COLLABORATIVE FOR STUDENT GROWTH



KEY FINDINGS

- English language learners (ELLs) generally start middle school with much lower self-efficacy than their non-ELL peers.
- And starting middle school with low self-efficacy is associated with much slower growth in math and reading through middle school grades.
- Thus, achievement gaps may be closing more slowly because ELLs lack academic selfconfidence.
- Further, the indirect nature of the relationship between ELL status and growth in math may be masking disparities in, and mechanisms determining, how fast gaps are closing.

Closing the achievement gap for English language learners (ELLs) is a high priority in education policy and practice. ELL students face the challenge of learning a new language while building their skills in core academic subjects. ELL students often have lower mean achievement test scores in reading and mathematics, higher dropout rates, and lower college attendance than their English-speaking peers. On average, ELLs perform below grade level in every subject tested for federal accountability and are twice as likely to drop out as their native English-speaking peers.

Research also increasingly demonstrates the importance of the social-emotional well-being of students to their achievement. In particular, academic self-efficacy is strongly associated with achievement and growth in reading and mathematics, so improving self-efficacy may be useful in helping close achievement gaps over time. However, little research has been done on the relationship between achievement and self-efficacy in ELL students.

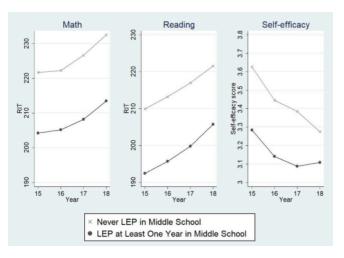
Self-efficacy—a student's confidence in her ability to attain a certain educational goal or outcome, such as the ability to do well on a test or earn good grades in class.

This study brings new insight to this important topic. Using achievement test data and self-efficacy survey scores from middle school students in a large, urban school district where more than 90% of students are Latinx and low-income, and over a third of students enter kindergarten as ELLs, it examines how the two outcomes are related, how they grow in tandem, and whether that growth differs for ELLs.

The study addressed three questions:

- Does self-efficacy differ for ELLs versus non-ELLs?
- 2. Do growth patterns in self-efficacy and achievement differ for ELLs versus non-ELLs?
- 3. Does self-efficacy affect growth in achievement for ELLs and vice-versa?

ELLs face an achievement gap and a selfefficacy gap



In all student groups in this study, self-efficacy decreased during middle school despite increases in reading and math achievement as students progressed through school. However, there were large gaps between ELL and non-ELL students in both self-efficacy and achievement in reading and math. In fifth grade, ELLs had self-efficacy scores roughly .25 standard deviations lower than their peers. For math and reading, the gap was even larger at roughly .6 standard deviations in both subjects. ELLs, in this district, then, began middle school with both a large achievement gap and a self-efficacy gap. While ELL students showed

faster growth in reading than their non-ELL peers as their mastery of English grew, these students did not show overall gains in confidence in their academic abilities, and the self-efficacy gap did not change much between fifth and eighth grade.

Low self-efficacy is associated with slower growth

The study used a modeling approach to examine how ELL status, achievement, growth, and self-efficacy are related. The results suggest that there is a significant indirect effect on growth in math and reading for ELL students through the gap in self-efficacy in fifth grade. In reading, being an ELL was associated with a .13 standard deviation increase in the slope on achievement. At the same time, the slope was .05 standard deviations lower because ELLs started with such low self-efficacy, which is associated with growth in reading. For math, there was no significant direct relationship between ELL status and growth, but, indirectly through lower 5th grade self-efficacy, lower growth was seen. This suggests that being an ELL may reduce growth in math in part because that subgroup lacks self-confidence in the subject.

Achievement gaps may be closing more slowly because ELLs lack academic self-confidence

Academic self-efficacy is a fundamental building block of motivation, achievement, and the growth needed to shrink achievement gaps. If students do not believe they can accomplish difficult academic tasks, they have little incentive to attempt them. Given the significant academic challenges ELLs face, self-efficacy may be especially important for this group of students. This research suggests that there are indeed large gaps in both self-efficacy and achievement between ELL students and their non-ELL peers, and that this low academic self-efficacy is associated with slower growth. The lack of belief among students in their academic abilities, then, could contribute to the slow rate at which achievement gaps are closed.

Findings underscore the importance of socialemotional skills in learning

This research also supports the growing focus in education on social-emotional learning (SEL) skills. SEL mindsets and competencies are not only likely important to finishing high school and attending college, as other research suggests, but they may also be a factor underlying the gaps in math and reading achievement that have been a focus of education practice and policy for decades. More research is needed to understand the full extent of the relationship between achievement gaps and SEL.

This brief describes research documented in:

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¹ Cook, H. G., Boals, T., & Lundberg, T. (2011). Academic achievement for English learners: What can we reasonably expect? Phi Delta Kappan, 93(3), 66–69.

[&]quot;Rumberger, R. W. (2006). Tenth grade dropout rates by native language, race/ethnicity, and socioeconomic status. Davis, CA: University of California Linguistic Minority Research Institute.

RECOMMENDATIONS

Work to improve self-efficacy for ELL students

With the rapid growth of ELL student populations in US schools, and the persistent achievement gap between these students and their non-ELL peers, understanding and addressing causes of this gap is critical. Educators and researchers must work together to find ways to improve academic confidence of ELL students. While the findings of this study are not causal, they suggest that identifying ways to improve academic self-efficacy among ELLs could also lead to greater academic growth for those students, including closing achievement gaps with non-ELLs.

Pay more attention to mechanisms and mindsets that may be driving achievement gaps

This research focused on self-efficacy, one important social-emotional learning skill, and how it is related to academic achievement and growth in middle school students. While other research has shown important relationships between SEL and academic achievement, there is more to learn on this important topic. Expanding this ELL-specific study to include younger students or subgroups or exploring other SEL constructs, like self-management and growth mindset, could provide insights that help educators understand how SEL, academic achievement, and growth are related in these groups. Exploring these relationships will help educators better understand achievement patterns so that they can best support students as they work to close these persistent, but not inevitable, opportunity gaps.

ABOUT THE AUTHOR

Dr. Jim Soland is a Senior Research Scientist at the Collaborative for Student Growth at NWEA, and is an Adjunct Professor of Quantitative Methodology in the College of Education at Oregon State University. His research focuses on assessment and evaluation policy and practice, with particular emphasis on measuring social emotional learning, test engagement, and estimating teacher and school effectiveness. Soland completed a PhD in Educational Psychology at Stanford University with a concentration in measurement and policy.



ABOUT THE COLLABORATIVE FOR STUDENT GROWTH

The Collaborative for Student Growth at NWEA® is devoted to transforming education research through advancements in assessment, growth measurement, and the availability of longitudinal data. The work of our researchers spans a range of educational measurement and policy issues including achievement gaps, assessment engagement, social-emotional learning, and innovations in how we measure student learning. Core to our mission is partnering with researchers from universities, think tanks, grant-funding agencies, and other stakeholders to expand the insights drawn from our student growth database—one of the most extensive in the world.



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