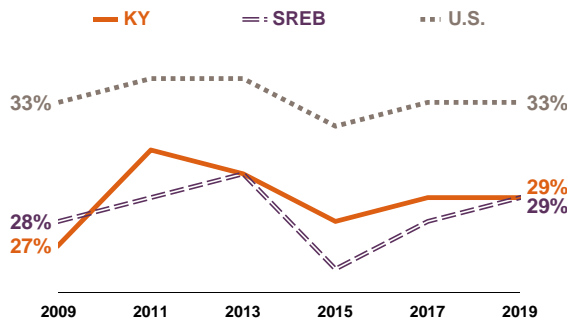
Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

## 8th Grade NAEP Math

Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

But greater proportions of eighth graders performed at or above the Proficient level in 2019 than in 2009. In **reading**, this group of eighth graders grew by 2 points in the nation and 3.1 points in the SREB region; in **math**, it grew by 0.3 points in the nation and 1.4 points in the region. Together, these changes mean that the group of eighth graders performing at the Basic level in 2019 shrank compared to 2009, while greater percentages of eighth graders did either very poorly or very well on NAEP.

## 8th Grade NAEP Reading and Math

Change in the Percentage of Students at Each Level, 2009 to 2019



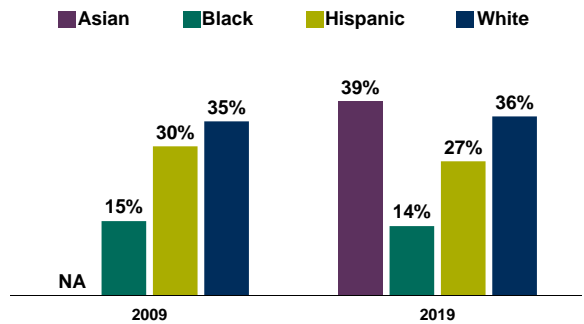
Note: Arrows and state count indicate change of 0.1 percentage points or more.

Source: National Center for Education Statistics

The Challenge to Lead 2020 goal for middle graders emphasizes the need for SREB states to close NAEP performance gaps between student groups. Differences in the percentages of two different groups of students performing at a given level on NAEP are an indicator of how well — or poorly — states are doing at supporting students who face additional barriers to learning.

## 8th Grade NAEP Reading

Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

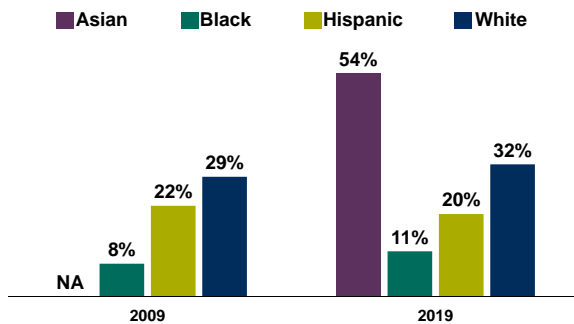
## Challenge to Lead 2020 Outcome Measures

- 90% of eighth graders at or above Basic on NAEP in reading and math
- Percentages of eighth graders at or above Proficient exceed national averages
- Achievement gaps between groups narrow

In 2019, Asian eighth graders in the SREB region outperformed their peers on NAEP. White eighth graders outperformed their black and Hispanic peers. In **reading**, the gap between the percentage of white students in SREB states and their black peers meeting the Proficient benchmark grew between 2009 and 2019, but this gap shrank slightly between white eighth graders and their Hispanic peers. In **math**, gaps grew between white and black eighth graders and white and Hispanic eighth graders performing at Proficient or above, but the gap between Asian and white students shrank from 2009 to 2019.

### 8th Grade NAEP Math

Percentage Scoring At or Above Proficient in Kentucky

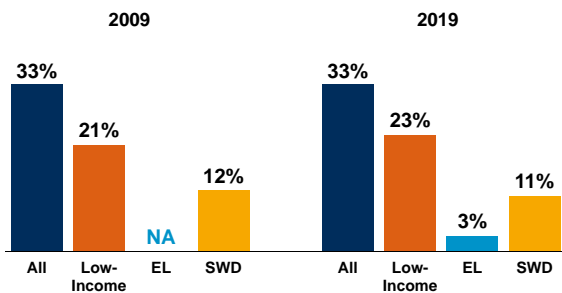


Source: National Center for Education Statistics

In 2019, smaller percentages of eighth graders from low-income families in SREB states met either benchmark in **reading** and in **math** than their national peers. In the SREB region, the gap in performance on NAEP between students from low-income families and their peers grew in **reading** at the Proficient benchmark and grew in **math** at both the Basic and Proficient benchmarks.

### 8th Grade NAEP Reading Gaps

Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

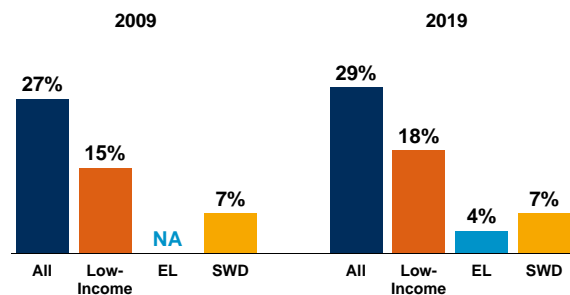
EL = English Learners  
SWD = Students With Disabilities

English learners in SREB states outperformed their national eighth grade peers in **reading** at both performance benchmarks in 2019. They met the Proficient benchmark at about the same rate as their national peers in **math** and met the Basic benchmark at a slightly lower rate. But the gap between ELs and their peers in SREB states grew significantly between 2009 and 2019 in both subjects and at both performance benchmarks.

Eighth graders with disabilities in SREB states did not do as well as their national peers on NAEP in 2019. The percentages of eighth graders with disabilities meeting Basic and Proficient benchmarks on NAEP in **reading** grew from 2009 to 2019, but a larger proportion performed below Basic in **math**. The gaps between these students and their peers grew at the Proficient benchmark level in **reading** and both benchmarks in **math**.

### 8th Grade NAEP Math Gaps

Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

EL = English Learners  
SWD = Students With Disabilities

Gaps between student groups remained in all 16 SREB states in 2019. Policies that help *all* groups of students meet standards and reach higher academic levels are crucial. States should keep in mind that the roots of academic problems in the middle grades often extend back to children's first years in school. Support that begins there and continues into the middle grades can help ensure that more students are prepared to move into high school.

### Related SREB Publications

*A New Mission for the Middle Grades: Preparing Students for a Changing World* (2011)

*Improved Middle Grades Schools for Improved High School Readiness: Ten Best Practices in the Middle Grades* (2012)

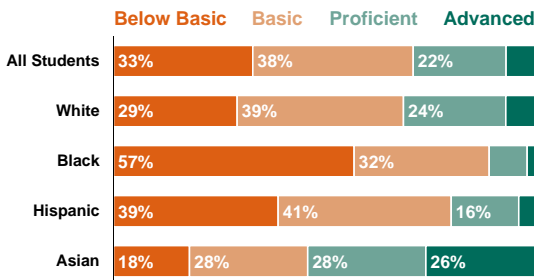
# Middle Grades

Understanding a state's challenges in moving more students to higher levels on NAEP requires a closer look at all the data. Helping students rise from Basic to Proficient on NAEP is critical, but it often first requires helping them improve from below Basic to Basic.

While 29% of eighth graders in the median SREB state performed at or above the Proficient level on NAEP in math in 2019, another 35% fell **below Basic**. These students did not demonstrate even partial mastery of grade-level skills. They are far from being prepared for high-school math classes and are likely to struggle, even with extra support.

## 8th Grade NAEP Math

Results by Performance Level in Kentucky, 2019

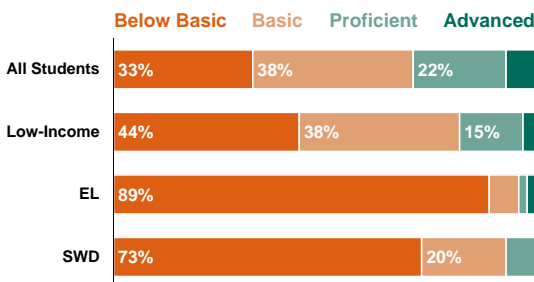


Note: Percentages below 10% are not labeled. Percentages may not add to 100% due to rounding.

Source: National Center for Education Statistics

## 8th Grade NAEP Math

Results by Performance Level in Kentucky, 2019



Note: Percentages below 10% are not labeled. Percentages may not add to 100% due to rounding. EL = English Learner; SWD = Students With Disabilities

Source: National Center for Education Statistics

Overall percentages of eighth graders performing below Basic on NAEP hide large gaps between student groups. In 2019, much larger proportions of black, Hispanic and American Indian eighth graders fell below the Basic benchmark on NAEP in math than did their white and Asian peers. Gaps were also large between students

from low-income families, English learners, and students with disabilities and their peers. These large differences in performance call out to states and schools to do more to support all students in the middle grades, and especially those most at risk of academic struggles.

## 8th Grade Math Results

Kentucky, 2019

	Assessment	
	State	NAEP
Below Basic	18%	33%
At or Above Proficient	45%	29%

Sources: National Center for Education Statistics and Kentucky Department of Education

Eighth graders take both NAEP and their state's grade-level assessment in math. When the percentage of students scoring at or above the level considered proficient on state assessments is close to the percentage scoring at or above NAEP Proficient, the standards, cut scores and reporting categories of that state are likely to accurately indicate college and career readiness. Likewise, similar percentages of students scoring below a basic level of achievement on state assessments and NAEP indicates that states are accurately identifying the students who need the most support.

In 2019, gaps between state and NAEP results in the percentage of eighth graders considered proficient in math ranged from 3 to 30 percentage points. The gap at the below Basic level ranged from 2 to 32 points. Only one state — Tennessee — could boast a difference of five points or less at both levels. In most cases, state assessments results overstate the percentage of students performing at or above the proficient level as compared to NAEP and understate the percentage of students performing below basic.

States in which students' performance on NAEP is very different from their performance on state assessments are less likely to be able to accurately measure the proportion of students who are ready for college or careers. They may also underestimate the proportion of students struggling to acquire academic skills and fail to provide the support these students need.

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## Education in a Pandemic

The COVID-19 pandemic, like the Katrina crisis 15 years ago, forces us to pause and carefully reconsider how best to deal at state and local levels with the ongoing crisis and a potentially long recovery. Lessons learned from Katrina have been incorporated into emergency preparedness policies and practices to improve response and recovery efforts going forward.

The COVID-19 pandemic differs from most crises in that it continues as we attempt to plan for the recovery phase, making everything more complicated and tenuous. Any next steps must be well planned and well executed, and they must provide the flexibility needed to face the unforeseen.

### Regional Teamwork

In response to these demands, SREB established two pandemic recovery task forces this spring: one focusing on K-12 recovery and the other on higher education.

The K-12 Education Recovery Task Force regularly convenes education leaders — from chief state school officers to classroom teachers — from SREB’s 16 member states as they consider issues related to reopening school buildings and returning to in-person instruction. The task force’s highest priority is addressing how to meet the academic, emotional and nutritional needs of students. The group is reviewing the challenges ahead, assessing critical needs and developing practical strategies in:

- Governance and operation
- Health and safety
- Instruction

As part of this effort, the task force is developing a playbook to assist states, districts and schools as they reopen classrooms following the COVID-19 pandemic. Progress on the playbook can be found on SREB’s website.

At the same time, SREB’s Higher Education Recovery Task Force is working with higher education state and campus leaders to address the challenges students and institutions face with the pandemic and recovery. Central issues the task force is focusing on include:

- Funding and costs: How colleges and universities will find the resources to endure and provide quality teaching and support for each student.

- Safety and health: How institutions will reopen and maintain safe campuses.
- Distance learning, technology, innovation: How institutions can improve online teaching and make broadband and technology more available for staff and students.
- Student support: How institutions will provide financial, academic and personal support for students dealing with the crisis.

For more information on the task force’s work to date, you can find breakout session notes and meeting summaries on SREB’s website.

### Federal Guidance

Established in 2004, the Readiness and Emergency Management for Schools Technical Assistance Center at the U.S. Department of Education serves as the federal government’s comprehensive one-stop shop for school emergency planning and preparation. In response to the current pandemic, the REMS TA Center provides frequently updated guidance, resources, training and tools on COVID-19 and infectious disease planning that includes information from key federal agencies such as the Federal Emergency Management Agency and the Centers for Disease Control and Prevention.

The CDC offers states and schools information on current concerns and suggestions for reopening schools during the pandemic. Its suggestions make clear that reopening schools will require diligence and forethought.

The CDC recommends that schools encourage behaviors that will help reduce the spread of the virus. The guidance also offers suggestions for maintaining healthy environments and operations, including ideas for staggered scheduling, gatherings, student groupings and communications.

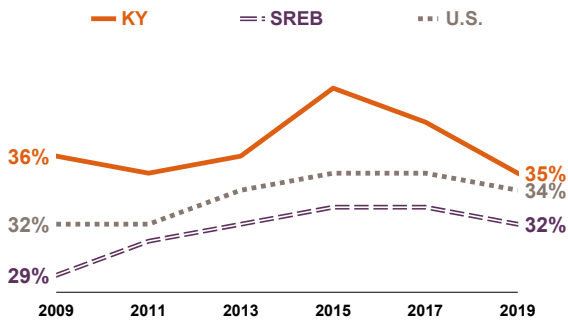
The CDC also advises that schools consider implementing strategies that will allow them to be prepared for the real possibility that someone will get sick. These strategies include isolation and transportation of those who are sick, cleaning and disinfecting, and appropriate notification of health officials, parents, staff and the community.

# Early Grades

The National Assessment of Educational Progress — also known as the Nation’s Report Card — measures student achievement every two years, most recently in 2019. The NAEP **Basic** level indicates that a student demonstrates partial mastery of grade-level knowledge and skills. The **Proficient** level is most closely associated with college and career readiness. The term “benchmark” in this text refers to the percentage of students performing at or above a given level.

## 4th Grade NAEP Reading

Percentage Scoring At or Above Proficient in Kentucky

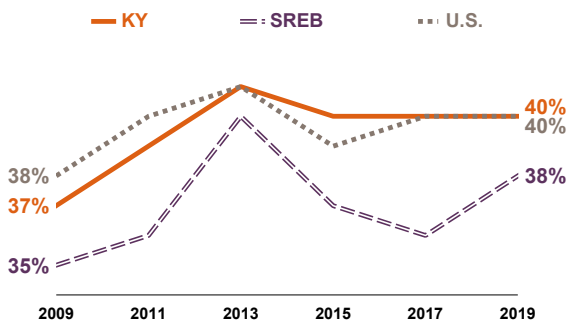


Source: National Center for Education Statistics

Smaller percentages of fourth graders scored at or above the NAEP Basic level in 2019 than in 2009 in both the nation and SREB region. In **reading**, these figures dropped by 0.4 points for the nation and 0.2 points for the region; in **math**, they dropped by 1.2 points and 2.0 points, respectively.

## 4th Grade NAEP Math

Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

However, the percentages of fourth graders performing at or above Proficient rose over the same period — by 2.8 points for the nation and 3.4 points for SREB states in **reading**, and by 2.1 points for the nation and 3.0 points for the region in **math**.

## 4th Grade NAEP Reading and Math

Change in the Percentage of Students at Each Level, 2009 to 2019



Note: Arrows and state count indicate change of 0.1 percentage points or more.

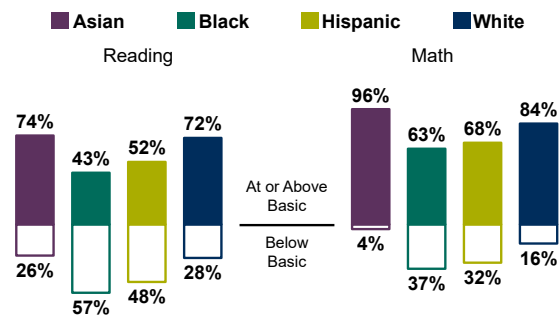
Source: National Center for Education Statistics

Together, these changes mean that the group of fourth graders performing at the Basic level in 2019 shrank compared to 2009, while greater percentages of fourth graders did either very poorly or very well on NAEP.

The Challenge to Lead 2020 early grades goal emphasizes the need for SREB states to close NAEP performance gaps between students of racial and ethnic groups, between students from low-income households and those whose families earn higher incomes, and between English learners and their peers. Performance gaps are an indicator of how well — or poorly — states are doing at supporting students who face additional barriers to learning.

## 4th Grade NAEP Reading and Math

Performance Percentages in Kentucky in 2019



Source: National Center for Education Statistics

## Challenge to Lead 2020 Outcome Measures

- 90% of fourth graders at or above Basic on NAEP in reading and math
- Percentages of fourth graders at or above Proficient exceed national averages
- Achievement gaps between groups narrow

In 2019, Asian fourth graders in the SREB region outperformed their peers on NAEP. White fourth graders outperformed their black and Hispanic peers. In **reading**, the gaps between the percentages of white students in SREB states and their peers meeting the Proficient benchmark grew between 2009 and 2019. In **math**, the gap between white and black students shrank, but it grew between white and Hispanic and white and Asian students.

### At or Above Proficient on 4th Grade NAEP Kentucky, 2019

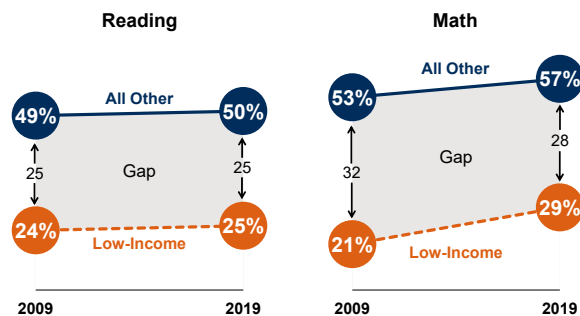
	Reading	Math
All Students	35% ↓	40% ↑
Asian	49% ↓	62% ↓
Black	14% ↑	20% ↑
Hispanic	25% ↑	27% ↑
White	39% ↓	44% ↑

Note: Arrows indicate change of 0.1 percentage points or more since 2009.

Source: National Center for Education Statistics

Academic outcomes related to household income contribute to some of the largest and most pervasive achievement gaps across the nation and SREB region. In 2019, fourth graders from low-income families in SREB states performed at or above the Basic and Proficient benchmarks at lower rates than their national peers in both **reading** and **math**. The gap in performance on NAEP between income groups grew in both subjects and for both benchmarks.

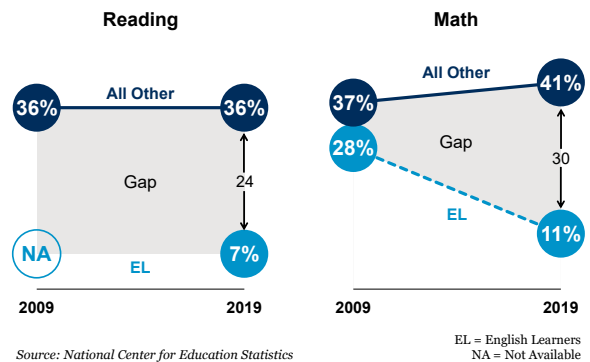
### 4th Grade NAEP Reading and Math Gaps Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

English learners often enter school with little to no exposure to the English language and struggle in U.S. classrooms, especially in subjects that are reading-dependent. This group is projected to account for an increasing proportion of enrollments in SREB states in the immediate future. In 2019, ELs in SREB states met the Basic benchmark at a slightly higher rate than their national peers in **reading**. They also outperformed their national peers in **math** at the Basic level and above. But the gap between ELs and their peers in SREB states grew between 2009 and 2019 in both subjects and for both performance benchmarks.

### 4th Grade NAEP Reading and Math Gaps Percentage Scoring At or Above Proficient in Kentucky



Source: National Center for Education Statistics

EL = English Learners  
NA = Not Available

Despite growing enrollments, demographic changes and the persistence of achievement gaps, some SREB states made promising gains in reading and math achievement between 2009 and 2019. Fourth graders in Mississippi made significant progress in both subjects and at both benchmark levels. Louisiana and Tennessee also saw gains in both subjects and for both benchmarks. But too few fourth graders in all SREB states are meeting benchmarks that put them on track for successful academic careers.

### Related SREB Publications

*Ready to Read, Ready to Succeed: State Policies That Support Fourth-Grade Reading Success* (2017)

*Dyslexia Policies in SREB States: Addressing the Needs of Struggling Young Readers* (2018)

*Early Math Matters: Factoring in Teacher Knowledge and Practice* (2019)

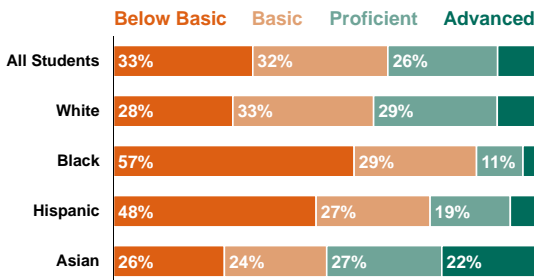
# Early Grades

Understanding a state’s challenges in moving more students to higher levels on NAEP requires a closer look at *all* the data. Helping students rise from Basic to Proficient on NAEP is critical, but a preliminary step is often helping them improve from below Basic to Basic.

While 32% of fourth graders in the median SREB state performed at or above the Proficient level on NAEP in reading in 2019, another 37% fell below Basic. These students did not demonstrate even partial mastery of grade-level skills. They are far from the target reading benchmark and are likely to struggle in future grades even if they receive extra support.

## 4th Grade NAEP Reading

Results by Performance Level in Kentucky, 2019

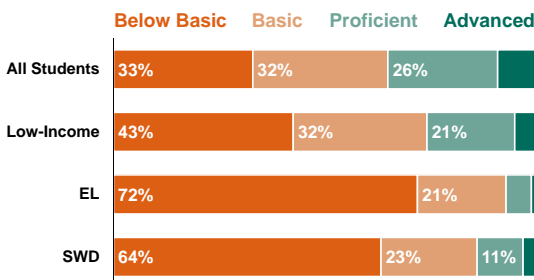


Note: Percentages below 10% are not labeled. Percentages may not add to 100% due to rounding.

Source: National Center for Education Statistics

## 4th Grade NAEP Reading

Results by Performance Level in Kentucky, 2019



Note: Percentages below 10% are not labeled. Percentages may not add to 100% due to rounding. EL = English Learner; SWD = Students With Disabilities

Source: National Center for Education Statistics

Overall percentages of fourth graders performing below Basic on NAEP hide large gaps between student groups. In 2019, much larger proportions of black, Hispanic and American Indian fourth graders fell below the Basic benchmark on NAEP in reading than did their white and Asian peers. Gaps were also large between students

from low-income families, English learners, and students with disabilities and their peers. These large performance gaps call out to states and schools to do more to support all students in the early grades, and especially those most at risk of academic struggles.

## 4th Grade Reading/ELA Results

Kentucky, 2019

	Assessment	
	State	NAEP
Below Basic	19%	33%
At or Above Proficient	53%	35%

Sources: National Center for Education Statistics and Kentucky Department of Education

Fourth graders take both NAEP and their state’s grade-level assessment in reading. When the percentage of students scoring at or above the level considered proficient on state assessments is close to the percentage scoring at or above NAEP Proficient, the standards, cut scores and reporting categories of that state are likely to accurately indicate college and career readiness. Likewise, similar percentages of students scoring below a basic level of achievement on state assessments and NAEP indicates that states are accurately identifying the students who need the most support.

In 2019, gaps between state and NAEP results in the percentage of fourth graders considered proficient in reading ranged from 1 to 39 percentage points in the SREB region. The gap at the below Basic level ranged from 2 to 27 points. Only two states — Maryland and Oklahoma — could boast a difference of 10 points or less at both levels. In most cases, state assessment results overstate the percentage of students performing at or above the proficient level as compared to NAEP and understate the percentage of students performing below basic.

States in which students’ performance on NAEP is very different from their performance on state assessments are less likely to accurately measure the proportion of students who are ready for college or careers. They may also underestimate the proportion of students struggling to acquire academic skills and fail to provide the support these students need.



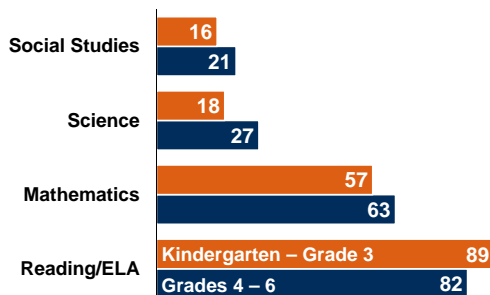
## Elementary Science

Science tends to be viewed as a completely separate subject from reading and math, even in elementary school, where academic content areas may be more intertwined than they are in later years. But scientific thought and processes are valuable across all areas of learning and for career success. Waiting until the middle grades to give science an equal place among the academic subjects means that students are deprived of important knowledge and experiences. This not only handicaps their performance in reading — background knowledge of all types is necessary for comprehension — but also means they have less time to develop important thinking skills that will benefit them in all subjects.

Children’s knowledge of science and their scientific thinking skills begin to develop early in life, both within and outside the school building. Nurturing children’s natural interest in the world in the early grades equips them to continue expanding and deepening their understanding of scientific concepts and processes. But this means setting time in the school day aside for science instruction and inquiry — a difficult task at times, given the extensive focus on reading and math in elementary school.

The 2018 National Survey of Science and Mathematics Education found that, while 99% of K-3 teachers reported teaching math all or most days each week, only 17% said the same of science. And the average amount of time K-3 teachers said they spent teaching science? Just 18 minutes per day, compared with 89 minutes for reading and 57 minutes for math.

**Average Number of Minutes Per Day Spent Teaching Each Subject in K-3 and Grades 4-6**



Source: 2018 National Survey of Science and Mathematics Education

Time spent on science instruction matters. Research shows that students in classes that spend more time on science instruction tend to perform better on the fourth grade NAEP science assessment and other standardized assessments of science achievement. In 2015 — the most recent year the NAEP science assessment was given — 76% of fourth graders in the median SREB state performed at or above Basic. This figure includes the 37% of fourth graders who performed at or above Proficient. These percentages are about the same as those seen for math in 2017, and better than the percentages at or above each level in reading. However, nearly a quarter of fourth graders were not even partially meeting grade-level expectations for science in 2015.

Reading, math and science don’t have to compete for classroom time to the extent they currently tend to. Key skills related to reading proficiency — like vocabulary and background knowledge — can actually be developed at the same time as scientific content knowledge. In fact, knowledge and reading skills are inextricably intertwined. If students lack the vocabulary and background knowledge to recognize the words they sound out, they will not understand what a text says.

Science is also closely connected to mathematics. Both fields involve skills that include the ability to analyze and interpret data, find patterns in that data, and develop and use models to make predictions. Using data in scientific inquiries requires strong mathematics skills. The logical and analytical nature of mathematical thinking, in turn, strengthens one’s ability to engage in scientific inquiry.

There are some things states can do to help set students up for success in science, both in elementary school and beyond:

- Encourage interdisciplinary instruction, which combines science with other content areas
- Ensure that science receives adequate time in the classroom
- Equip elementary teachers with the knowledge to teach science well using inquiry-based learning

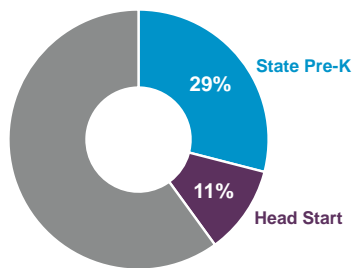
*For more on early grades science instruction, see SREB’s May 2020 policy brief, **Elementary Science: Equipping Students Through Inquiry and Integration.***

# Early Learning

The Challenge to Lead 2020 goals call for all children entering school to exhibit the knowledge and skills needed for success in first grade. This goal can be achieved by increasing access to pre-K and kindergarten and ensuring the quality of these programs. If young children experience high-quality early learning programs, they are more likely to enter first grade ready to learn, and their chances for success throughout school are greatly improved.

The SREB region has historically led the nation in pre-K access for 4-year-olds. Between 2009 and 2019, the percentage of 4-year-olds enrolled in state-funded pre-K rose in 11 SREB states. Eight states nationwide, including four SREB states, enrolled at least half of 4-year-olds in state-funded pre-K during the 2018-19 school year. Nationally, 34% of 4-year-olds were enrolled that year.

**Enrollment in Publicly Funded Pre-K Programs**  
4-Year-Olds in Kentucky, 2018-19



Source: National Institute for Early Education Research

States in the SREB region still face the challenge of providing earlier access to pre-K programs. Research underscores the importance of two years of pre-K for children at risk of struggling in school. Nine SREB states enrolled 3-year-olds in their state programs in 2018-19, and four enrolled them at rates at or above the national rate of 6%. However, only one state in the region — Arkansas — served more than 10% of its 3-year-olds.

While access to pre-K is important, quality is the key to achieving lasting gains for young children. NIEER, the National Institute for Early Education Research, has identified 10 standards of quality for pre-K programs. Aspects of *structural quality* include class size limits, low child-to-staff ratios, and state monitoring requirements. NIEER has also identified aspects of *process quality*, which include learning standards aligned through

grade three, regular classroom observations, and well-qualified teachers who receive ongoing coaching.

Only 11 state-funded pre-K programs in the nation met all four of NIEER's process quality-focused benchmarks in the 2018-19 school year. Of those, six were in the SREB region. An additional eight programs in SREB states met three of the four benchmarks. Alabama and Mississippi are two of only four states nationwide that met all 10 of NIEER's standards in the 2018-2019 school year; another four programs in SREB states met nine of these standards.

## In Kentucky in 2018-19:

4-year-old pre-K enrollment:



in publicly funded programs

state-funded pre-K up 1 point since 2008-09

The state-funded pre-K program met

8 out of 10



standards of quality including

2 out of 4

teacher standards

The 2020 goals emphasize strong teacher qualifications and continuing professional development for early learning teachers. Research shows that students with pre-K teachers who have a bachelor's degree and specialized training in early childhood education tend to have better outcomes. Assistant pre-K teachers need the Child Development Associate credential.

Ongoing, hands-on professional development — at least 15 hours per year — and coaching are also important for all classroom teachers. Four of the 10 NIEER standards of quality spell out minimum requirements in these areas. Alabama, Georgia and Mississippi were among just five states in the nation that met the four NIEER teacher qualification standards in 2018-19.

A 2017 SREB policy report, *Ready to Read, Ready to Succeed: State Policies That Support Fourth-Grade Reading Success*, stresses that kindergarten is a critical link between early childhood and the early grades, especially for children at risk of academic struggles.

- Participation rates in pre-K programs exceed national averages
- Professional requirements for public pre-K teachers meet national standards

**Teacher Quality in State-Funded Pre-K**  
Kentucky, 2019

NIEER Standard	State Required
All lead teachers have a bachelor's degree	✓
Lead teacher has specialized training in early childhood development	✓
Assistant teacher has the Child Development Associate credential or equivalent	
Teaching staff have individual professional development plans and receive ongoing coaching and at least 15 hours/year of PD	

Source: National Institute for Early Education Research

As expectations for later grades have increased, so has the importance of kindergarten as a transition point to help young children build on pre-K gains and be prepared for success in elementary school and beyond. Despite this, only 10 SREB states require kindergarten as children's first program of study in school.

Research shows that children who attend full-day kindergarten programs, compared with half-day programs, make more academic progress during the kindergarten year and are therefore better prepared for first grade. Full-day programs have more instructional time than half-day programs. But the minimum number of instructional hours for full-day kindergarten programs varies widely across SREB states — from as few as 680 annual hours to as many as 1,260.

Researchers also find benefits for smaller class sizes in the earliest school years. Policymakers in nearly every SREB state have set class size or student-to-teacher ratio maximums for kindergarten classrooms. These maximums ranged from 18 to 30 students per kindergarten teacher in 2020; the median SREB state allowed no more than 22 kindergartners per teacher.

Developmentally appropriate assessment in kindergarten provides important information for teachers and for states. A readiness assessment at kindergarten entry can help teachers plan instruction for the varying needs of their students. As of spring 2020, 11 SREB states required a kindergarten entry assessment for all entering kindergartners.

In 2015, SREB's Commission on Early Childhood Education published *Building a Strong Foundation: State Policy for Early Childhood Education*. The report emphasized that pre-K and kindergarten provide the foundation for later learning, especially for at-risk children. It also urged SREB states to make early investments to prepare children for school so they can reap sizeable benefits later. If states commit to the report's recommendations they can ensure that more children have the solid start they need for academic success.

**Related SREB Publications**

- Building a Strong Foundation: State Policy for Early Childhood Education* (2015)
- Pre-K Benefits: 2018 Update* (2018)

**Kindergarten Policies in Kentucky**

Policy Elements	Status	Comments
Minimum amount of annual instructional time for full-day program	1,062 hours	No more than 7 hours per day for at least 170 days
Requires attendance		Child must be five years old by August 1
Maximum number of students enrolled in a class	24	LEAs may apply for exemption allowing up to two additional students, but classroom must have an instructional aide
Requires readiness assessment(s) for all entering kindergartners	✓	BRIGANCE® Early Childhood Kindergarten Screens III

Source: SREB analysis of state documents

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