

# Why 3<sup>rd</sup> Grade Matters: Reading & Math as Gateways to Lifelong Success

By the end of third grade, students reach a turning point: they must shift from learning foundational reading and math skills to using those skills to learn more complex content across every subject.

The research is clear: proficiency in reading and math by the end of third grade is one of the strongest predictors of future academic achievement, high school graduation, and career success.

### **Context: The Grade 3 Pivot Point**

Third grade is widely recognized as a critical turning point in learning. Literacy expert <u>Jeanne Chall</u>, in her *Stages of Reading Development* (1983; updated 1996) identified this as the transition from "learning to read" to "reading to learn", when fluent reading becomes the primary tool for gaining knowledge across all subjects. The <u>National Research Council</u> (1998) similarly notes:

"By the end of the third grade, children are expected to use reading to learn new information, to synthesize ideas from multiple sources, and to expand their knowledge across the curriculum."

Mathematics follows a parallel trajectory. According to the NRC's Adding It Up (2001), by the end of grade 3, students should have a solid grasp of the base-ten number system and computational fluency with whole numbers, enabling them to tackle more complex concepts like fractions, ratios, and algebra in later grades.

**T©EE** 

# **Key Research Evidence**

## **Graduation Odds Are Set Early with Reading Proficiency**

- In a national longitudinal sample of about 4,000 students, those not proficient in reading by the end of third grade were four times more likely to leave school without a diploma than proficient readers. For the lowest readers, the dropout risk was nearly six times higher.
- **Source:** Hernández, D. J. (2011). Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. Annie E. Casey Foundation.

## Grade 3 Reading Proficiency Sets the Academic Trajectory

- In a Chicago longitudinal study, third-grade reading level predicted eighthgrade reading and math performance, ninth-grade GPA, high school graduation, and college enrollment — even after controlling for demographics.
- **Source:** Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). Reading on Grade Level in Third Grade: How Is It Related to High School Performance and College Enrollment? Chapin Hall.

### **Grade 3 Math Test Scores Predict High School Outcomes**

- In a multi-state longitudinal analysis, Grade 3 standardized test scores predicted high school graduation and other academic outcomes with accuracy rates close to those of Grade 8 scores. This held true across different state education systems.
- **Source:** Goldhaber, D., et al. (2020). Assessing the Accuracy of Elementary School Test Scores as Predictors of Students' High School Outcomes. CALDER Center / American Institutes for Research.

### **Bottom Line**

**Grade-3 reading and math proficiency are the first universal, measurable indicators of whether our education system is on track.** Missing them puts students at a lifelong disadvantage. Hitting them boosts graduation rates, opens STEM pathways, strengthens the workforce, and fuels economic growth.

T@EE 2