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Benefits of 'Deeper Learning' Schools Highlighted in Studies

Students did better in and out of class

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Three sweeping reports have taken the temperature of the so-called "deeper learning" movement and given the approach a fairly clean bill of health in a set of American high schools.

On average, students at deeper learning schools had better test results and people skills, the studies found. They were also more likely to graduate from high school on time and enroll in four-year colleges.

The American Institutes for Research, or AIR, a Washington-based research organization, released **the reports** last week. The researchers studied 20 schools, mostly in California and New York, that belonged to 10 different networks that focused on deeper learning, and compared them with a similar set of 13 non-network high schools. The William and Flora Hewlett Foundation, which funded the reports and some of the learning networks that were studied, **defines deeper learning** as education that emphasizes core academic content, critical thinking, problem solving, collaboration, effective communication, self-directed learning, and an academic mindset. (The Hewlett Foundation also supports coverage of deeper learning in *Education Week*.)

After accounting for demographics and prior achievement, researchers found that the advantage to students of attending a deeper-learning school was equivalent to moving from the 50th to the 54th or 55th percentile in reading, mathematics, and science, as measured by the Program for International Student Assessment-Based Test for Schools. Researchers gave the exam to 11th and 12th graders in the spring of 2013. Deeper-learning schools had a similarly sized advantage on state math exams. In English/language arts, deeper-learning schools attained a smaller advantage, equivalent to moving from the 50th to the 52nd percentile.

Nonacademic Skills

Survey results from the study suggested that students who attended deeper-learning schools were more academically motivated and engaged than the comparison group of students. They also had better collaboration skills. The two groups were similar, however, when it came to creative thinking, perseverance, and other personal traits emphasized by deeper learning.

At 65 percent, the on-time graduation rate for students in the deeper-learning schools was 9 percentage points

Deeper Learning Through Linked Learning

A Teacher Channel Video

This video examines teachers' and students' perspectives on "deeper-learning" initiatives, including teaching models that emphasize real-world experience, academic mindsets, and collaborative project work.

higher than at comparison schools. Both groups enrolled in college at similar rates, though the students in the deeper-learning schools were more likely to choose four-year and more-selective schools.

The study students are less than four years out of high school, so it's too soon to estimate the rate at which they attained bachelor's degrees, a key outcome for the approach, which emphasizes life after high school.

"This is about preparing young people for college and career, both objectives, not just one or the other," said Gary Hoachlander, the president of **ConnectEd: The California Center for College and Career**, a Berkeley-based network that took part in the study.

For example, William Kested was a sophomore two years ago at Tech Valley High School in Albany, N.Y., which is a member of the Napa, Calif.-based New Tech Network. Interested in a career in medicine, he spent time shadowing a physician at a hospital near his school.

"I learned that I didn't want to be a physician," he said. "It would have been really awkward if I went through my school and got to residency and then figured out that I hated everything." He now hopes to study business management in China.

Shadowing and internships were more common at deeper-learning schools, according to the AIR study, as were project-based learning, group work, opportunities to develop intrapersonal skills, and longer-term cumulative assessments, such as portfolios.

Multi-Faceted Evaluation

The study relied on a variety of social science research techniques, including interviews, focus groups, surveys, and exams. All the schools enrolled high percentages of minorities (80 percent, on average) and students from low-income families (60 percent).

But the school networks were otherwise very different. For instance, ConnectED works to implement career pathways, while the Internationals Network for Public Schools focuses on recent immigrants.

James W. Pellegrino, a professor of psychology and education at the University of Illinois at Chicago, was not directly involved with the research but is familiar with deeper-learning approaches and the AIR studies.

"This is both a challenging and rigorous attempt at conducting research on what's happening at some of the Hewlett deeper-learning network schools," he said.

A more critical assessment came from Tom Loveless, a senior fellow at the Brookings Institution, a Washington think tank, who has suggested that **deeper-learning approaches downplay the importance of content knowledge**. He said the deeper-learning schools might have differed from the comparison schools in important but unaccounted-for ways. For instance, average enrollment at the deeper-learning schools was 398 versus 1,350 at the comparison schools.

"In a school of 398, I would expect the students to be closer to the teachers," Mr. Loveless said. Despite such advantages, he said, the test-score differences between the two school groups "aren't huge."

Mr. Pellegrino said, however, that the researchers appeared to have identified "real differences" between the practices and approaches of deeper-learning schools and comparison schools, despite the challenges of creating a comparable control group.

But, he added, "it's not a set of findings that say let's run out and emulate what these schools are doing, because the schools are not all doing the same thing."

He also said that, although the students in deeper-learning schools were doing better than their comparison peers, their achievement levels were still lower than "what we might hope ... with respect to their likelihood for future academic and adult success."

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