

Deeper Learning + Diffusion of Innovation and Scaled Impact

Concept Paper + Request for Letters of Interest

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WILLIAM + FLORA
Hewlett Foundation

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1. Overview

The William & Flora Hewlett Foundation (Hewlett) is a nonpartisan, private charitable foundation that advances ideas and supports institutions to promote a better world. For over 50 years, Hewlett has supported efforts to advance education for all, preserve the environment, improve lives and livelihoods in developing countries, promote the health and economic well-being of women, support vibrant performing arts, strengthen Bay Area communities and make the philanthropy sector more effective.

Since 2010, Hewlett’s education grantmaking has focused on ensuring the education system is oriented towards enabling students from all backgrounds, especially those who are most underserved, to graduate prepared to transfer their knowledge, skills and dispositions to solve the novel and unstructured problems they will face in future work and citizenship. The Foundation works to align K-12 public schools in the U.S. to deliver and measure **deeper learning**—a set of six interrelated competencies (collectively dubbed “deeper learning”) that emphasize:

Working with knowledge & ideas (cognitive competencies):

- Mastering rigorous academic content.
- Learning how to think critically and solve problems.

Working with others (interpersonal competencies):

- Working collaboratively.
- Communicating effectively.

Working with oneself (intrapersonal competencies):

- Learning how to learn.
- Developing and maintaining an academic or learning mindset.

In the past, Hewlett has supported organizations as “proof points” to demonstrate it is possible for deeper learning to benefit those farthest from opportunity and to illustrate the enormous potential of deeper learning. Within this portfolio of grants, Hewlett has invested in the development, testing, validation and early piloting of a range of classroom and school practices that promote student mastery of deeper learning competencies in a variety of school settings. We call these “**deeper learning practices.**” However, a set of proof points alone will not transform a complex system. The Foundation aims to understand how to remove systemic barriers in K-12 public schools, as well as understand how deeper learning practices most quickly spread and have outsized effects, so that all students have equitable access to these practices which enable their success in a rapidly changing world. This is how we define **scaled impact**.

In this document, we outline a new grant opportunity designed to help Hewlett and the broader education sector better understand how deeper learning practices achieve sustained, scaled impact in school systems. We are seeking letters of interest from research-practice partnerships. Applicants should note that we do not define a set of eligible deeper learning practices; rather, we expect all applicants to provide empirical evidence that their chosen practice contributes to student proficiency in at least two of the six competencies in deeper learning, one of which must be “mastering rigorous academic content.”

Based on our review of these letters of interest, we will invite a subset of applicants (i.e., teams of individuals representing all partners in their proposed research-practice partnership) to participate in a required workshop on August 7-8, 2017 in Menlo Park, CA. At the workshop, applicants will work to further develop the ideas included in their letters into grant proposals. The Foundation will then invite some or all of these applicants to submit full-length proposals to be considered for potential funding.

2. Problem statement

Today, far too few students, especially those who are farthest away from opportunity, get to experience instructional practices that support deeper learning in their classrooms and schools. Given the current structure of the K-12 educational system, instruction in a typical school tends to cover a broad list of basic facts and skills across subject areas, while sacrificing the depth of learning needed to cultivate the competencies all students must now have to thrive in the future. **In this grant opportunity, we seek to start with knowledge-building as a means to address the disparities in access to deeper learning practices in the K-12 education system and the differential impact on deeper learning outcomes.**

There are at least three key features of this problem.

First, this is a systemic problem. The mantra that “every system is perfectly designed to get the results it gets” is quite apt. Given the current structures in K-12 public education, the majority of school systems and schools are making what could be seen as a rational decision not to use deeper learning practices consistently across all students. Although standards and assessments have shifted in recent years to signal that students are expected to master at least a subset of the deeper learning competencies, we do not yet know how to shift the education system to support all students and teachers in ways that facilitate mastery of all six competencies.

Second, this is an equity problem. One could likely go to any school and observe deeper learning practices happening in at least some corner of the campus, but too often, traditionally underserved students are least likely to experience deeper learning in their coursework. This observation suggests that schools can deliver these practices, but they are not reaching all students, especially those students farthest from opportunity who might benefit the most from these practices. Combined with the first point, the question then becomes: What are the systemic barriers that prevent all students from having these same opportunities to experience deeper learning practices in their schools?

Third, this is a “dosage” problem. Arguably, many teachers use some elements of deeper learning practices in their instruction. However, we do not know if these educators are applying these practices with sufficient frequency and quality for students to graduate high school with the necessary proficiency in the deeper learning competencies. For example, if a teacher asks her students to spend a few minutes once a week in a “turn and talk” activity to reflect on the most recent classroom lecture, would that be an adequate “dose” of a deeper learning practice? Would that be enough for students to become the kinds of collaborators and communicators who can successfully face the new challenges in a changing job market?² If a student spends time playing an iPad game that requires problem solving, would that be enough to help them transfer those skills to solve real-world problems?

Over the past several years, Hewlett has worked with partners to identify examples and models of schools and classrooms, often times implementing a constellation of deeper learning practices. In large part, these have served as crucial proof points to demonstrate that when provided opportunity and

¹ Attributed to Paul Batalden, IHI Senior Fellow and Founding Chair of the IHI Board of Directors.

² See, for example, Frank Levy and Richard Murnane, *The New Division of Labor: How Computers Are Creating the Next Job Market* (Princeton, NJ: Princeton University Press, 2005).

support, all students can indeed develop proficient levels of the deeper learning competencies. For example, IDEO and the Hasso Plattner Institute of Design at Stanford University compiled a selection of evidence-based deeper learning practices in a public resource through their [School Retool](#) program.³ However, the pathways to scaled impact beyond these proof points are not clear. Thus far, spread has been arguably intentional, slow and incremental, focused on a small number of school systems willing and able to try these practices, and often taken place under a unique set of conditions different from those in a typical school system serving large populations of high-need students. Furthermore, to date, this spread has relied heavily on philanthropic dollars (from Hewlett and other foundations), which calls into question how deeper learning practices might achieve systemic adoption and sustainability, especially since there are not enough private funds to invest in every school in the country.

We believe that solving this problem can help the education sector achieve scaled impact. Many define scaling in K-12 public education as the replication, expansion and adoption of a program to go deep in an already established area, target new areas and/or serve new populations of students. We argue, as others have suggested, that the education sector needs to address how to scale impact, not only how to expend the reach or increase the size of a particular program. For example, Jeff Bradach of The Bridgespan Group asks, “The question now is, ‘How can we get 100x the impact with only 2x change in the size of the organization?’”⁴ Likewise, in a recent literature review for the Social Impact Exchange, researchers at Duke University and the Growth Philanthropy Network broaden the definition of scale “from the concept of scaling as organizational growth...towards the concept of scaling impact, or the outcomes the organization has generated beyond just the organization itself.”⁵ At Hewlett, scaled impact means spreading deeper learning practices to achieve significant impact for students.

The challenge for Hewlett and our grantees is to develop empirically-driven, practical approaches to get from proof points of deeper learning practices to equitable and sustainable scaled impact. This grant opportunity helps us explore how to maximize the spread of deeper learning practices and the impact for all students when there might be no or just modest increases in an organization’s size or resources.

3. Background on scaled impact and the diffusion of innovations

In the past few years, Hewlett and its grantees have started to coalesce around and engage in shared learning about what it takes to spread deeper learning practices in school systems in order to achieve scaled impact. This collaborative work is informed by diffusion of innovations theory⁶ and recent thinking in improvement science,⁷ large-scale social change,⁸ change management⁹ and scale in

³ The evidence base is arguably thin at this time. Much of the evidence for these practices comes from small case studies and expert opinions, with very few randomized-controlled trials or other rigorous experimental designs.

⁴ Jeffrey Bradach, “[Scaling Impact](#),” *Stanford Social Innovation Review*, Summer 2010, 27.

⁵ Catherine H. Clark, Cynthia W. Massarsky, Tamara Schweitzer Raben and Erin Worsham, [Scaling Social Impact: A Literature Review for Funders](#) (New York, NY: Social Impact Exchange, 2012).

⁶ Everett Rogers, *Diffusion of Innovations, Fifth Edition* (New York, NY: Free Press, 2003).

⁷ Anthony S. Bryk, Louis M. Gomez, Alicia Grunow and Paul G LeMahieu, *Learning to Improve: How America’s Schools Can Get better at Getting Better* (Cambridge, MA: Harvard Education Press, 2015).

⁸ Billions Institute, *Skid Row School for Large-Scale Social Change*, February-March 2017.

⁹ Chip Heath and Dan Heath, *Switch* (New York, NY: Crown Business, 2010).

education,¹⁰ among other fields. With this new grant portfolio, Hewlett aims to contribute to the theory and knowledge base about how to achieve scaled social impact. The Foundation seeks to understand and test hypotheses about how to spread deeper learning practices in school systems that serve students who are farthest from opportunity (e.g., students of color, students from communities of poverty, and recent immigrants) and to achieve spread in the range of school systems (e.g., large and small; urban, suburban and rural; variability in resource levels) across the country.

In this section, we describe what we know about scaled impact. For ease of exposition, when we reference the literature we may use “innovation”, but for the purpose of this concept paper it is implied that this means deeper learning practices.

Hewlett has learned several lessons through its work thus far that have shaped its thinking about the potential for scaled impact in school systems and therefore the contours of this new diffusion of innovations grant portfolio. **The Foundation expects applicants to address and apply these concepts to their proposed work in their letters of interest (see section 8 in this document).**

- A. DEMAND.** Diffusion is primarily a “demand-side” strategy: Efforts to diffuse an innovation must understand the “market” of individuals who would use and promote it—who they are, what their motivations are and what problems the innovation might help them solve. The diffusion literature focuses on how ideas travel and therefore considers how reaching scale is ultimately a communications and decision-making process. This requires deep knowledge of the decision-making and innovation-adoption behavior of different segments of the market, as they will respond differently to the innovation. Diffusion efforts also need to analyze the role of opinion leaders (within the population of early adopters) as they play a critical function in sharing information about the innovation with others to enable diffusion to take place. In fact, Rogers posits that opinion leaders are critical to accelerating the diffusion of an innovation: While the innovators might be perceived as outliers by the community of potential users, opinion leaders are respected members of this community who can model the use of an innovation for others.

Rogers identifies five categories of individuals based on the degree to which when they are likely to adopt a particular innovation¹¹ relative to others (see figure 1). The percentage for each category is a useful rule of thumb derived from Rogers’ research on the adoption behaviors of different individuals.

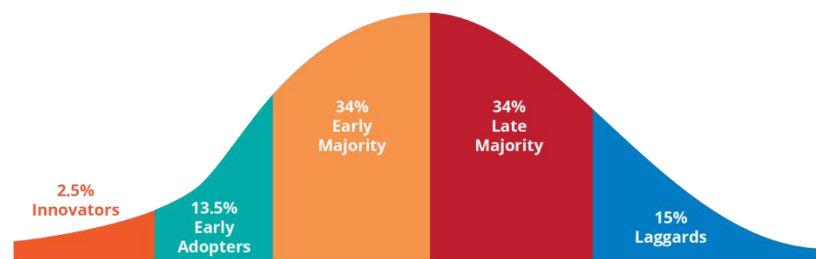
- **Innovators:** These are the first individuals to create or adopt an innovation. Innovators are willing to take risks, have resources to try (and fail) and are the closest to scientific sources and interaction with other innovators.
- **Early adopters:** Similar to innovators in risk-taking and access to resources, they are more discrete in adoption and some may be observed by others in their field and recognize that their adoption will reinforce their standing in the field. Opinion leaders are a subset of early adopters, and have an outsized influence on subsequent adoption group behavior.

¹⁰ Cynthia E. Coburn, “Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change,” *Educational Researcher*, Vol. 32, No. 6, 3-12.

¹¹ Rogers reminds us that one might be an earlier adopter of one innovation, but a later adopter of another.

- **Early majority:** Moving from early adopters to early majority is the biggest hurdle in diffusion. Early majority members adopt at varying and much slower rates than innovators and early adopters. They tend to have contact with early adopters, but may be influenced by or trust opinion leaders but aren't typically opinion leaders themselves.
- **Late majority:** Late majority members have a high degree of skepticism about adopting innovations, less access to resources (such that adoption may be riskier) and some contact with members of the early majority; they are more likely to adopt an innovation once the majority of others have.
- **Laggards:** These members are the last to adopt. They tend to reject "change agents," have the fewest resources, have relatively closed social circles and are the most focused on "traditions."

Figure 1: Rogers' distribution of adopters of an innovation



B. ATTRIBUTES. "Diffusible" innovations tend to have a set of key attributes: According to Rogers, innovations that successfully and quickly spread typically possess five key characteristics.¹² He notes that decision makers are more likely to adopt an innovation if it is perceived to be:

- **Relatively advantageous:** Is it perceived to be better than the practice it is replacing?
- **Compatible:** Is it perceived to be consistent with their existing values, past experiences and present needs/structures in the context of their own social system?
- **Simple:** Is it perceived to be simple to use and easy to understand?
- **Trialable:** Is it possible to try out the innovation for a limited time as a trial run?
- **Observable:** Is it possible to quickly see and/or experience the results of the innovation?

Recently, the Billions Institute argues that two additional characteristics can also enable spread:

- **Adaptable:** Is it possible to adapt the innovation to particular circumstances? This requires making a distinction between the "essential" features of the innovation that allow it to be effective and "peripheral" or "additional" features of the innovation that may be adapted. Diffusion efforts often need to try adaptations in different contexts to learn what to hold constant and what to customize as the innovation scales to generate the same results. For large-scale spread to occur, the effort should be tight on ends and loose on means.
- **Scalable:** As more adopters use the innovation, is it possible to strike a balance between elements of the innovation that scale naturally and other elements that require significant resource investments? **For Billions, the scalable attribute is about infrastructure,**

¹² Rogers (2003) and Billions Institute (February-March 2017).

including human resources, financial resources, technology supports and governance and oversight structures.

- C. **CHANGE.** Diffusion calls for an understanding of the complexity of the system *and* clarity about a small, manageable change: Diffusion efforts need to develop a nuanced understanding of the system they are trying to influence and of the ways in which the innovation functions within that system. In the education sector, reaching scaled impact through diffusion means shifting the mindsets of educators and others in the system to own and sustain the innovation for the long term.¹³ Having a deep understanding of that system is a necessary condition for considering how to target manageable yet high-yield change to achieve scaled impact through mindset and behavior change. Donella Meadows, a leading systems change researcher, identifies places within a complex system—what she calls “leverage points”—where a small intervention can lead to major outcomes.¹⁴ These leverage points include, in order of potential for impact: (1) transcending system paradigms, (2) altering system mindsets or paradigms, (3) shifting system goals, (4) changing the structure of the system, (5) rearticulating system rules, (6) influencing the structure of information flows, (7) strengthening positive feedback loops, (8) regulating negative feedback loops, (9) minimizing the length of delays in receiving feedback from the system, (10) changing the structure of material flows, (11) adjusting buffers to help the system stabilize from shocks and, finally, (12) setting and modifying the parameters of the system.

Individuals leading the diffusion of an innovation might consider the extent to which their innovation targets one (or more) of these leverage points, especially how it influences underlying mindsets and assumptions in a system. Making strategic choices about leverage points in a complex system requires a combination of logic and evidence to identify what is most likely to shift outcomes and to make clear to adopters what the clear, manageable change “ask” will be in their role and practice.

Rogers also argues that the more familiar an innovation is to adopters, the faster the diffusion. Therefore, diffusion is least successful (or only taken up by the early adopters) if the innovation is perceived to be too complex, ambiguous and unfamiliar for adopters to use, which then limits the innovation’s potential for scaled impact. Take an example from the health sector: While there are many contributors to a person’s health—including genetics, nutrition, exercise, and their environment—an innovation might be asking adopters to drink 2% milk (as opposed to whole milk) as *one critical step* to improve their health. In this example, the diffusion effort takes a complex system (health) and proposes a specific, doable and evidence-based behavior change (drink 2% milk) because this one simple behavior change has outsized impact.¹⁵ Although it is highly unlikely that a single change alone will result in all students achieving proficiency in all six deeper learning competencies, diffusion of innovation theory enables us to consider how that initial change can lead school systems to pursue further changes down the path toward

¹³ Coburn (2003).

¹⁴ Donella Meadows, *Leverage Points: Places to Intervene in a System* (Norwich, VT: The Donella Meadows Project, formerly the Sustainability Institute, 1999).

¹⁵ Of course, a shift to 2% milk alone will not improve overall health, but such a specific behavior change can positively influence far more at scale.

deeper learning. The diffusion of innovations approach encourages the sector to reimagine how large-scale change happens.¹⁶

D. BEHAVIOR. Diffusion requires individuals to change their behavior: Individuals will have to change their behavior in specific ways to take advantage of the innovation. Diffusion efforts can catalyze this kind of behavior change by applying three strategies:¹⁷

- **Provide information:** Individuals need clear directions about how to change their behavior in a way that does not require significant effort on their part. Diffusion efforts can break down the innovation into small, manageable changes such that adopters perceive it as achievable. Diffusion efforts can define specific actions individuals may take and/or find places that have already adopted the innovation successfully (i.e., “bright spots”) to show others how behavior change is possible.
- **Spark motivation:** Individuals need to feel motivated to start adopting the innovation and continue using it. These efforts can target their emotions—for example, the emotions that the innovation elicits or enhances for them.
- **Create the right conditions:** Individuals need to be in an environment that facilitates their use of the innovation. Diffusion efforts can deploy positive social pressures and messages. These efforts can also make changes to existing systems, structures and processes in adopters’ lived environment that would make it easier for them to use the innovation.

Taken together, these concepts underscore that scaled impact involves more than the expansion of an innovation to new settings. This is a multi-dimensional kind of scale that considers not only how the innovation spreads but also the extent to which this innovation changes behavior in a meaningful way, how sustainable the change is over time, and how ownership for this change shifts from the originator of the innovation to the individuals carrying it out on an ongoing basis.¹⁸

Finally, in the education sector especially, we must consider not only the educators who will use an innovation (e.g., by applying a deeper learning practice in their classrooms) and the leaders who support them, but also the students who will need to engage with the innovation to achieve the desired outcomes in deeper learning. Students are indeed another set of adopters, albeit indirectly. Diffusion efforts in education must therefore design their innovation around the needs of both sets of key adopter audiences.

4. Research questions

The sections above summarize what we know about the diffusion of innovations and scaled impact. There are, of course, many things we collectively do not know. In the table that follows, we describe the specific gaps in our knowledge and list the corresponding research questions we seek to answer in collaboration with partners in this new diffusion of innovations grant portfolio. **We seek to fill these knowledge gaps to help Hewlett and the education sector—in particular, researchers, practitioners, funders and policymakers—spread sustainable deeper learning practices to more school systems around the country and achieve scaled impact. To that end, we aim to generate**

¹⁶ Heath and Heath (2010) and Billions Institute (February-March 2017).

¹⁷ Heath and Heath (2010).

¹⁸ Coburn (2003).

new knowledge that helps strengthen scientific theory-building among researchers as well as practical, action-oriented knowledge that can support the strategic spread of practices among practitioners and the funders and policymakers who set the conditions for practitioner action.

What we do not know	Our research questions
Diffusion of innovations theory draws heavily from research in rural sociology at a time when agricultural technology was advancing rapidly. Rogers and others sought to understand how farmers were adopting hybrid seeds, equipment, and techniques. Other fields, notably technology and medicine, have applied this theory to explain the spread of their products and tools. We do not know the extent to which we can apply insights from this theory to a social sector field, as in education, to facilitate the diffusion of a practice in the service of scaled impact.	<p>What are effective approaches to diffuse a deeper learning practice to reach scaled impact in a school system?</p> <p>What is the right “grain size” for a deeper learning practice to diffuse in a school system and have scaled impact? What design features or characteristics must this practice have?</p> <p>How can school systems design and implement efforts to diffuse a deeper learning practice in a way that supports equitable student outcomes?</p>
The K-12 education system is a highly dynamic, decentralized and complex ecosystem. For example, a superintendent or system leader may ask teachers to adopt a deeper learning practice, but teachers behind closed classroom doors still may choose whether or not to implement the practice, may or may not have the knowledge or skill needed to adopt or adapt the practice, or may actually improve the practice in ways that are not shared with others. We do not know how diffusion can work in this context.	<p>What conditions in a school system enable and hinder the diffusion of a deeper learning practice? These conditions might include system-wide policies, governance structures, leadership and staffing models, among others.</p> <p>What is the minimum level of resources that a school system must have to achieve scaled impact? How can a school system invest 2x more resources and have 100x more students achieve deeper learning outcomes?</p>
School systems in the U.S. can vary widely. For example, they may be located in communities with different assets and resources and they can serve different demographics of students and families. While we know that “one size does not fit all” and diffusion depends largely on context and the population served, we do not know the degree to which a deeper learning practice can be adapted to the unique context of a school system and still have the desired impact at scale.	<p>Which elements of a deeper learning practice are essential for diffusion to happen in any given school system? Which elements can be adapted to the context in a school system?</p> <p>To what extent and in which ways do the Rogers attributes (described in the prior section) contribute to or explain scaled impact in different kinds of school systems?</p>

The ultimate focus of this grant portfolio is to use practical, empirical work in school systems to develop new knowledge about scaled impact. Thus, our emphasis will be on research that tests hypotheses and contributes to knowledge-building about how to scale deeper learning practices in school systems that is both useful to the research community in building theory as well as practitioners

who will continue the work of spread in their systems as well as others.¹⁹ **This grant opportunity is not appropriate for an organization that seeks only to replicate its practices without simultaneously working to develop new knowledge (that might lead to theory) about the diffusion of an innovation and scaled impact in school systems. Hewlett’s goal is to learn about scaling impact and not to scale organizations or practices, per se. As a result, we are opening this grant opportunity only to research-practice partnerships, which bridge academic expertise with on-the-ground practitioner experience in school systems.**

To answer these research questions, the focus of this grant portfolio will be school systems (districts or charter management organizations) that enroll roughly 25,000 or more students, of whom roughly 60% or more must be high-need students.²⁰ Also, to understand what it takes to diffuse an innovation beyond the pilot stages, Hewlett expects that these school systems will have already spread their deeper learning practice to approximately 15% of targeted users at baseline (by definition, the innovators and early adopters in Figure 1) and will therefore use grant funds to increase adoption to at least 80% of the potential users (which requires capturing most of the early and late majority as well). **This grant opportunity is not appropriate for a school system where the chosen deeper learning practice has already spread to a significant portion of targeted users at baseline (e.g., beyond 15%).**

Given our timeline and interest in building knowledge and theory, our focus will be on a deeper learning practice rather than whole school reform. Additionally, we are less interested in the results of isolated projects that positively contribute to an individual school system. Instead, we hope to build new knowledge and theory that helps the field understand how to spread deeper learning practices. Because of this focus, we believe we will learn the most with practitioners and researchers working together in concert. We believe it’s important to create a community of grantees working together over at least three years because we will learn more together. Finally, we believe large school adoption of an innovation in a school system will be the best way to learn. For example, to answer our research questions 800 educators in one district who adopt an innovation will teach us more about scale than 800 educators who adopt it across the country. Also, for this phase of work we think we want to first understand a school system that goes from 15% to 80% of educators who adopt an innovation rather than a system that goes from 80% to 100%.

5. Short- and long-term objectives

Hewlett has identified a set of objectives to guide these diffusion of innovation grants and to evaluate the success of the portfolio. While these objectives apply to the portfolio of grants rather than individual grantees, we share them to further elucidate what we hope to gain from the effort as a whole and therefore how we envision individual grantee efforts contributing to portfolio-wide goals.

Short-term objectives: In three years...

¹⁹ For the purposes of this grant, we refer to the development of scientific theory (as well as practical knowledge). Developing theory requires following the scientific method of inquiry, which includes the idea of using a range of quantitative and qualitative methods that are best suited to addressing the particular research questions at hand. We expect grantees to iterate and learn continuously, and in the process, create new knowledge for a range of audiences about what it takes to successfully diffuse a deeper learning in the service of scaled impact.

²⁰ Consortia of rural school systems may also apply. See eligibility section for more information.

- Grantees provide empirically based answers to the research questions.
- Hewlett and grantees contribute to the knowledge base of scaled impact, including documentation of key lessons that can inform the actions of researchers, practitioners, funders and policymakers to bring deeper learning practices to scale in school systems in diverse contexts and the development or refinement of theories of diffusion that have greater utility in the social sector
- Deeper learning practices reach scaled impact in at least five school systems that serve students farthest from opportunity with the support of Hewlett's scaled impact grants. Each grantee will define what scaled impact means in the context of their school system based on their baseline level of diffusion for their chosen deeper learning practice.
- Three additional foundations consider findings from Hewlett's diffusion of innovation/scaled impact grants to inform their education investments, specifically focused on scale.

Long-term objectives: In five years...

- Organizations in the education sector codify and adopt new knowledge about how to spread deeper learning practices in different types of school systems.
- Practitioners in at least four school systems that have not been affiliated with Hewlett grantees achieve scaled impact through deeper learning practices using the knowledge, theory and/or scale strategies developed by the scaled impact grantees.

We recognize that these objectives are ambitious for this timeframe. The Foundation will monitor progress toward these objectives and potentially add longer-term objectives beyond the five-year milestone as we learn more about the spread of deeper learning practices at baseline in the school systems participating in this grant opportunity.

6. Statement on diversity, equity and inclusion (DEI)

Hewlett is strongly committed to DEI. The Foundation actively seeks to collaborate with organizations whose leadership, staff and activities represent and include diverse perspectives and experiences, especially those from the most underrepresented communities in the U.S. Hewlett believes that by prioritizing DEI in its work, it can help the education sector become more responsive to disparities in educational outcomes.

Key DEI considerations for scaled impact

Rogers' theory of diffusion underscores that when many innovations are initially adopted they may in fact exacerbate equity gaps and create disparities, as those who are already better off tend to adopt innovations earlier and at a faster rate than more disadvantaged populations. Hewlett has identified four considerations to preempt this risk and ensure that the Foundation and its grantees consistently apply a DEI lens to their diffusion efforts. These considerations will inform the Foundation's review of letters of interest and eventually full proposals in the diffusion of innovation/scaled impact grant portfolio.

- **Partner with school systems that serve a critical mass of students farthest from opportunity:** The Foundation will collaborate with school systems that would benefit the most

from deeper learning practices to help their students farthest from opportunity achieve their academic and life goals.

- **Ensure deeper learning-aligned practices reach a critical mass of students farthest from opportunity:** The Foundation will prioritize giving high-need students in school systems access to deeper learning practices so those farthest away from opportunity see the fruits of this work first.
- **Reduce or eliminate systemic barriers for students farthest from opportunity:** The Foundation will support partners that, in working toward deeper learning, also address persistent, systemic barriers that high-need students face in the K-12 public education system.
- **Focus on outcomes for students farthest from opportunity:** The Foundation will disaggregate outcome data and specifically look for improvement in outcomes for high-need students resulting from the scaled impact grants. Here, we look to eliminate performance gaps.

7. Grant information

Grant amount

The Foundation will invest a total of approximately \$10 million over a three-year period, with approximately \$5 million in year one (2017), \$3 million in year two (2018), and \$2 million in year three (2019). This letter of interest is associated with the \$5 million to be awarded in year one (2017) to build the initial cohort of research-practice partnerships. The Foundation anticipates awarding up to 10 grants in year one.

Eligibility

Only research-practice partnerships are eligible for this grant. Hewlett adopts the definition of research-practice partnerships as intentional, purposeful, mutually-beneficial, long-term collaborations between practitioners (or those who administer education) and researchers (or those who study education) that investigate problems of practice and solutions for improving schools and school systems.²¹ Often times, research-practice partnerships seek to impact decision-making in education using empirical, research evidence. These partnerships must include a researcher or a research organization with relevant and demonstrated²² expertise on diffusion of innovations and/or scaled impact, a practitioner-focused support organization with extensive experience developing and/or helping school systems implement new practices to achieve deeper learning, and a school system committed to deeper learning and willing to diffuse a deeper learning practice across its schools. Hewlett will also consider research-practice partnerships that consist of fewer than three organizations if they can show how their collective expertise meets the requisite expertise in the intended partnership. For example, two organizations—a researcher plus a practitioner-focused support organization that also operates schools—are eligible to submit an application as a research-practice partnership. Eligible school systems must enroll about 25,000 or more students, of whom at least roughly 60% must be high-needs students. Consortia of rural school systems are also eligible for this grant opportunity as long as they collectively enroll about 25,000 or more students, of whom at least roughly 60% must be high-needs students.

²¹ Cynthia E. Coburn and William R. Penuel, “Research-Practice Partnerships in Education: Outcomes, Dynamics, and Open Questions,” *Educational Researcher*, Vol. 45, No. 1, 48-54; another source for information about RPPs is <http://nnerp.rice.edu>

²² For example, this could be demonstrated via publications in peer-reviewed journals.

Research-practice partnerships at all levels of maturity are eligible to apply, including new partnerships and well-established partnerships. However, all applicants must demonstrate that the partners can sustain a productive working relationship for the long term. Hewlett anticipates that new partnerships will need to provide initial evidence that they have potential for such a relationship upon submitting their proposal. The Foundation expects that partners would work together through the duration of the entire grant-funded project. For example, this grant opportunity is not appropriate for research-practice partnerships where the researcher would only play a role during the last few months of the grant to do a retrospective evaluation, or one where the researcher frames the study without active participation from the practitioners from the very beginning, or where the researcher engages the practitioners for implementation and not the design, interpretation and analysis of the results.

While eligible research-practice partnerships may be located anywhere in the United States, Hewlett is especially interested in supporting school systems in California, Colorado, New Hampshire and Virginia given the focus of other grant-funded projects in those four states.

If selected, applicants will need to justify the relative funding support for the researcher/research organization, a practitioner-focused support organization and the school system in their budget. The budget would indicate the level of involvement of each of the parties throughout the process. It would also indicate the likelihood that after completion of the project another school system would be able to also have similar impact using its own resources (i.e., if a substantial proportion of the grant goes directly to support direct service or the purchasing of equipment, it is unlikely that another school system with the same initial financial constraints would be able to replicate the impact without the funds provided by the grant).

Timeline

May 24, 2017	Request for letters of interest released publicly
May 30, 2017	Applicants submit questions about the letters of interest to be answered on the May 31st optional conference call. Please send questions to scale@hewlett.org by 5:00 PM PDT.
May 31, 2017	Optional conference call at 1:00 PM PDT to answer questions about the letters of interest process (note: in order to maintain a fair process, Hewlett Foundation staff and their consultants are unable to answer questions about individual proposals outside of this call). The call will be recorded for those unable to join.
June 16, 2017	Letters of interest due by 5:00 PM PDT (Submission instructions below)
June 19-July 7, 2017	Hewlett letter of interest internal review
July 7, 2017	Selected applicants invited to scaled impact workshop
August 7-8, 2017	Mandatory scaled impact workshop at Hewlett offices in Menlo Park, CA
August 11, 2017	Request for proposals released to scaled impact workshop participants
September 1, 2017	Proposals due by 5:00 PM PDT (Submission instructions forthcoming)
September 4-29, 2017	Hewlett proposal internal review (Applicants may be asked to update and/or revise their proposals)

8. Letter of Interest

Submission instructions

Format and length: Up to seven pages, single-spaced with minimum of 11-point font and one-inch margins in Microsoft Word document form (PDFs will not be accepted). Attachments are not included in the page count.

Narrative: Describe a project you would undertake in a research-practice partnership over three years to help Hewlett answer the research questions. In your narrative, address:

A. **What deeper learning practice(s) would you seek to reach scaled impact in a school system?**

(Recommended length: 0.5 pages)

In your response, consider the following:

- i. As stated in the prior sections, deeper learning consists of six interrelated competencies. In this grant opportunity, we will only consider deeper learning practices that build student proficiency in at least two of these six competencies, one of which must be “mastering rigorous academic content.” Also, note the specific empirical evidence base about the efficacy of your proposed deeper learning practice, including how it advances mastery of rigorous academic content.
- ii. Since we define scaled impact as reaching 80% of all students/teachers in a school system, we will give relative weight to deeper learning practices that will see relatively faster impact. This is not to suggest that practices that require longer periods of time to have an impact are not also important to understand. However, with a three-year time horizon for this set of Hewlett investments, we seek to learn about scaled impact in the immediate term, and hope this lays the groundwork for future theory-building based on longer-term impact.
- iii. To achieve real, sustained behavior change—the key to scaled impact—the deeper learning practice(s) must be sufficiently clear and manageable for various individuals in the school system to understand what they need to do differently to spread the chosen practice. While we expect that many applicants will define a single deeper learning practice to diffuse in a school system, we welcome letters of interest that propose to spread a set of *multiple* deeper learning practices all at once. In either scenario, you need to make the case that your chosen practice(s) is/are sufficiently clear and manageable to be highly likely to diffuse successfully in a school system.
- iv. We acknowledge there is a tension in the education sector between the premise of this grant opportunity—that diffusing a practice has potential to generate scaled impact—and the common perspective that meaningful impact can only be achieved through whole-school change. We recognize the role and value of whole-school change, which would require the implementation of numerous, often complex practices at the same time. However, as a knowledge- and potentially theory-building initiative, the purpose

of this grant opportunity is to explore and help the sector start with better understanding how smaller, well-defined changes can lead to outsized impact and the potential for systems change over time. Although the focus of this concept paper has been a “deeper learning practice,” proposals from applicants seeking to have scaled impact around whole-school models are also welcome to apply.

B. What would be your key indicator(s) of impact?

(Recommended length: 0.25 pages)

In your response, consider the following:

- i. Be sure to distinguish between uptake/use of the deeper learning practice(s) and the impact on an outcome. Although you will likely need to track how many individuals applied a practice (e.g. downloaded a tool, attended a professional development session, etc.), you will also need to track the behavior change or impact that the practice ultimately is designed to achieve.
- ii. We recognize that you will only be able to measure immediate and not long-term impact on student learning.
- iii. Provide your initial ideas on how you would collect data on the key indicator(s).

C. What research questions do you intend to address and how do you think this inquiry will contribute to the development of theory about diffusion in school systems?

(Recommended length: 2.25 pages)

In your response, consider the following:

- i. Tie your proposed research questions to the research questions we pose in this paper for the portfolio as a whole. We do not expect these to match exactly but do expect to see the ways in which they connect.

D. What ideas or concepts related to scaled impact and diffusion as described in this concept paper will you test, use, or apply in your proposed work?

(Recommended length: 0.5 pages)

In your response, consider the following:

- i. We do not expect each applicant to address every idea or concept we discuss here. Rather, each applicant should describe the ways in which their proposed plan addresses the broad concepts we discuss in the background section related to demand, attributes, change and behavior.

E. How do you envision the process of diffusion taking place for your chosen deeper learning practice(s) in your school system over three years? How would you launch this process in year one? What goal(s) would you set for scaled impact in your school system?

(Recommended length: 0.5 page)

In your response, consider the following:

- i. Provide the baseline level (or best estimate) of diffusion in the school system right now; note your data source.

- ii. Share your initial thinking about the method(s) you would use to spread your chosen deeper learning practice. Include information about how this work would unfold within the system by clarifying what actors would undertake what activities and when.
- iii. Each grantee in this grant portfolio will define what scaled impact means in their school system, based on where they are with the diffusion of their chosen practice at baseline. We recommend setting a goal of 5x - 10x the growth over the baseline as a way to set ambitious yet achievable goals for the next three years. For example, if in the past three years the school system increased use of a practice by 50 teachers, an appropriate goal for the next three years would be to reach 250-500 teachers.

F. **How will diffusing the practice (s) help a school system make progress toward achieving the outcomes of deeper learning with a focus on equity?**
(Recommended length: 0.5 pages)

In your response, consider the following:

- i. Refer to the specific deeper learning competencies in the ***Background on scaled impact and diffusion of innovation*** section. How would these ideas apply to and shape the activities within the chosen school system?
- ii. Refer to the ***Statement on diversity, equity and inclusion (DEI)*** section.

G. **How can school systems use their existing funds to achieve the same or greater impact, rather than relying on investments of external dollars?**
(Recommended length: 0.5 pages)

In your response, consider the following:

- i. Discuss the likelihood that after completion of this project similar school systems (i.e., large and serving roughly 60% students farthest from opportunity) could achieve impact towards deeper learning goals using only their own existing funds.
- ii. One of Hewlett's long-term objectives is to spread the knowledge created by the grantees in this grant portfolio to non-grantee school systems so they too may achieve scaled impact by diffusing deeper learning practices. We welcome any ideas you may have about how your project will help spur adoption of deeper learning practices in non-grantee school systems. However, we do not require this information at this time.

H. **How will this work position you to contribute to the development of knowledge about scaling deeper learning practices in school systems? What will you be positioned to contribute to the knowledge base (and/or theory) about scaled impact in education?**
(Recommended length: 0.5 pages)

In your response, consider the following:

- i. What is your approach to building knowledge (and/or theory) that can inform the work of various audiences, including researchers, practitioners, funders and policymakers?
- ii. What other bodies of research or theoretical literature would you draw upon?
- iii. Keep in mind that this grant portfolio is designed to produce new knowledge and theory that will help the education sector—in particular, researchers, practitioners, funders and policymakers—make decisions and take informed actions to scale deeper

learning practices in school systems. The goal of this grant portfolio is not simply to publish articles in peer-reviewed academic journals.

I. Who are your partners?

(Recommended length: 1 page)

In your response, consider the following:

- i. Include the name of the **school system**, the size of the study body, data to show it serves roughly 60% of high-need students (in particular, students of color, students from communities of poverty and recent immigrants) and evidence of leadership commitment to participate in the work.
- ii. List **other members of the research-practice partnership**, as described in the *Eligibility* section above.
- iii. Describe the **organizational capacity** of each partner to collaborate with each other. Partners will need to show they have established (or have the potential to establish) systems and processes for deep collaboration, such that all partners are equally involved in the project and contribute to its success.
- iv. Describe **functional expertise** across partners: the skills and experience in design, innovation within complex systems, change management, stakeholder engagement and/or other areas, as needed to pursue the intended project.
- v. Provide evidence of **commitment to diversity, equity and inclusion** (including demographic data of leadership team/board members) of all partners.
- vi. Describe **potential to contribute to a learning network** of diffusion of innovation grantees: Discuss how partners demonstrate past or high potential to participate actively in a network of grantees for the purpose of shared learning and knowledge-creation focused on scaling deeper learning practices; also, partners have a demonstrated ability to openly share resources with others in the field. (Note: as is consistent with all Hewlett-funded projects, all work products funded through this RFP will be expected to be openly licensed with a Creative Commons “attribution only” or CC-BY license.²³)

J. Reflecting back on your preparation of the LOI, where did you struggle?

(Recommended length: 0.5 pages)

Note: We will use this information to design the scaled impact workshop on August 7-8, whose purpose is to help select applicants develop strong, full-length proposals from their letters of interest. We welcome your candid and honest reflections. Discussing where you struggled will not count against you in our review of letters of interest.

Budget: Please include an estimated budget for the full set of work you described in your letter of interest.

Attachments: Hewlett welcomes attachments that are especially critical to understand fully the applicant’s ideas in the narrative. Attachments may include theories of change and theories of action, logic models, sample work products, etc. Limit attachments to 1-2 files, totaling five pages maximum.

²³ For more information, visit <https://creativecommons.org/licenses/by/3.0/us/>

Deadline: June 16, 2017 by 5:00 PM PDT.

Submission: Please submit your letter of interest with all attachments in a single email addressed to scale@hewlett.org.

Letter of interest review process: Hewlett will conduct a thorough review of all letters of interest. Hewlett and Education First, a national strategy and policy consulting firm, will screen all letters of interest and attachments to determine which applicants will be invited to a capacity-building workshop to support building out a full proposal. Based on the results of this LOI review process, Hewlett will invite selected applicants to the capacity-building workshop. Given the nature of this process, representatives from Hewlett and Education First will not be able to provide advice or specific feedback on letters of interest, draft proposals or proposals not selected to advance in the process.

9. Appendix: List of key terms

Deeper learning²⁴: An umbrella term for the skills and knowledge that students must possess to succeed in 21st century careers and civic life. At its heart, deeper learning is 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. These competencies are:

- *Master rigorous academic content:* Students develop and draw from a baseline understanding of knowledge in an academic discipline and are able to transfer knowledge to other situations.
- *Think critically and solve complex problems:* Students apply tools and techniques gleaned from core subjects to formulate and solve problems. These tools include data analysis, statistical reasoning and scientific inquiry as well as creativity, nonlinear thinking and persistence.
- *Work collaboratively:* Students cooperate to identify or create solutions to societal, vocational and personal challenges.
- *Communicate effectively:* Students clearly organize their data, findings and thoughts in both written and oral form.
- *Learn how to learn:* Students monitor and direct their own learning.
- *Develop an academic or learning mindset:* Students develop positive attitudes and beliefs about themselves as learners that increase their academic perseverance and prompt them to engage in productive academic behaviors. Students are committed to seeing work through to completion, meeting their goals and doing quality work, and thus search for solutions to overcome obstacles.

Deeper learning practices / innovations: Teacher or leader practices that facilitate and sustain the deeper learning of their students. These practices call for teachers to re-envision their instruction to help students build their deeper learning competencies. Examples of such practices include, but are not limited to, the “big ideas” in the [School Retool toolkit](#).

²⁴ For more information, visit <http://www.hewlett.org/strategy/deeper-learning/>; also, see National Research Council reports on deeper learning at http://sites.nationalacademies.org/DBASSE/BOTA/Education_for_Life_and_Work/

Diffusion: The process by which (1) an innovation (2) is communicated through certain channels (3) over time (4) among the members of a social system (Rogers, 1962).

Local school system: A school district or charter management organization (CMO) operating multiple schools.

Scaled impact: Contributing to meaningful and sustainable impact on increasing numbers of people. Traditionally, many in the nonprofit sector have understood scale as the growth of an organization to reach greater numbers of people with a particular set of products and/or services. Scaled impact, however, focuses on maximizing the outcomes of an organization (Clark et al. 2012). What is scaled is the impact of an organization's work on increasingly larger populations over time. To achieve this kind of scale in the education sector, organizations must create *deep change* in teaching practice that is *sustainable* in the changing context of a school system, can *spread* to more classrooms and schools, and *shifts the ownership* of the change from the organization to the school system itself (Coburn 2003).

Students farthest from opportunity / high-need students: Students who are at risk of educational failure and need additional support to succeed. This category of students includes, for example, students of color, students from communities of poverty and recent immigrants, as noted above, as well as special education students, students who are far below grade level, students at risk of not graduating on time, homeless students, students in foster care and English language learners.