Evaluating Deeper Learning: Retrospect and Prospect

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At the request of the William and Flora Hewlett Foundation Education Program, the Stanford Center for Opportunity Policy in Education (SCOPE) conducted an evaluation of the William and Flora Hewlett Foundation's deeper learning strategy research studies and evaluations. Its strategy research and evaluations grew out of a particular theory of change that emphasized policy as an essential lever for change along with establishing a research base and developing innovative measures, scaling practices, and strengthening assessment for teaching and learning. The purpose of this evaluation was twofold: 1) to distill and communicate the key learnings and insights gleaned thus far from the body of research studies and evaluations conducted on and as part of the foundation's deeper learning strategy and 2) to identify the potential implications of these lessons for supporting the foundation's deeper learning work in the field of education going forward. The analysis of this body of work (hereafter referred to as studies) involved document organization and classification of 71 files generated between 2012 and 2017 and a critical analysis of both the findings and the research and evaluation claims within a purposeful sample of key studies produced during this period. See Appendix A for an extended account of the methods.

Three Areas of Learning to Grow Upon

- **Deeper learning analytic tools and metrics were developed.**
  Deeper learning studies have developed a significant assortment of data collection instruments and analytic tools. For instance, surveys and interview protocols for gathering information about deeper learning practices and outcomes were developed as were metrics for analyzing deeper learning opportunities embedded in standardized assessment items and in teacher-generated student tasks. The tools developed demonstrated ways that deeper learning can be measured summatively and formatively.

- **Descriptions of deeper learning practices were created.**
  The studies provided useful descriptions of what deeper learning practices looked like in the Deeper Learning Network schools. Organizational conditions (e.g., schools with high levels of collaboration) and structures (e.g., advisory classes, alternative scheduling, and professional learning communities) that seemed to support deeper learning were identified.

- **The studies focused on student academic outcomes.**
  The focus on student academic outcomes in many of the studies meant that the teaching practices associated with deeper learning were not always described in detail or closely examined. While student achievement outcomes are certainly important, a focus on student outcomes assumed that teachers and other school leaders who were being evaluated already had the skills and abilities needed to achieve those outcomes. In the case of deeper learning, which has been de-emphasized in policy and practice for the past two decades, this assumption

is probably faulty. Therefore, further examination and study would be useful on what deeper learning instructional practices are, how educators learn how to do these practices effectively and in classrooms with various student populations, as well as which tools and practices best support their learning. Developing a knowledge base of deeper learning practices (in classrooms and in professional learning experiences) that also support educational equity for students of all racial and socio-economic backgrounds can better support the long-term goals of the foundation's program.

Moving Forward

The evaluations of the foundation's first phase of its deeper learning strategy point to the need for teachers and administrators to learn more about the "how" of deeper learning. Going forward, the foundation could continue to grow the learnings highlighted above in several ways.

- **Use the analytic tools to support teacher and administrator learning.** The analytic tools and metrics developed by researchers for their use in evaluating the level of deeper learning that tasks required could be shared with and used by teachers. Here are a few ideas. The rubrics and metrics could be used to provide a set of criteria for designing student tasks or for selecting "off-the-shelf" tasks to give to students so that students are engaged in, and supported through, cognitively demanding learning experiences more frequently. The collection of studies pointed to the need for students to have more opportunities for deeper learning and higher-level critical thinking skills. Educators might need support to develop practices for using these rubrics and analytic tools as a way to increase deeper learning opportunities for students. Additionally, school and district leaders might need assistance learning how to develop the system support capacity for teacher professional practice and opportunities for ongoing growth and development.

- **Use descriptions of deeper learning practices to develop field capacity.** While the existing studies give some detailed descriptions of deeper learning, moving forward, these descriptions could be used to further develop teachers' capacity to provide opportunities for deeper learning. The descriptions in existing studies and the affiliated project documentation can be mined for criteria that would be relevant for the development of more fully fleshed out deeper learning systems that span from the classroom and the school to the central office and beyond. For example, we know from the body of work reviewed for this evaluation and other research that alternative scheduling is an organizational structure that supports the enactment of deeper learning practices. To make this knowledge actionable for the broader field, evaluations and project documents along with other extant research could be used to better understand specifically which alternative scheduling patterns have historically gotten traction, how they support deeper learning, and, perhaps most importantly, under what conditions.

Additionally, to establish greater field coherence over time, existing descriptions of deeper learning practice and tools may be used as a springboard to inform those who apply for funding in the future and those who wish to grow the work beyond the immediate foundation community. Deeper learning criteria extracted from the foundation's existing work—and from the growing body of research on ambitious teaching practices in subject areas such as mathematics, science, and the humanities—can be used to inform the next generation of deeper learning projects.

This may include the dissemination of concrete excerpts of relevant, deeper learning descriptions and tools alongside commentary about their known strengths and weaknesses. Shared examples should be accessible, digestible (e.g., in the form of digital learning communities, blog posts, or short informational videos), and instructive. Artifacts such as these would provide a foundation for future projects to build upon and support incremental learning within the K-12 system.

- **Focus on learning as an outcome.**
  Since there is a tremendous need in the education field to develop the capacity to provide all students—especially those who are low-income, English language learners, and minorities—with opportunities to engage in and achieve deeper learning, the foundation might want to support the development of a proof of concept site or sites (e.g., urban and rural districts serving different populations of students). Doing so could provide an important knowledge generation opportunity, one that answers the question: How does a culture of deeper learning get created in classrooms, schools, and districts? A proof of concept where the school and/or the district is the unit of analysis (rather than individual classrooms), would show how an organization or a system can develop and support deeper learning for all students. Focusing on developing a proof of concept at the system level would be particularly useful, not so much because it would show what constitutes a culture of deeper learning within a district, but rather because it could show how such a culture can be developed. Indicators of deeper learning—such as student tasks that require deeper learning—exist as do subject matter instructional practices that engage students in deeper learning activities. The knowledge, however, that is needed is knowing how individuals, institutions,

and educational systems learn how to use deeper learning practices and tools. Additionally, we don't know very much about how to create the organizational and system conditions that both expect and support deeper learning practices. Nor do we know enough about what the critical practices (both macro- and micro-) are that administrators, teachers, students, and families use that contribute to developing cultures of deeper learning. Studying and documenting how a culture of deeper learning develops in a few strategically selected sites has the potential to generate important knowledge for the field that ultimately can contribute to the spread of deeper learning practices in other settings.

- **Use research as a strategy for knowledge development.**
  Related to the idea of focusing on learning as an outcome is the notion that researchers could be used strategically to simultaneously document and study the evolution of these proof of concept sites. Using implementation research methodologies, researchers could collect and analyze data over relatively short periods of time in order to share preliminary analyses with the educators on site as a way to inform and strengthen their ongoing efforts to develop a strong deeper learning culture. Once there is sufficient evidence that educators have developed the skills and abilities needed for providing deeper learning opportunities and effective instruction to students in ways that contribute to developing an equitable educational system, then an outcomes-based evaluation that focuses on both the social, emotional, and academic development of students coupled with an evaluation of how equitable the educational system is would be a useful way to confirm the outcomes as well as the conditions that supported and/or constrained the desired outcomes.

Conclusion

In 2017, Barbara Chow wrote "Bottom line, over the last six years, we've seen mounting evidence that deeper learning works." And after reviewing the research studies and evaluations from this period and those that came afterwards, SCOPE certainly agrees. Barbara goes on to say, "While the work around field building and communications is relatively new, the concept of deeper learning has begun to gain traction in several digital, practitioner, and policy spaces." SCOPE agrees with this sentiment as well. Based on our in-depth review of the large body of research and evaluations from these last years, we also believe that the best path forward for clarifying the concept of "deeper learning" and scaling its application at the systems level will be to build upon the tools and descriptions already in place, focus on learning as an outcome, and use research as a strategy for further knowledge development. With these strategies in place, we believe the foundation can maximize its potential for deeper learning to reach all students at scale.

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Appendix A: Methods

SCOPE's evaluation was guided by the following research questions:

1. What are the types of deeper learning evaluations that the William and Flora Hewlett Foundation possesses?

2. What were the findings of these evaluations?

3. What is the strength of the evaluation claims?

4. What, if any, recommendations does SCOPE have for the use of these particular evaluations?

5. What, if any, additional recommendations does SCOPE have for the foundation's future evaluations?

Question 1: SCOPE created a document library and organized the documents by topic (i.e., overall strategy, cluster), by type (i.e., RFP, proposal, external report, appendix), and by date. This organization allowed us to track findings from evaluations and follow how these influenced the foundation's approach to evaluation over time.

Questions 2 & 3: In collaboration with the current Program Director and hiring Program Officer, SCOPE identified a subset of seven highly significant research studies and evaluations. Criteria for inclusion in this subset included frequent referencing in subsequent documents, evaluations examining strategy milestones, and those that carried noteworthy internal significance.

We developed and applied a coding scheme taking multiple passes through the 20 documents associated with these evaluations and wrote numerous research memos to distill emerging themes. Of the seven, five critical evaluations were selected for their pivotal importance in defining and interpreting progress with the deeper learning strategy. Findings from these were synthesized in a preliminary analysis and presented to the William and Flora Hewlett Foundation collaborators.

Questions 4 & 5: While questions 1-3 were analytic questions, questions 4 & 5 were evaluative questions. To answer these, SCOPE brought to bear the insights that emerged from analysis of the evaluations as well as significant expertise in evaluation and education research. Our recommendations also take into account those recommendations made in earlier evaluations, whether and how these were taken up, and the extent of their impact on the overall success of the strategy.

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