

Writing exercises prompt improvement in minority student academic performance

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Researchers have developed unique written classroom exercises that are designed to improve the academic performance of minority middle school students.

Credit: 2011 Jupiter Images Corporation

Can writing about one's personal values enhance academic performance? How does such an exercise create a sense of belonging within the classroom and what impact does this have on students' grades and test scores?

Geoffrey Cohen of Stanford University, Valerie Purdie-Vaughns of Columbia University and their collaborators, Julio Garcia and David Sherman of University of California, Santa Barbara, have developed unique classroom exercises designed to improve the academic performance of minority middle [school](#) students and reduce the racial achievement gap in core academic disciplines.

"What we have found is that a corrective intervention strategy helps to reduce the student achievement gap in general," said Cohen.

The intervention strategy includes various writing exercises that focus on students' core personal values.

Cohen explained that students' social or group identity affects students' experiences in the classroom. For ethnic minority students, there may be a concern that other people see them through the lens [negative stereotypes](#) that undermine their sense of fitting in school.

Cohen said that for many students, middle school in general is a time in children's lives when their "sense of belonging in school declines," which is one of the reasons why he and his team chose to work with middle-schoolers for their study.

For some students, "maybe the things they value aren't valued at school and maybe reflecting on these brings a greater sense of belonging," said Cohen.

Cohen and his team evaluated about 120 middle school students from school districts in Connecticut and Colorado. In Connecticut, about 50 percent of the students are black and in Colorado about 50 percent of the students are Hispanic.

The study was conducted as follows: around week two of the school year, researchers gave students what Cohen calls a "baseline survey of belongingness," in which students described how much they felt they "belonged" or felt accepted in their academic environment.

Around week four of the school year, the students were given an affirmation or "values" exercise that included writing prompts that had the students reflect upon their personal values. Some values in the

exercise included enjoying sports, being good at art, having a sense of humor, being with friends or family and being creative.

Researchers asked each student to circle two or three values most important to him or her and then write a paragraph describing why they were important. Then the student discussed the reasoning behind his or her choices.

A control group of students was given the same values listed as in the first section, except this time each student was asked to circle two or three values that were not important to him or her. The students then wrote about why these values might be important to someone else and the reasoning behind why someone else might think the values were significant. Variants of the two exercises were given to the two groups of students over the year.

The values exercise improved participating students grades by about 0.2-0.3 points on a standard grade point average scale in core subjects such as math, science, social studies and English. According to Cohen, his team's intervention "cut the percentage of African-American kids getting a D or below in the course in which the intervention was given from 20 percent to 9 percent in the first quarter after the intervention.

Further downstream, intervention-treated minority students were more likely to be assigned to an advanced math track and less likely to be assigned to a lower one.

Cohen also explained that the minority students who expressed the least sense of belongingness in the baseline survey, showed the most improvement from the exercises. In another study, a similar series of interventions also had a significant positive impact on the grades of Hispanic students, many of whom were from first-generation immigrant families. For these [students](#), the positive effect of the intervention on

math and science grades was particularly pronounced and persisted for the two full two years of the observation period.

Because these courses are ones in which skills build on an earlier foundation, they are also ones in which early failure could make it increasingly difficult to catch up later. Such courses are therefore ones where a well-timed intervention that prevents early failure can have long-term cumulative benefits.

The results of the study look promising, but Cohen and his team are still devising additional projects to further test the impact of the values exercise. "We're still collecting long-term data to look at the duration of the effects," said Cohen. "We're under no illusion that [this intervention] is a silver bullet."

Cohen explained that additional factors such as proficient, committed teachers and curriculum also are necessary for reducing the racial achievement gap.

"We are also very interested in the effects of timing," or of administering the values exercise earlier versus later in the school year, with the "expectation that earlier is better," and that "timing the intervention to stressors, such as test days, is better" said Cohen. He and his colleagues are also looking at the effects of pairing the intervention with other school intervention programs.

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