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Civics: Leaving Your Legacy Project

23 Mar. 2020

### **Research on Interventions**

Historically, the U.S. has not agreed upon what students should learn at each grade level—or on what kind of work is good enough. These decisions have been left to individual schools and teachers. The result is a system that, by and large, doesn't ask much of most of its students. In survey after survey, young people tell educators that they are not challenged in school. (Education Trust, 2009).

Clear and public standards for what students should learn at benchmark grade levels and rigorous curriculums are a crucial part of solving the problem. They are a guide—for teachers, administrators, parents, and students themselves—to what knowledge and skills students must master. (Education Matters, 2003). Standards cannot make much of a difference, though, if they are not accompanied by a rigorous curriculum that is aligned with those standards. Yet in too many schools, some students are taught a high-level curriculum, whereas other students continue to be taught a low-level curriculum that is aligned with jobs that no longer exist. Current patterns are clearest in high schools, where students who take more rigorous coursework learn more and perform better on tests. Indeed, the more rigorous courses they take, the better they do.

Almost three-quarters of high school graduates go on to higher education, but only about half of them complete even a mid-level college-preparatory curriculum (four years of English and three years each of math, science, and social studies). If we also include two

years of a foreign language and a semester of computer science, the numbers drop to about 12 percent. The numbers are worse for African Americans, Latinos, and low-income students. (Haycock, 2001).

These patterns are disturbing because the quality and intensity of high school coursework are the most important determinants of success in college, more important than class rank or college admissions test scores (Adelman, 1998). Curriculum rigor is also important for work-bound students (Bottoms, 1998).

A few years ago, New York City's Schools Chancellor required all 9th graders to take the Regents math and science exams. Though many people were worried that failure rates would be astronomical, in one year the number of Latinos in New York City who passed the Regents science exam tripled, and the number of African Americans who passed doubled.

Around the United States, states and communities are wrestling with how best to provide extra mathematics and literacy time. Kentucky gives high-poverty schools extra funds every year to extend instruction in whatever way works best for their community: before school, after school, weekends, or summers. Maryland provides a wide range of assistance to students who are not on track to pass its new high school graduation test. San Diego created more time, mostly within the regular school day, by doubling—even tripling—the amount of instructional time devoted to literacy and mathematics for low-performing students and by training *all* of its teachers. (Haycock, 2001).

If students are going to be held to high standards, they need teachers who know the subject matter well and how to convey it successfully to students, yet large numbers of students, especially poor or members of minority groups, are taught by teachers who do not have strong backgrounds in the subjects they teach. The differences are often greater in

predominantly minority high schools. In math and science, for example, only about half the teachers in schools with 90 percent or greater minority enrollments even meet their state's *minimum* requirements to teach those subjects—far fewer than in predominantly white schools. (Haycock, 2001).

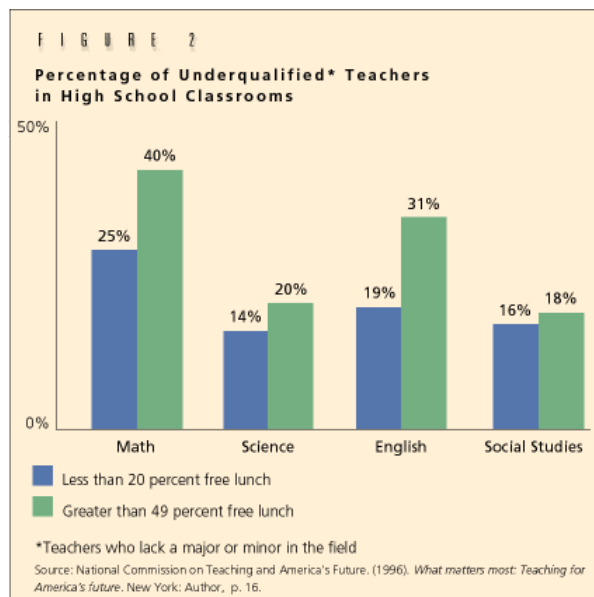


Fig. 1. In every subject area, students in high-poverty schools are more likely than other students to be taught by teachers without even a minor in the subjects they teach.

A decade ago, we might have said that we didn't know how much qualified teacher expertise mattered. We believed that what students learned was largely a factor of their family income or parental education, not of what schools did, but recent research has turned these assumptions upside down. What schools do matters enormously: what matters most is good teaching. (Haycock, 2001).

Results from a recent Boston study of the effects teachers have on learning are fairly typical. In just one academic year, the top third of teachers produced as much as six times the learning growth as the bottom third of teachers. In fact, 10th graders taught by the least effective teachers made nearly no gains in reading and even lost ground in math. (Boston Public Schools, 1998). Groundbreaking research in Tennessee and Texas shows that these

effects are cumulative and hold up regardless of race, class, or prior achievement levels.

Some of the classrooms showing the greatest gains are filled with low-income students, some with well-to-do students; the same is true with the small-gain classrooms. It's not the kids after all: Something very different is going on with the teaching (Sanders & Rivers, 1996).

Findings like these make us wonder what would happen if, instead of getting far fewer than their fair share of good teachers, underachieving students actually got more. In a study of Texas school districts, Harvard economist Ronald Ferguson (1998) found a handful of districts that reversed the normal pattern: Districts with initially high-performing (presumably relatively affluent) 1st graders hired from the bottom of the teacher pool, and districts with initially low-performing (presumably low-income) 1st graders hired from the upper tiers of the teacher pool. By the time their students reached high school, these districts swapped places in student achievement.

Public Charter Schools have also started to open up specifically in states like North Carolina, New York, and New Jersey. Their goals are to create college readiness schools that close the achievement gap between races and social classes through a rigorous and structured school atmosphere. In Vance County in 2010, a school named Henderson Collegiate was founded with 100 fourth graders that were 95% African American or Hispanic. Eighty-six percent of the grade level qualified for free or reduced lunch. (Henderson Collegiate, 2011).

Since the school's opening in 2010 their score report card has grown impressively. According to their state report card from 2017-2018, they outperformed the state scores in their middle school Math, English Language Arts, and Science. At the high school level they outperformed the state in Biology, English II, and Math 1. (North Carolina School Report Cards, 2018).

Henderson Collegiate doesn't credit a specific single solution to how they've outscored the state and have started to make a dent in the achievement gap in Vance County. However, Eric Sanchez referenced, "There's no silver bullet to our success, there's no secret sauce, no single solution; rather we've created millions of small solutions that have allowed us so much success." A few examples the school uses: extended school days from 7:20 am to 3:35 pm, a math and reading specific floating block in middle school, mandatory tutoring by teachers for their most emerging students, as well as character building daily in middle school and weekly in high school that focuses on social justice and grit mindsets. (Henderson Collegiate, 2011).

In summation, schools at a local level are attempting to close the achievement gap, however the current interventions are not working at a national level. While there are bright spots in public charter schools similar to Henderson Collegiate, the United States has not properly made the changes necessary to close the gap entirely.