

NSWERS Brief on EARLY READING PROFICIENCY IN NEBRASKA

by David Nguyen

In 2022, 66 percent of Nebraska's fourth graders did not meet reading proficiency standards on the National Assessment of Educational Progress (NAEP), a nationwide measure of reading skills¹. Research has shown that students who struggle with reading early on are less likely to graduate from high school, which can lead to lower lifetime earnings and other negative outcomes²⁻⁴. In response to these concerns, Nebraska has undertaken efforts to improve early reading instruction^{5,6}. To further understand how early reading proficiency relates to Nebraska students' academic success, this report analyzes the performance of third and seventh graders on Nebraska's state-specific reading assessment, the Nebraska State Accountability –Reading (NeSA-R). The results indicate a clear relationship between third grade reading proficiency and future outcomes, such as high school graduation and college enrollment, providing important insights for educational policy and practice in the state.

Students with better reading skills in third grade are more likely to graduate high school on time and go to college.

In 2012, 77 out of every 100 third graders achieved reading scores on the Nebraska state assessment that met or exceeded third grade reading standards and 23 students were below third grade reading standards.

60%

55%

Meets

40%

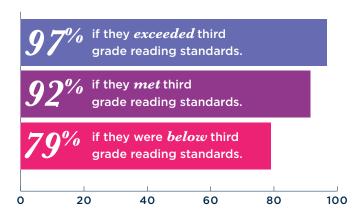
22%

Exceeds

Below

Third grade reading score (NeSA-R)

Nine years later, as high schoolers in 2021, these students graduated on time at rates of:



As high school graduates, these students went to college at rates of:



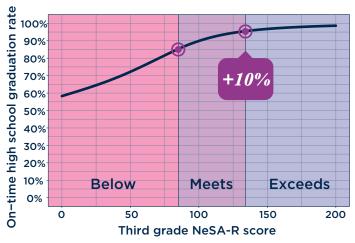
Proficient readers also benefit from improved reading skills.

Still, students who achieve the same third grade reading level (Below, Meets, Exceeds) can have very different chances of on-time high school graduation and college going. For example, top scorers who **met** but did not exceed reading standards in third grade were:

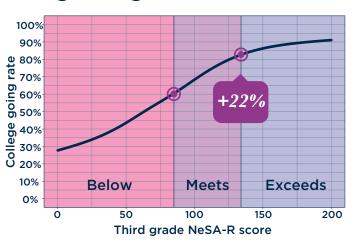
- 10 percentage points more likely to graduate high school on-time;
- 22 percentage points more likely to go to college;

compared to lower-scoring students who also **met** third grade reading standards. Hence, even for proficient students, further development of reading skills is beneficial.

High School Graduation Rate



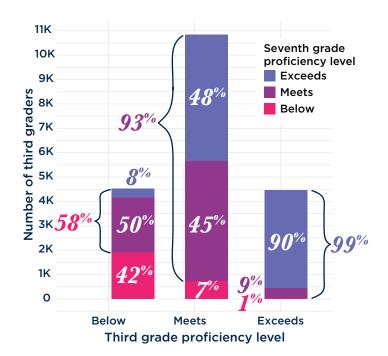
College Going Rate



These charts show the average high school graduation rate and college going rate across third grade reading scores.

Most third graders maintain or improve their grade-level reading proficiency by seventh grade.

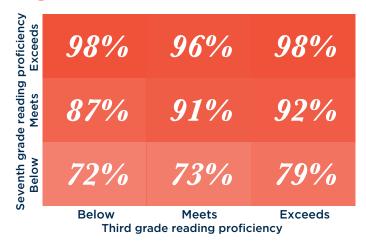
Third grade reading proficiency sets the stage for seventh grade reading proficiency. Fifty-eight percent of students who had below standard third grade reading achieved reading proficiency by seventh grade compared to 93 percent of students who met standards and 99 percent of students who exceeded standards for third grade reading. Few students attained lower reading proficiency levels in seventh grade than in third grade. These trajectories of student reading proficiency matter because they predict who will graduate high school on time and go to college.



The probability of a student achieving a specific seventh grade reading proficiency level based on their reading proficiency in third grade.

Students with a history of strong reading skills are more likely to go to college.

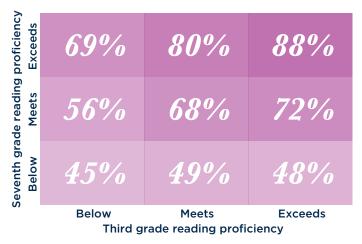
High School Graduation Rate



The rate of on-time high school graduation for different trajectories of third and seventh grade reading proficiency.

Seventh graders who exceeded reading proficiency had similarly high chances of on-time high school graduation regardless of their third grade reading level (top row, 96 and 98 percent). Non-proficient readers in seventh grade had lower chances of on-time high school graduation even if they met standards in third grade (bottom center cell and bottom right cell, 73 to 79 percent). This suggests that even below-proficiency third graders can have similarly high graduation outcomes if they can improve their reading proficiency by seventh grade. However, this does not mean that third grade reading is insignificant as it determines the likelihood the student will be proficient in reading by seventh grade.

College Going Rate



The rate of college going for different trajectories of third and seventh grade reading proficiency.

Students who had higher seventh grade reading proficiency were also more likely to go to college. However, unlike on-time high school graduation, seventh graders who exceeded reading standards were more likely to go to college if they also exceeded standards in third grade (top right cell, 88 percent) compared to students who met (top middle cell, 80 percent) or were below (top left cell, 69 percent) standards in third grade reading. The difference was larger when comparing students who exceeded standards in both third and seventh grade (top right cell, 88 percent) to students who met reading standards in both third and seventh grade (middle cell, 68 percent) or were below standards in both third and seventh grade (bottom left cell, 45 percent). This suggests college going is most likely for students with consistently high reading performance.

Taking action to improve early reading skills could have important long-term educational and economic benefits for Nebraskans.

This report includes data on third graders who took the Nebraska State Accountability-Reading (NeSA-R) subject test in the 2012 academic year. This includes students participating in English Learning Programs and/or Special Education who took the standard NeSA-R test (not an alternative assessment). These are the most recent students who can be included in the analysis of on-time high school graduation and college going. At the date of analysis, the NSWERS data system included data from 2012 to 2021 from the Nebraska Department of Education (NDE) so high school graduation records for students who were in third grade after 2012 is not yet within the NSWERS data system. On-time high school graduation rate calculations exclude students who transferred out of the Nebraska public school system or were deceased, per NDE quidelines. College going is calculated for high school graduates per NSWERS data definition.

Guiding Questions:

Parent/Guardian:

- Is my student reading at grade level?
- How can I work with my student's teachers to improve their reading skills?

Teacher:

- How many of my students are reading at grade level?
- Is my curriculum and instruction effective for improving reading?
- Are there students who do not qualify for additional services (e.g., special education, Title I) who seem to need additional support?
- How can I work with my school leadership (including the Educational Service Units) to better support my students who do not qualify for services?

Principal:

- Does my school use high-quality instructional materials with fidelity?
- Do my teachers in grades K-8 understand how to support struggling adolescent readers?

Policymaker:

 Do schools have the resources necessary to buy and implement high-quality instructional materials and interventions?

Terms:

Nebraska State Accountability-Reading (NeSA-R):

The standardized test administered to Nebraska public school students to assess if their reading skills meet grade-level expectations.

This test was replaced by the Nebraska Student-Centered Assessment System (NSCAS) in 2018.

Reading Proficiency:

Students are considered proficient readers if they either meet or exceed grade-level standards on the Nebraska State Accountability -Reading (NeSA-R) subject test. Students are non-proficient if they are below grade-level standards. The NeSA-R grade-level proficiency levels are:

- Below standards (1 to 84 points)
- Meets standards (85 to 134 points)
- Exceeds standards (135 to 200 points)

On-time High School Graduation:

A student who graduates within four years of starting high school as a ninth grader for the first time.

College Going:

A high school graduate who enrolls in a U.S. college within 16 months of their high school graduation.

References:

- 1. The Nation's Report Card (National Assessment of Educational Progress, 2022).
- 2. D. J. Hernandez, "Double Jeopardy" (The Annie E. Casey Foundation, 2012).
- 3. Education pays, 2023," (Career Outlook, U.S. Bureau of Labor Statistics, 2024).
- 4. P. Novosad, C. Rafkin, S. Asher. "Mortality Change among Less Educated Americans." American Economic Journal: Applied Economics, 14 (4): 1-34. (2022).
- 5. L. Wagner, "Nebraska schools slowly changing curriculum to improve how students are taught to read." Omaha World Herald. January 21, 2024.
- 6. L. Wagner, "Two Nebraska bills would train educators on how to teach students to read effectively." Omaha World Herald. January 29, 2024.

Source:

Nebraska Statewide Workforce & Educational Reporting System analysis of data from NSWERS Data System, 2012-2023. These data include records for public high schools and public postsecondary institutions in Nebraska. These provisional results are based on certified NSWERS data as of January 16, 2024. The provisional results in this brief may change because of data resubmissions by NSWERS Partners and/or Affiliates. For updated results, please contact support@nswers.org.

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