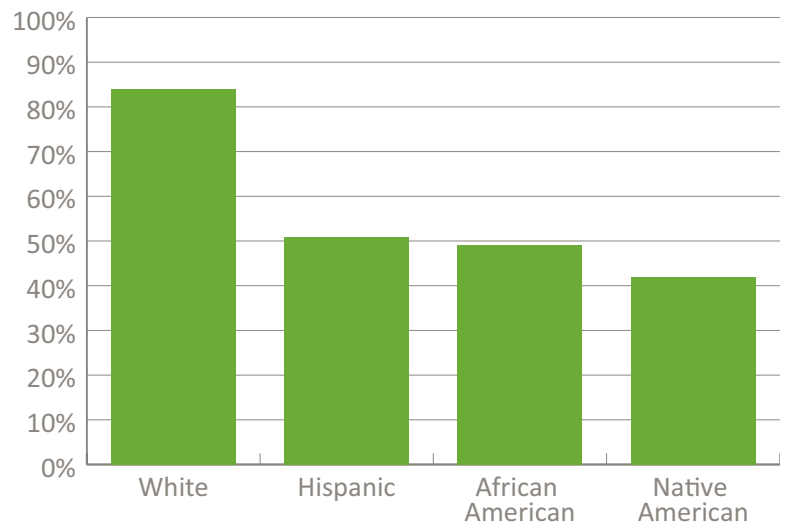


The racial gaps in educational attainment and achievement in Minnesota are well documented. In terms of high school graduation rates, 84% of Minnesota's white students graduate in four years, while the graduation rate is 42% for Native American students, 51% for Hispanic students and 49% for African American students. These sizable gaps are among the very largest in the nation. And gaps begin even earlier, with large differences in proficiency in fourth and eighth grade on the National Assessment of Education Progress (NAEP) math and reading tests. This challenge compels educators and policymakers to consider every promising strategy to reduce or eliminate gaps.

Many proposed strategies focus on whole school reforms related to teacher quality, curriculum, school funding and class size. In Minneapolis, a campaign called RESET was launched to focus on closing the achievement gap using five strategies (Real-time use of data; Expectations, not excuses; Strong leadership; Effective teaching; and Time on task). A statewide initiative co-chaired by Education Commissioner Brenda Cassellius and Lieutenant Governor Yvonne Prettner Solon aligns Minnesota with GradNation, an effort of America's Promise Alliance, a national group founded by General Colin Powell. The goal of both GradNation and Minnesota's initiative, GradMinnesota, is to reach a 90% high school graduation rate by 2020. (Minnesota students currently have a four-year high school graduation rate of 77%.) Another new initiative focused on the Twin Cities region, Generation Next, is based on the successful Strive Partnership that has helped sustain reduced educational achievement gaps in Cincinnati. Generation Next brings together government, business, philanthropy, education, and community stakeholders to use data and data-driven strategies to accelerate learning and reduce achievement gaps by income and race. While there are several initiatives and a growing commitment to reducing racial achievement gaps in Minnesota, there are additional opportunities that should be considered.

One strategy that looks promising is a student-focused approach, using a seemingly small adjustment in the way teachers interact with their students. This method, typically described as a "social-psychological intervention," has been effective in increasing student achievement, specifically with students of color. An intervention that utilized short writing exercises resulted in significantly higher grades by African American students, and a reduction of 40% in the racial achievement gap between African American and white students in one suburban middle school classroom in the Northeast.¹

Four Year High School Graduation Rates in Minnesota 2010-2011



Source: US Department of Education four-year regulatory adjusted cohort graduation rate for school year 2010-2011

1 Cohen G.L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science, 313*, 1307-1310.

WHAT ARE SOCIAL-PSYCHOLOGICAL INTERVENTIONS? HOW CAN THEY HELP IN THE CLASSROOM?

Schools are social places. Schools thrive on relationships, cultures and multiple interactions between multiple actors every day, and social processes are fundamental to teaching and learning. One approach to understanding these complexities is to use social psychology, the study of how people think about, influence and relate to each other.²

A social-psychological intervention starts with the subjective experience of the student in school. It is not an intervention that increases the students' academic ability; it's not subject or content-focused. Instead, a social-psychological intervention changes the way that students think or feel about school, or think or feel about themselves in school.

Studying social psychology or applying social-psychological interventions can help because so much of teaching and learning is social, and the effects of these small interventions can be disproportionately large. And because these interventions disrupt a recursive process, they can establish long lasting patterns.³

These social-psychological interventions might include a very specific way of praising a student, or a short lesson that teaches students that their brain can grow (intelligence malleability theory). These small acts can make a significant difference in a student's achievement, as measured by test scores. They can raise students' confidence in their work and boost their willingness to try harder, while improving their feelings of belonging in a school, as measured by self-evaluation and qualitative feedback. These kinds of improvement in achievement and in feelings of belonging are key components to raising student achievement and reducing the persistent achievement gap.

THEORIES OF INTELLIGENCE

In a 2007 study, Blackwell, Trzesniewski, and Dweck tested the impact that theories of intelligence had on mathematics achievement among seventh and eighth graders in an urban school. The study followed several hundred students in New York City as they transitioned to middle school. In the study, students were divided into two groups. The control group was assigned to a workshop that taught study skills. The other students were taught study skills as well as a "growth mindset" theory. A growth mindset is the belief that the brain can grow and get stronger when a person works on challenging tasks. At the end of two years, the students with a growth mindset achieved higher than the control group. At the beginning of junior high, the two groups' math test scores were comparable. As time passed and as the math became increasingly more difficult, the growth mindset group of students showed more persistence than the control group, leading to higher scores.

Additionally, they had more positive motivational beliefs which were related to increasing grades. The effect on their achievement was 0.30 grade points at the end of the year.⁴

GROWTH MINDSET

Students perform better in school when they and their teachers believe that intelligence is not fixed, but can be developed.

Teaching students that intelligence can be "grown" is especially powerful for students who belong to negatively stereotyped groups.

Growth mindsets focus on effort and motivate students to overcome challenging work.

From "Mind-Sets and Equitable Education" by Carol Dweck in *Principal Leadership* January 2010

2 Myers, D. G. (2008). *Social psychology* (9th ed.). New York, NY: McGraw-Hill.

3 Gehlbach, H. (2010). The social side of school: Why teachers need social psychology. *Educational Psychology Review*, 22, 349-362.

4 Blackwell, L., Trzesniewski, K., & Dweck, C. (2007). Theories of intelligence and achievement across the junior high school transition: A longitudinal study and intervention. *Child Development*, 78, 246-263.

STEREOTYPE THREAT

Cohen, Garcia, Apfel and Master performed a study in 2006 to test the impact of stereotype threat on African American students in seventh grade at a suburban middle school. “Stereotype threat” refers to the risk of confirming, as self-characteristic, a negative stereotype about one’s own group.⁵ Studies on stereotype threat show that academic performance suffers when students are aware their performance could be viewed as a racial stereotype.⁶ The researchers implemented a values-affirmation writing exercise to test whether it reduced stereotype threat and whether it affected academic performance. Prior to starting a class, the students were asked to write about values. One set of students was randomly assigned to write about values that were personally important to them, and in the control group, students were assigned to write about a neutral value that did not relate to them personally. After one semester, the value-affirmation intervention had significantly increased African American student achievement and reduced the achievement gap between white students and African American students in the classroom by 40%.⁷ After two years, the initially low-performing African American students had raised their GPA in all core academic classes, showing an improvement in classes outside of the treatment subject. Their grade point averages increased 0.30 points after the first semester, and went up 0.46 points after two years.⁸

SOCIAL-PSYCHOLOGICAL INTERVENTIONS WORK IN CONCERT WITH OTHER SCHOOL REFORMS

Social-psychological interventions do not create student ability. They will not give a student capability to multiply and divide, if that student does not already know how to multiple and divide. And as each author is quick to point out in discussing their results, the interventions won’t work without broader positive forces in the school environment that create optimal opportunities for student learning and performance.

In a study that reviewed evidence-based strategies for closing the achievement gap in math in high poverty middle schools, Balfanz and Byrnes concluded that multiple factors had to come together to close the achievement gap:

Schools need to provide teachers and classrooms that enable the average student to gain more than a grade equivalent of mathematical skill and knowledge per year for multiple years. At the same time, students need to show up, behave in class, and try hard to learn. (p. 153)⁹

Only when all of these happened together did the achievement gaps in the schools begin to close. They tracked attendance, behavior, teacher excellence (as measured by defining a “high gain” classroom), and effort, and found that when all four of these were happening for students in the sample, 77% caught up during middle school.¹⁰

5 Steele, C.M. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, Nov, 69 (5), 797-811.

6 *Ibid.*

7 Cohen G.L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science*, 313, 1307-1310.

8 Cohen, G.L., Garcia, J., Purdie-Vaughns, V., Apfel, N., & Brzustoski, P. (2009). Recursive processes in self-affirmation: Intervening to close the minority achievement gap. *Science*, 324, 400-403.

9 Balfanz, R., & Byrnes, V. (2006). Closing the mathematics achievement gap in high-poverty middle schools: Enablers and constraints. *Journal of Education for Students Placed at Risk*, 11:2, 143-159.

10 *Ibid.*

PROMISING RESULTS: STUDENTS WHO FEEL BETTER PERFORM BETTER

Teaching and learning are often measured by student test results, graduation rates and other academic milestones. But improving student performance on academic tests isn't only an academic endeavor; it's a social and psychological one as well. Recent research shows that other factors not directly linked to intellect—those related to identity and its effects on psychological belonging and stereotype threat—can play a role in student motivation and academic achievement.¹¹ Remembering that school is a social experience and responding to students' psychological needs can lead to small, but significant, changes in a classroom setting that promote greater academic achievement. In short, students who feel better, perform better.

The results from these social-psychological interventions are promising, although they aren't a perfect solution that makes an entire school function better at everything.¹² Instead, they are an element of change that, together with a range of other improvements in the school, can lead to improved outcomes, most notably an increase in student achievement and a reduction in racial education gaps.

SMART INVESTMENTS IN MINNESOTA'S STUDENTS

For more information about other reforms and approaches for improving school success identified by Growth & Justice in its initiative on Smart Investments in Minnesota's Students, please visit growthandjustice.org/issues/education.

11 Cohen, G. & Garcia, J. (2008). Identity, belonging and achievement: A model, interventions, implications. *Current Directions in Psychological Science*, 17:6. 365-369.

12 Yeager, D., & Walton, G. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81: 2. 267-301.



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