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**StriveTogether**<sup>®</sup>

# Cradle-to-Career Outcomes Data Guides: *Early Grade Reading*

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Developed in  
partnership with





# Early Grade Reading

StriveTogether's recommended indicator for early reading is percentage of third graders scoring proficient or higher on the state assessment. This guide provides information on why early reading proficiency matters, recommended indicators, data sources for indicators, detailed data specifications, how to calculate this outcome, data disaggregation, frequently asked questions, learning resources and data sharing. This guide also recommends data collection strategies, sources and methods for building data practices that can be used to better serve communities.

## >>>>>> Why this outcome matters

### Key takeaways:

- **Reading proficiency in elementary school is foundational for learning a wide variety of subject matter. Students who are proficient readers in third grade are more successful in high school and are more likely to enroll in college.**
- **Reading proficiency is also associated with positive social skills and behaviors.**
- **Black and Latine students, and students experiencing poverty, have lower rates of reading proficiency than white students.**

Early-grade reading is a foundational skill for school-based learning and is associated with future academic success and life outcomes. Reading and comprehension in early elementary school years is critical for a positive academic trajectory, not only in language arts courses but in all subjects ([CCSSO 2019](#)). A longitudinal study on the relationship between third-grade reading and high school performance and college enrollment found that students who were at or above grade level in third grade graduate from high school and attend college at higher rates than their peers who were below grade level ([Lesnick et al. 2010](#)). Moreover, students who do not read proficiently by third grade are four times more likely than proficient readers to leave high school without a diploma, and these rates are

higher among students experiencing poverty ([Hernandez 2012](#)).

Beyond academic outcomes, substantial evidence indicates students that establish basic reading skills by third grade have better social skills and behavioral outcomes ([NCES](#)). For example, students with higher literacy achievement are less likely to be aggressive ([Miles and Stipek 2005](#)), and reading achievement in third grade predicted subsequent behavioral engagement (i.e., positive efforts and involvement with academic activities) in fifth grade, with higher effects among students experiencing poverty ([Feister 2013](#); [Guo et al. 2015](#)).

Gaps in reading are more prevalent among students of color and students experiencing poverty, and the COVID-19 pandemic compounded the issue. In the pandemic's aftermath, the U.S. experienced the largest decline in reading outcomes since 1990 ([NCES](#)). Although students in every demographic group have been affected, Black and Latine students, as well as those experiencing poverty, those with disabilities, and those who are not fluent in English, have fallen furthest behind ([Brookings](#)). As of 2022, a long-term analysis of reading at age nine indicated that Black students performed a statistically significant 11 percentage points lower than white students, and Latine students performed a statistically significant nine percentage points lower than white students ([NAEP](#)).



## Recommended indicators

Since No Child Left Behind ([NCLB](#)) was signed in 2002, and more recently under the Every Student Succeeds Act ([ESSA](#)), state education agencies (SEAs) have been federally required to create state accountability systems; administer state-created assessments in reading (i.e., English language arts), math, and science; and report achievement data to the U.S. Department of Education. Students must be assessed annually in third through eighth grades and at least once in high school.

Federal law also requires states to establish performance levels students must reach to be classified as “proficient.” Although this is a federal rule, states can establish their own tests and set their own proficiency standards. States must report data such as the number of students taking the assessment or an alternate assessment and the percentage of students attaining grade-level or above proficiency on the state’s reading and math assessments ([Department of Education](#)). For accountability, achievement data must be reported in aggregate and be disaggregated by student demographics (see section six, Data disaggregation) to measure differences among traditionally underserved students.

Early-reading outcomes can be operationalized as **the percentage of third graders scoring proficient or higher** on their state’s reading assess-

ment. If third-grade scores are unavailable, we suggest using scores from fourth and then fifth grades.

The following are examples Cradle to Career Network members have used. These examples indicate the number of third graders meeting or exceeding individual state standards using individual state assessments. Many states indicate that this level of performance can be referred to as “proficient,” and some network members use that terminology to describe the same thing.

1. Achieve Brown County: Third-grade forward exam in English language arts proficiency
2. Alamance Achieves: Percentage of students meeting grade-level proficiency benchmarks in reading
3. All Hands Raised: Percentage of students meeting or exceeding third-grade reading standards
4. Generation Next: Percentage meeting or exceeding standards in reading, third grade
5. The Commit Partnership: Percentage of students who meet standards for the third-grade reading exam
6. Tri-County Cradle to Career: Average percentage of third-grade test takers who met or exceeded ELA expectations

# Data sources for indicators

*All states and districts are required to publish a report card with information on spending, student achievement and graduation rates. These report cards provide parents and the public important information on state, district and school performance and progress (ESSA). There is no specific deadline for publishing data, but states must publish data “annually.”*

## District data

School- and district-level data on reading proficiency are reported on district websites. Districts without websites are permitted to make report cards available in another format.

**Availability:** This data is often available via school district websites with a one-year lag.

## State data

States vary in their collection and reporting approaches. States may update their websites on different schedules than they use to report to the U.S. Department of Education, but they also vary by the content the state has determined appropriate for that grade and subject. More information on individual state reporting can be found [here](#).

**Availability:** This data is available on each state’s [State Report Card](#) website, including school- and district-level data with about a one-year lag. StriveTogether also maintains a list of state report card sites that can be found [here](#).

Individual SEAs can determine their statewide assessments, academic standards and thresholds for proficiency, meaning that changes in any of these factors can lead to discrepancies across time.

Additionally, because assessments, standards and proficiency thresholds are not consistent across states, cross-state comparisons are not recommended. See FAQs for additional resources on cross-state comparisons.

Lastly, because of the COVID-19 pandemic, several

states waived their assessment requirements (CPE).

## Federal data

There are multiple sources of federal data, with varying formats, described below.

### EDFacts

The U.S. Department of Education’s [EDFacts](#) initiative collects, analyzes and centralizes data provided by SEAs on various topics. Raw data documents (in CSV form) from [EDFacts](#) contain reading and language arts achievement and participation data at the school and local education agency (LEA) or district level. This data has an estimated one-year lag. For example, the reading and language arts achievement and participation data for school year 2018–2019 was updated in September 2020.

### The Urban Institute’s Education Data Portal

The Urban Institute centralizes and compiles school- and district-level achievement assessments in reading and language arts from [EDFacts](#) through the [Educational Data Portal](#). Achievement scores are provided by race and ethnicity and special populations. Scores include the number of students who completed each assessment for whom a proficiency level was assigned, as well as the proficiency share. The proficiency share is reported as a range, unless there are more than 300 students in the demographic, with the magnitude of the range decreasing as the number of students reported increases. The reading and language arts assessment score is reported as a percentage, with the magnitude of the range indicating a higher score. As noted above, [EDFacts](#) data has a one-year lag, and the portal makes the data available the following quarter. For example, the reading

and language arts scores for 2018–2019 were made available in September 2020.

### Note on federal data identifiers

To use federal data sources, it is necessary to use district identifiers (searchable through NCES’s Search for Public Districts Tool or Search for Public Schools Tool). School districts are also known as local education agencies (LEAs). Each LEA is assigned a seven-digit ID by the National Center for Education

Statistics (NCES) called the NCES LEA identification number. The first two digits make up a unique state ID called the American National Standards Institute state code, which adhere to Federal Information Processing Standards codes, and the last five digits are unique within that state for the LEA. Each school is also assigned a unique ID by the NCES. School IDs are twelve digits. The first seven digits make up the NCES LEA identification number for the LEA the school belongs to, and the remaining five digits are unique to that school within the LEA, but those five

## Detailed data specifications

### Definitions

#### Percentage of third-graders scoring proficient or higher

The percentage of third-grade students scoring proficient or higher on the SEA’s reading or language arts assessment. It uses the total number of students with assessment participation data and the total number of students scoring proficient or higher.

#### Assessment participation in reading or language arts

The unduplicated number of students who were enrolled during the period of the state assessment in reading or language arts ([EDFacts documentation](#)).

#### Academic proficiency in reading or language arts

The unduplicated number of students who completed the state assessment in reading or language arts for whom a proficiency level was assigned ([EDFacts documentation](#)).

#### Target population

The target population for this metric includes students who attend schools in the districts that overlap with your cradle-to-career partnership’s geographic scope. For some, the target population will be all of the third graders in the school district. If, however, your geographic focus is different from the school district, it may be necessary to collect this data at the school level.

## >>>>> Example

Formula for calculating the percentage of third graders scoring proficient or higher in a given school year:

$$\frac{\text{Number of third graders scoring proficient or higher on the SEA reading or language arts assessment}}{\text{Total number of third graders that participated in the SEA reading or language arts assessment}} \times 100$$

## >>>>> Data disaggregation

States provide academic achievement data on the number of students taking each type of assessment by proficiency status (e.g., “Attained proficiency” and “Not proficient”) by subject and grade. States also provide assessment participation data or the number of students enrolled during the state assessment testing window, by whether the students participated in or did not participate in the state assessment and by subject and grade (EDFacts). ESSA requires that every state and district disaggregate performance data by demographics at the school, LEA and state levels, unless the number of students in the demographic “is insufficient to yield statistically reliable information or the results would reveal personally identifiable information about a student.” In addition, for privacy reasons under the Family Educational Rights and Privacy Act, some demographics may be too small to report. Both achievement and participation data are reported in the following demographics, when possible, as required by law:

- homelessness (homeless enrolled status)
- Children who are in foster care (foster care status)
- Students who identify as male or female (sex [membership])

- Each major racial and ethnic group
- Economically disadvantaged students (economically disadvantaged status)
- Children with disabilities (disability status)
- English learners (English learner status)
- Children who are experiencing



# Frequently asked questions

## What if my community crosses state lines?

Because every state uses different assessments and proficiency standards or thresholds to measure reading achievement, we recommend collecting the aggregated share of third graders scoring proficiently or meeting standards separately by state.

## What if I want to compare my community's proficiency rates with the rates in another state?

The [Stanford Education Data Archive](#) normalizes proficiency rates across states using underlying EDFacts data. But data is not available at the school level and is sometimes limited. You can also use National Assessment of Academic Progress to make cross-state comparisons.

## How do I collect reading and language arts scores for multiple schools or multiple districts?

Take the individual school or district proficiency and assessment participation rates and find their average, weighting by the total number of students in each cohort (each individual denominator).

## Are there examples of what we could use to measure third-grade reading achievement?

Yes, see section two, Recommended indicators, for examples StriveTogether network members use.

## What if third-grade scores on the state assessment are unavailable?

It is possible that states do not report third-grade scores, for several reasons, including a statewide waiver in extreme circumstances, such as the COVID-19 pandemic or other natural disasters that took place at the time when the test would typically be administered. In these instances, we

recommend using fourth-grade scores. If fourth-grade scores are unavailable, we recommend using fifth-grade scores.

## When are state assessments typically administered?

States generally administer their statewide assessments in the spring. A few states administer their assessments in the fall. Students who test in the fall are assessed on academic content from the previous school year. See state websites for detailed information about the timing of statewide assessments ([EDFacts documentation](#)).

## What if my state changes assessments? Can I still compare the results?

Sometimes, states create new tests with new performance standards. If your state changes assessments, we recommend making geographic comparisons within a particular year rather than comparisons over time.



## Learning resources

National Assessment of Education Progress:

<https://nces.ed.gov/nationsreportcard/reading/>

NCES Long-term trends in reading and mathematics achievement:

<https://nces.ed.gov/fastfacts/display.asp?id=38>

Creating Preventative, Rather than Reactive, Policies To Boost Third-Grade Literacy:

<https://ednote.ecs.org/creating-preventative-rather-than-reactive-policies-to-boost-third-grade-literacy/>

Curriculum Associates: State of Student Learning in 2022:

[https://stateoflearning.curriculumassociates.com/?utm\\_source=PartnerSocial\\_IRE-1381048&utm\\_medium=social\\_Display&utm\\_content=annual-research&utm\\_campaign=7015b000005aG9B&ppcp\\_platform=adroll&fbclid=IwAR1pErbCvALXZL5LmSxj8t4PjDv7fWwtsww99uKcuAJgui\\_iouBobIHfjnI](https://stateoflearning.curriculumassociates.com/?utm_source=PartnerSocial_IRE-1381048&utm_medium=social_Display&utm_content=annual-research&utm_campaign=7015b000005aG9B&ppcp_platform=adroll&fbclid=IwAR1pErbCvALXZL5LmSxj8t4PjDv7fWwtsww99uKcuAJgui_iouBobIHfjnI)

Ending the Reading Wars: Reading Acquisition from Novice to Expert:

<https://journals.sagepub.com/doi/full/10.1177/1529100618772271>

Double Jeopardy: How Third Grade Reading Skills and Poverty Influence High School Graduation:

<https://www.aecf.org/resources/double-jeopardy>

## Data sharing

The StriveTogether [Guide to data sharing](#) provides important information about requesting, storing and working with data. It is important that cradle-to-career partnerships work with local school districts to obtain achievement and assessment participation data. This may involve entering into a data-sharing agreement with local

schools, districts or the state. In some cases, it may be possible to access student-level data for this outcome as part of a request for district- or state-level data. The data sharing guide provides important information for doing that responsibly.

# StriveTogether<sup>®</sup>

StriveTogether is a national movement with a clear purpose: help every child succeed in school and in life from cradle to career, regardless of race, ethnicity, zip code or circumstance. In partnership with nearly 70 communities across the country, StriveTogether provides resources, best practices and processes to give every child every chance for success. The StriveTogether Cradle to Career Network reaches more than 14 million students, including more than 7 million children of color and over 7 million children experiencing poverty. The network spans 29 states and Washington, D.C.

**125 East Ninth Street  
Second Floor  
Cincinnati, OH, 45202  
513.929.1150**

**[StriveTogether.org](https://www.StriveTogether.org)**

