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**Findings From the Study of Deeper Learning: Opportunities and Outcomes**, by American Institute for Research (AIR), funded by William and Flora Hewlett Foundation:

From AIR: *This analysis focuses on the strategies implemented in 19 high schools across 10 school networks participating in the Foundation's Deeper Learning Community of Practice. We also include some comparative information collected from 11 comparison high schools. While we collected a wide range of data for this study, the analysis in this first report relies primarily on qualitative data from interviews and focus groups with school administrators, teachers, students, and network leaders and support providers, supplemented with relevant data from a survey of teachers in both network and comparison schools.*

The Shape of Deeper Learning: Strategies, Structures, and Cultures in Deeper Learning Network High Schools

-Mette Huberman, Catherine Bitter, Jennifer Anthony and Jennifer O'Day

In the past few years, a movement for “deeper learning” has emerged on the United States’ educational scene, based on decades of development work by educators, support from the philanthropic community, and the interest and engagement of national and local policymakers. This is the first in a series of three research reports on the strategies, opportunities, and outcomes of a set of high schools explicitly organized to promote deeper learning among their students.

Failure of the No Child Left Behind Act (2001) to produce the levels of proficiency and college preparedness anticipated by its authors has sparked considerable discussion and debate in the past six years about what today’s students really need to know and be able to do to be successful both in school and in their lives and work after graduation. Much of the policy focus has been on the need for students to develop deeper content knowledge and an ability to apply their knowledge and skills to novel tasks and situations inside and outside of school.

In this report, the authors focus on the assumption that educators can design/redesign schools’ instructional strategies, structures, and cultures to explicitly focus on deeper learning. The goal is primarily descriptive—to provide a picture of the strategies and structures the adults in the sampled network schools used to foster deeper learning.

**KEY TAKEAWAYS**

1. Network schools took a range of approaches to developing the deeper learning competencies.
2. Most schools integrated project-based learning to develop mastery of core academic content knowledge and critical thinking skills. However, projects looked different in different schools, ranging from semester-long projects with multiple components and assessments to short-term projects addressing specific units.
3. Interpersonal skill development was a goal at a majority of network schools and was addressed through instruction, assessment, and internship opportunities.
4. Network schools used a variety of structures and strategies to encourage the development of academic mindsets and learning-to-learn skills. Relevant strategies included internships, projects, study groups, and student participation in decision-making.

5. Most network schools had established structures and cultures to support the implementation of instructional strategies aligned with deeper learning.

### Providing Opportunities for Deeper Learning -Catherine Bitter, James Taylor, Kristina Zeiser, Jordan Rickles

The concept of deeper learning has been used both to describe a set of competencies or goals for students, and to characterize a way of learning (or a process) that promotes these competencies. The William and Flora Hewlett Foundation—a leader in the national initiative to promote deeper learning in schools—has defined deeper learning as “a set of competencies students must master in order to develop a keen understanding of academic content and apply their knowledge to problems in the classroom and on the job.”

The first report from this study described key aspects of participating schools’ approaches to promoting deeper learning—that is, what *adults* in network schools did to develop deeper learning competencies. In this report—the second in a series of three—the authors focus specifically on the *opportunities that students experienced* to engage in deeper learning in their classrooms. In other words, the key question is, “Did students who attended the selected network schools experience more opportunities to engage in deeper learning than would likely have been the case had they not attended the network schools?”

#### **KEY TAKEAWAYS**

1. On average, students who attended the network schools in the study reported greater opportunities to engage in deeper learning than did similar students who attended non-network schools.
2. These differences in opportunities were observed among schools serving diverse student populations, including substantial subgroups of traditionally underserved students.
3. The effects of attending a participating network school on deeper learning opportunities were similarly positive for subgroups of students including initially high- and low-achievers and students who did or did not qualify for free or reduced price lunch.
4. Teachers’ most challenging assignments collected from the network schools exhibited greater opportunities for independent learning in mathematics and real-world connections in English Language Arts than the challenging assignments collected from the non-network schools, but were not significantly different on other opportunity measures (including complex problem solving, communication, and conceptual understanding in mathematics).
5. The opportunities for deeper learning experienced by individual students, regardless of whether they attended a network school, were associated with those students’ deeper learning outcomes.

### Evidence of Deeper Learning Outcomes

-Kristina Zeiser, James Taylor, Jordan Rickles, and Michael S. Garet, AIR and Michael Segeritz, Research

Alliance for New York City Schools

The William and Flora Hewlett Foundation defines deeper learning as “a set of competencies students must master in order to develop a keen understanding of academic content and apply their knowledge to problems in the classroom and on the job.” In the first of the three reports in this series about deeper learning, the authors provided a picture of the strategies and structures the adults in the sampled network schools used to foster deeper learning. In the second, they focused on the question of whether students who attended the selected network schools in the study experienced more opportunities to engage in deeper learning than would likely have been the case had they not attended the network schools.

In this third report, the focus is on whether students who attended selected network schools had higher educational outcomes than did their matched counterparts who attended similar non-network schools. In particular, there were two key questions:

1. Did students who attended the selected network schools achieve better outcomes than would likely have been the case had they not attended the network schools? In particular, did they demonstrate improved outcomes in cognitive competencies, interpersonal and intrapersonal competencies, high school graduation, and postsecondary attendance, persistence, and selectivity?
2. Were the impacts of attending a participating network high school similar for all students who attended these schools, or did certain subgroups of students (e.g., students with low and high levels of prior achievement) differentially benefit from attending these schools?

#### **KEY TAKEAWAYS**

1. On average, students who attended the network schools in the study achieved higher scores on the OECD

PISA-Based Test for Schools (PBTS)—a test that assesses core content knowledge and complex problem-solving skills—than did similar students who attended non-network high schools.

2. Students who attended participating network schools reported more positive interpersonal and intrapersonal outcomes than students who attended non-network schools.

3. Students who attended participating network schools were more likely to graduate from high school on time (within four years of entering Grade 9) than were students who attended non-network high schools.

4. Students who attended participating network schools and non-network schools had similar rates of enrollment in postsecondary institutions overall. However, students who attended network schools were more likely to enroll in four-year institutions and in selective institutions.

5. Although there were significant positive effects of attending a network school averaging across the pairs of network and non-network schools in our sample, for many outcomes—for example, PBTS mathematics scores—the effects of attending a network school varied significantly across individual pairs of schools.

6. Attending a network school had similar benefits for students who entered high school with low achievement and for those who entered with high achievement, particularly for the test score and high school graduation outcomes. However, while attending a network school increased the postsecondary enrollment rate of students who entered high school with low achievement, it had no effect on the postsecondary enrollment rate of students who entered with high achievement.

### **Blending Middle Grades Humanities, funded by the Nellie Mae Foundation**

Beyond Traditional Silos: Connecting Humanities to Real World, Deeper Learning, & STEM Excellent reading and writing skills form the foundation of content work in the humanities. And the humanities' breadth— the arts, theater, philosophy, religion, ethics, world languages— makes it easy to see how the humanities cross over into so many other content areas. Here in particular we can think about the impact strong reading skills can have in a math course, or the impact that strong writing skills can have in a science class. The humanities and STEM really do go hand in hand (hence the increased emphasis on STEAM). We also see this content integration throughout schools that incorporate Deeper Learning and Project-Based Learning as foundational approaches to learning.

See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/Research-Into-Deeper-Learning-Awesome-Stories-101>

See Learning Tasks for this story online at:

<http://www.awesomestories.com/asset/AcademicActivities/Research-Into-Deeper-Learning-Awesome-Stories-101>