

a concept paper for a student-centered learning research collaborative

Investigating the Evidence for Student-Centered Learning

**Students At the Center**

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# **INTRODUCTION: WHY A RESEARCH COLLABORATIVE IS NEEDED**

As part of JFF’s ongoing effort to build and support student-centered approaches to learning, we continue to seek new means to better meet the needs of the practitioners and policymakers who are essential to implementing and scaling the work. This paper represents our understanding of how the evolving domains of research, practice, and policy intersect with the four principles of student-centered learning and the role a Research Collaborative can play in helping to bring those principles to scale.

The nation continues to turn away from standardized, one-size-fits-all approaches to education, and educators and policymakers are seeking rationale and methods for more personalized forms of instruction. More than ever before, school professionals, district and state-level policymakers, and university- or nonprofit-based researchers have access to abundant resources in both the scholarship that informs student-centered learning and the techniques that comprise it. We now have a deep and growing understanding of how students learn and which forms of instruction are most likely to promote positive academic and social outcomes for each individual student. In particular, student-centered approaches have demonstrated tremendous potential to accelerate student achievement and enhance equity system-wide.

##### **Defining and Building and Knowledge Base for Learner-Centered Approaches**

Multiple frameworks and research studies now identify an increasingly coherent set of knowledge, skills, and dispositions students need to succeed in the 21st century. Since 2010, Students at the Center has been working with academics and researchers to compile, synthesize, and analyze hundreds of research articles to develop a grounded definition of student-centered learning.[[1]](#endnote-2) The four key principles of student-centered learning—drawn from the mind/brain sciences, learning theory, and research on youth development—are overlapping and complementary. They are:

* Learning is **personalized.** Opportunities to learn are customized and differentiated to match each individual student’s needs, interests, and skills.
* Learning is [**competency based**](http://studentsatthecenterhub.org/educator-competencies/#competencyeducation)**.** Students move ahead based primarily on their demonstration of key learning milestones along the path to mastery.
* Learning takes place [**anytime, anywhere**](http://studentsatthecenterhub.org/educator-competencies/#anytimeanywherelearning)**.** Equitable opportunities to learn extend beyond the school day and the school building and take advantage of community and technological resources.
* Students have **agency** and **ownership** over their learning. Students understand how to improve by applying effort strategically and are given frequent opportunities to direct and reflect on their learning.

In combination, and when guided by a coherent and rigorous set of educational goals, these principles provide a strong foundation for the pursuit of **deeper learning**—the knowledge, skills, and dispositions necessary to prepare every student for college, a career, and civic life.

A small but growing group of studies following the release of the Students at the Center framework provides further substantiation for this vision (e.g., Zeiser, K., Taylor, J., Rickles, J., Garet, M., & Segeritz, M. 2014; Pellegrino, J. & Hilton, M., eds. 2012; the studies cited in: <http://www.nmefoundation.org/resources/student-centered-learning/centered-on-results>).

Our analysis strongly suggests that the formation of a Research Collaborative would further advance these promising developments. We propose, therefore, to launch a Research Collaborative that will specify and unify a system of learning personalized to each student and demonstrate how it can be implemented at scale. We believe the Research Collaborative can accomplish this through three overarching goals (for details on the specific activities associated with each Goal, please see p.17-19).

1. Support new and innovative research on the principles of student-centered learning to catalyze development and build coherence within the field
2. Serve as the communicator and sense-maker of the Collaborative’s work as well as the curator and clearinghouse for all studies related to student-centered learning
3. Continue to build the evidence base of good implementation, and develop approaches that help practitioners and policymakers apply research on student-centered learning in their unique settings

Explained below are the conclusions and rationale that inform these goals.

## **We Have Strong and Increasing Evidence that Students Benefit from Student-Centered Learning Approaches…**

The research base for the principles of student-centered learning is solid and growing. The Students at the Center research series along with the curricula, newsletters, webinars, infographics, blogs, and reports available at the StudentsAtTheCenterHub.org website are powerfully capturing the current knowledge and future possibilities of student-centered learning and increasing its visibility and uptake in education.

Though it is clear student-centered learning describes a potent set of approaches and a powerful lever for school reform, much more remains to be done if we are to fully understand student-centered principles and bring them to those who need them most. The stark racial, socioeconomic, and linguistic disparities in educational outcomes that are routinely detailed in peer-reviewed research, commissioned reports, and media outlets indicate that our school system’s capacity to individualize instruction to meet each student’s needs is still far from ideal. Research suggests that implementing personalized, competency-based, anytime/anywhere, and agency-enhancing forms of instruction can reduce those disparities. So too can increasing the student-centered tools and resources available to educators and school systems, and continuing to build the evidence base supporting best practices in student-centered learning.[[2]](#endnote-3) Therefore, to fully realize the potential of student-centered learning—*to build on what we know in order to better inform what we do*—it is crucial that we sustain the momentum that has been established and use it to inspire new discoveries and better practices.

A Research Collaborative is perhaps the best way to build the evidence base supporting student-centered learning approaches and establish an enduring platform for change. A Collaborative can do this by addressing three key issues. First, it can unify field terms and provide needed clarity in definition so that the use and pursuit of knowledge related to student-centered learning is as precise as it is consistent. Right now, the field needs leadership to make sense of what are arguably too many empirically distinct but practically integrated concepts, the access and uptake of which have become cumbersome for the practitioners and policymakers most charged with the implementation of student-centered approaches. Second, a Collaborative can make difficult decisions about what to study in ways that integrate and maximize (rather than segregate and diminish) researcher, practitioner, and policymaker expertise. Though often valued in the academy, highly nuanced sub-specialties and isolated sub-interests can be liabilities when it comes to developing usable knowledge (see the “Overcome Barriers” subsection on p. 9), but a Collaborative can turn restricted areas of expertise into assets by facilitating partnerships that are accountable to real-world contexts. And third, a Collaborative can help build momentum among the next circle of researchers, practitioners, policymakers, and funders so that coherent investigations and rigorous applications of these topics are sustained well into the future.

## **…But Important Unanswered Questions Remain**

While we have strong and increasing evidence that student-centered principles in action produce measurable academic gains, important questions remain. Conducting research into which cognitive and psychosocial factors most drive student-centered outcomes, and which pedagogical techniques yield the most robust positive changes in student performances, will establish for researchers, practitioners, and policymakers the utility of student-centered learning both as an organizing framework for teaching and as a reform initiative in education. Likewise, investigating where the leading edges of student-centered learning reside and then studying which components offer the greatest leverage for change will help to generate momentum for its wider implementation in the decades ahead.

Indeed, we know much about why student-centered approaches are so powerful in classrooms and schools, but important areas remain unexplored. For example:

* Which specific, high-leverage student-centered approaches—from classroom teaching techniques to deep cultural and structural systems change—produce the greatest impact, particularly for our most underserved students?
* How do certain cognitive, psychological, cultural, and social-emotional factors interact in classrooms and within individual students to maximize and perhaps minimize the impact of student-centered learning approaches?
* To what extent are student-centered approaches culturally responsive and/or culturally agnostic, and how does that orientation shape educational outcomes for specific racial, ethnic, linguistic, and socioeconomic groups?
* Which personalized learning digital platforms produce the most positive academic and psychosocial outcomes and for what groups?
* How, or to what extent, might student-centered principles need to be reframed for students with disabilities? What models of competency-based education, for example, are most promising in this regard?
* What kinds of knowledge, skills, and supports permit some students to be relatively autodidactic? In other words, for whom does anytime, anywhere learning most (and least) work?

Perhaps one reason student-centered learning has not yet been implemented at scale is the fact that pressing questions like those above remain unanswered. Public demand for any research-driven enterprise often hinges on scholarship’s utility and applicability in everyday contexts. A Research Collaborative dedicated to investigating such inquiries would provide valid, reliable, and replicable evidence about which student-centered approaches can and do result in dramatically improved outcomes—and which don’t. This, in turn, would help practitioners and policymakers make crucial decisions about how to allocate resources to maximize achievement, where and when to infuse student-centered principles into school design, and how to integrate student-centered approaches into instructional planning to meet the needs of all students, particularly those who have been least served by previous reform efforts.

Of course, questions like these represent only a fraction of the full range of student-centered inquiries researchers are poised to investigate. Consequently, one of the core early activities of the Research Collaborative would be to generate and prioritize a more comprehensive list of potential research questions and use it to construct a coherent and meaningful research agenda that will move the field ahead.

## **Student-Centered Learning** **Undergirds Many Important Issues in Education…**

Debates over the purposes, methods, and outcomes of education have always been a prominent fixture on the American political landscape. Today is no different. Amid growing fatigue and dissatisfaction with test-based accountability and a desire for more authentic, rigorous forms of assessment, accountability, and learning, leaders and practitioners at all levels are scrambling to innovate. Comparisons to other nations’ achievement levels are driving a concurrent push for deeper learning outcomes that prepare students for complex problems in real-world situations. Student-centered approaches are ideally situated to respond to these trends and address gaps in achievement. In fact, that student-centered learning directly informs a host of important educational issues suggests the utility of its principles as well as the potentially enormous impact they could have (and are having) on how we design schools, plan instruction, assess student work, and reform education. Just a few of the current educational “hot button issues” directly informed by student-centered learning include: proficiency-based and authentic forms of assessment; differentiated instruction in inclusive, untracked cohorts; teacher evaluation, accountability, and support; school climate factors and the way they shape student engagement; effective instruction for English language learners; school and district accountability; universal design in online learning; and turnaround strategies for low-performing schools.

To fully explore the myriad ways the four principles of student-centered learning address the concerns topmost on educators’ and policymakers’ minds, further inquiries are required. A Research Collaborative that explores the extent to which student-centered learning informs and influences today’s challenges, controversies, and trends in K-12 education would supply the field with much-needed insights into what works best.

## **…But We Need to Make Sense of What is Now a Diverse and Complicated Field**

Partly because of the enthusiasm among practitioners and policymakers for student-centered principles, researchers have generated an array of approaches over the years that are aligned with student-centered learning (e.g., “deeper learning,” “personalized learning,” “competency-based instruction,” “blended learning,” “project-based learning,” “flipped classrooms,” “student voice and choice,” etc.). Perhaps due to the number of foundations currently supporting their own sub-domains of research related to student-centered learning (each with its own set of reports, press releases, conferences, and websites), coupled with the hyperspecialized academic silos in which many scholars must conduct their studies, this kind of replication is to be expected. It may even be advantageous. The adage “let a thousand flowers bloom” reminds us that the inspiration for innovation and reform often emerges from the diverse exploration of as many avenues as possible.

To the practitioner and policymaker, however, the field may seem somewhat scattered and overly compartmentalized, as if highly related concepts and approaches are somehow distinct rather than overlapping and complementary as they often are experienced in the classroom and in learning environments outside of school. This can lead those who work closest to students to choose concepts and techniques out of expediency rather than efficacy—or to reject altogether what are perceived to be “flavor of the week” reforms. Such tendencies can exacerbate inequities and impede system-wide change.

To remedy this, a single-source home for the research on and application of student-centered learning is needed, one that takes the best of what research has to offer but directs and applies it so it produces the impact our students most need. Because many research centers and collaborations touch ideas similar to student-centered learning—and more seem to be popping up every day—we believe one essential role for the Collaborative to play would be to curate what has become a diverse, often complicated, and sometimes redundant field. The online Students at the Center Hub is already serving as a powerful central clearinghouse for student-centered learning, and the Research Collaborative would be designed to strengthen this resource both by producing new research and by highlighting other studies that investigate related phenomena. Part of the Collaborative’s charge would be to find and feature emerging studies and scholarships from a variety of sources and, wherever possible, to map connections among these efforts. As a result of this curation and amplification, busy practitioners and policymakers would learn to rely on the Research Collaborative as the trusted source of information on the scholarship and practices that inform student-centered learning. Among the many possible outcomes of the Collaborative, this one may be its most enduring.

# **WHAT LEADING SCHOLARS ADVISE**

To determine the shape and direction a Research Collaborative should take, we reached out to some of the leading scholars in fields related to student-centered learning. We interviewed 19 researchers from around the country, some of whom have been directing large-scale studies, research teams, or centers for decades. In addition, with AIR we co-hosted a meeting of 25 leading researchers engaged in pursuits grouped under the deeper learning umbrella and used some of the time in that meeting to elicit their input. We then culled, analyzed, and grouped their recommendations into the seven areas detailed below and summarized in Table 1 on p. 13. (See Appendix A for a complete list of scholars consulted.)

Knowing that a Research Collaborative is needed, we set out to learn what the best minds in SCL-related fields could tell us about how to focus the work. This section distills those scholars’ recommendations to help frame and orient the goals and activities of the Research Collaborative.

## **Think Through and Across Disciplines**

Consistent with the points made above about the need to sustain the momentum of student-centered learning research and implementation, and to deepen our understanding of still unknown aspects of student-centered learning, the scholars we interviewed recommended a focus on what is likely to be most innovative, visible, and impactful in educational research in the years to come. One consistent message we received was that a Research Collaborative would need to synthesize insights from highly specialized and often isolated fields. That is, the scholars we interviewed saw great promise in the kinds of studies that think through and across various disciplines and that operate in true collaborative form. Areas they specified include the following:

* **Approach research questions interdisciplinarily and with an eye toward application.** To capture the complexity of student-centered principles as they are understood in the academy and applied in schools, a Research Collaborative would need to ask and answer questions in consultation with experts in a variety of fields and sub-fields. Depending on the issues being investigated, such experts can be found in university departments, research centers, state agencies, district offices, and classrooms. To advance the field, scholars and practitioners need to think across their individual disciplines, to bring cognitive findings into conversation with sociocultural ones, to crosswalk learning science, instructional design, organizational sociology, developmental psychology, economics, systems theory, and other relevant fields so that student-centered principles have traction once they are introduced in schools. And integrating experts in policy development, institutional change, and content instruction will ensure that the Research Collaborative’s products are conversant with the current legislative, procedural, and pedagogical landscape.
* **Explore the factors that shape student-centered learning using a social psychology lens.** Conducting blended analyses of cognitive and non-cognitive factors as they play out in the social spaces of classrooms and schools most closely approximates the actual contextual dynamics that shape students’ decisions to engage and apply effort. In the same vein, several scholars warned against focusing too much on neuroscientific research. Because all neuroscientific findings have to be filtered through cognition, emotion, socialization, culture, etc., before they will ever be relevant to education, it makes far greater sense to focus on malleable cognitive and social-emotional factors and how they interact in the communal environments of classrooms and schools. These factors are inextricable in the minds of students and teachers, so a Research Collaborative dedicated to student-centered principles should look for ways to integrate them in research as well.
* **Examine student-centered learning phenomena within specific content areas.** Particularly in our departmental­ized middle and high schools, generalized findings about learning can be easily dismissed by discipline-based practitioners because such insights are perceived to be irrelevant to their focused efforts to teach specific content. For example, math teachers are not ostensibly tasked with building agency; they are tasked with teaching fractions. Were a Research Collaborative to undertake studies that examine how student-centered learning might be promoted specifically in mathematics classes, social studies classes, science classes, and language arts classes—and across such content areas as well—it would yield findings and implications that are expressed in the language of the specific content areas where the vast majority of educators’ thinking, planning, assessing, and teaching resides. In short, extending student-centered learning research beyond “how students learn” to “how students learn X” will make it far easier for school-based professionals to apply the Research Collaborative’s findings and assist them in integrating the content areas to solve real-world problems.
* **Measure the impact of teacher beliefs, their malleability (or not), and how they drive student-centered outcomes.** Daily classroom-applied student-centered learning techniques need scrutiny, as do the beliefs that drive their usage—or their rejection, as the case may be. Our interviewed scholars consistently argued that a Research Collaborative dedicated to investigating student-centered principles needs to drill down to how teachers make sense of research and how teachers adapt what they learn—and what they believe—during instruction. We know that fidelity, or lack thereof, has cultural, institutional, and political roots. We also know that practices emerge as much from ideas and ideologies as from research—if not more so. We need to attend, therefore, to what teachers believe if we are to determine whether and how they will choose to implement student-centered learning practices. Doing so will enhance the credibility of the student-centered learning movement—as will the meaningful inclusion of teachers in the Collaborative—because it will provide the field with much-needed insights into the beliefs and dispositions that drive the effectiveness of student-centered learning in the classrooms where it matters most.
* **Translate findings into approachable, usable information that helps educators improve practices.** Several scholars recommended that we consider branding the Research Collaborative partly as a translational enterprise. They argued that unless research is translated for practitioner audiences it remains effectively out of reach and inert. They noted that the research base for student-centered principles is well established but its uptake into today’s classrooms is frequently slow, simplistic, erroneous, or nonexistent. One scholar we interviewed remarked, “We know the good medicine. The real question is, why isn’t it getting to the kids who need it?” As a result, our interviewed scholars urged us to evaluate the Collaborative’s success in light of how well practitioners are expertly using its research, and to measure the extent to which new discoveries—effectively translated for practitioner and policymaker audiences—are having a positive impact on real students’ lives, particularly those who have been historically underserved.

## **Overcome Barriers**

Interview participants identified two main barriers a Research Collaborative would have to overcome if it were to advance the field of student-centered learning and make a measurable impact. The first concerns the nature of researchers’ work. Given that the Research Collaborative will almost surely involve university-based faculty, it is important to consider how the current academic landscape shapes how scholars will come to the work and be inclined to carry it out. Consistently, interview participants expressed concern about the isolating and territorial nature of academic research and how those qualities are often exacerbated by the tenure process, the publishing industry, and grants. A research collaborative would therefore need to be clear about how it would address these tendencies and support scholars to get out of their academic silos to ask questions, explore phenomena, and change settings to improve learning in ways that support student-centered principles. Though academic silos can present barriers to collaboration, structural components and incentives can and should be built to surmount them. (Please see the section “How the Research Collaborative would be Structured” on p. 13 for specifics.)

The second barrier our interview participants highlighted pertained to the way student-centered learning is often misunderstood and misconstrued by practitioners and policymakers. Several interviewees mentioned the need to articulate student-centered principles in ways that counter the many myths about what that means. Durable misperceptions about what is meant by “student-centered learning” (and an array of competing or overlapping terms) permit its easy dismissal. This can prevent practitioners and policymakers from considering, much less implementing, student-centered learning approaches known to produce positive outcomes in the classroom. For example, the Research Collaborative might specifically target the myth that “students at the center means teachers at the periphery” by showing how teachers using student-centered learning approaches are actually much more integrated in students’ thinking and decision-making than they are in traditional teacher-centered instruction. Likewise, the Collaborative might address the misconception that student-centered learning means “students are always working in small independent groups” by showing the way skilled educators carefully orchestrate multiple forms of interaction to optimize student-centered outcomes. Personaliza­tion, competency, ownership, and anytime, anywhere learning will not get us to high-level academic outcomes if these myths persist. For this reason, the Research Collaborative may need to prioritize in its design and messaging a healthy dose of myth busting.

## **Find Dramatic Examples in Ordinary Places**

Interviewees recommended that the Research Collaborative find, study, and bring to scale “dramatic examples in ordinary places.” A direct quote from one of the scholars we interviewed (echoed by several others), this phrase signals the need to locate where student-centered principles are already being implemented effectively, and to focus, at least partly, on those places that reflect the everyday reality of most districts, schools, teachers, and students. That is to say, the widely reported and amply studied successes of unique, if not isolated and irreproducible, contexts are difficult to bring to scale in other institutions that lack the structural components on which so much of those successes depend. While student-centered learning tenets may be widely understood and applied in these more rarified contexts, significant barriers to wider implementation exist in more typical schools. Consequently, one promising, future-oriented development of student-centered learning research would be to understand how non-specialized schools have been able to use student-centered learning approaches to elevate academic outcomes, particularly for traditionally underserved students. Only through the identification of these strong renditions in numerous settings can we hope to bring student-centered principles and practices to scale.

## **Partner with Practitioners and Policymakers**

Interview participants repeatedly identified the need to establish and support partnerships among researchers, practitioners, and policymakers to ensure that a Research Collaborative’s products are relevant and responsive to conditions on the ground. The scholars we interviewed recounted repeatedly how the domains of research and practice are far too often isolated from one another due to the machinations of both the K-12 environment and the academy. One leading edge of educational research, therefore, is the partnering of skilled teachers, principals, district officials, and legislators with prominent researchers in related fields. Scholars with whom we spoke also recommended that we begin those partnerships at the envisioning phase and extend the collaborations all the way to the translation and distribution of findings. Such partnerships, when they are properly formed and sufficiently supported, will guarantee that student-centered principles are anchored in the real-world challenges and triumphs of today’s schools. They will also ensure that a host of leading scholars are able to appreciate and integrate the realities of 21st-century teaching with their theories about what is most likely to inspire lasting reform. And finally, if done right, a Research Collaborative can help practitioners and policymakers become educated consumers—and even creators—of research in a way that is meaningful and useful to their everyday lives.

## **Study Implementation and Use it to Improve**

Several of our interviewed scholars argued that more teachers seem to *care* about the principles of student-centered learning and accept their importance than actually *practice* them. This suggests the need for additional strategies that help educators understand and develop truly student-centered learning environments. It also suggests the need for studies that capture and measure that implementation so that it can be brought to scale. Consequently, many of our interviewees advocated that a Research Collaborative dedicated to student-centered learning take an improvement science approach for at least a portion of its work.

Improvement science is designed to reveal how specific contextual dynamics directly affect a particular reform effort’s uptake and eventual success in schools. The approach, which recognizes the difference between knowing something theoretically and implementing it in practice, seeks to understand the way scholarship is understood, applied, and often changed in the complex systems of schools. Through rapid-cycle studies and active partnerships among researchers and practitioners, improvement science collaborations can illuminate in real time what is (and is not) working and why. This cutting-edge form of research is gaining traction in educational scholarship due to the methodology’s rigor, its pacing, and the applicability of its outcomes.[[3]](#endnote-4) The Nellie Mae Education Foundation’s ongoing investment in improvement science demonstrates the approach’s mounting value to both researchers and reformers. A Research Collaborative that successfully integrates improvement science would therefore be poised to lead national conversations, not just about how we *study* educational change but how we actually *affect* it.

## **Foreground Equity**

It is difficult to divorce today’s educational outcomes from many of the most devastating social ills that continue to undermine our schools and our democracy. From increasing poverty and wealth disparities, to flaring racial tensions amid blatant examples of discrimination, from a school-to-prison pipeline built on the disproportionate application of discipline to glaring gaps in the resources, talent, and opportunities that pervade our districts and schools, equity is an issue that cannot be ignored. This is as true for student-centered inquiries and strategies as it is for the institutions that will one day house them. As one prominent scholar put it, any effort to bring the principles of student-centered learning to scale will have to “intentionally avert the almost inevitable outcome of reifying, once again, the status quo.” For example, competency-based forms of instruction are unlikely to work for low-income students unless attending, at the same time, to opportunities and supports that compensate for inequities. Furthermore, equity-blind approaches may actually exacerbate preexisting disparities due to “rich get richer” patterns in implementation. Similarly, the principles of student-centered learning could potentially legitimize yet another way to target different “aptitudes” in the classroom and then differentiate opportunities based on the labels, sorting mechanisms, and rankings that result. This, of course, runs contrary to the express purposes of personalization, universal design, and competency-based forms of instruction, but unless a concerted focus on equity is cultivated and sustained, the specter of such distortion remains. Consequently, many scholars we interviewed argued that a Research Collaborative seeking to work at the edge of what’s possible in educational research and reform would need to situate equity at the center of its mission. Making a strategic turn toward the use of equity as a lens to examine the design, objectives, and methods of the Collaborative as well as to evaluate its outcomes would guarantee that the students least served by our schools would be most likely to benefit from the Collaborative’s efforts.

## **Enhance Parallel Efforts**

There was wide agreement among the interview scholars that the current array of research centers and institutes working in student-centered learning is approaching redundancy.[[4]](#endnote-5) Depending on the extent to which funders and leaders collaborate to advance student-centered principles and impact practices, this is not necessarily a bad thing, particularly when each organization takes a nuanced approach that informs and supports the others. But being judicious and transparent—both internally, with researcher/practitioner/policymaker collaborators, and externally, with potential partners/funders—will be crucial to maximize impact and minimize duplication. The general assessment among several interviewees was that repetition of concepts and research agendas should be avoided, but parallel projects with complementary investigations and interventions could enhance student-centered learning’s visibility and influence both regionally and nationally. Several of our interviewed scholars noted that an area ripe for cross-funder collaboration is the demand side of research (less so the supply side) where issues of fidelity and implementation are most pronounced and where success in application is often most fleeting. Regardless of the focus of potential collaborations, the key to leveraging parallel efforts rather than duplicating them will be communication and coordination across projects—hence the need to consider creating a funders’ collaborative that would run parallel to the Research Collaborative.

##### **Table 1: Summary of Leading Scholars’ Advice**

|  |  |
| --- | --- |
| **The Research Collaborative should seek to:** | **The Research Collaborative can accomplish this by:** |
| Think through and across disciplines | * Using a social psychology lens to explore the interdependent factors that shape student-centered learning
* Examining SCL phenomena as they affect information retention and skill development in specific content areas
* Measuring the impact of teacher beliefs, their malleability (or not), and how they drive SCL outcomes
* Approaching research questions interdisciplinarily and with an eye toward application
* Translating findings into approachable, usable information that helps educators improve practices
 |
| Overcome barriers | * Breaking down academic silos by establishing collaborations using “outsider” expertise
* Dispelling persistent myths that prevent SCL engagement and uptake
 |
| Find and study dramatic examples in ordinary places | * Searching for those places that reflect the everyday reality of most districts, schools, teachers, and students
* Finding extraordinary educators who are implementing SCL practices in “normal” contexts
 |
| Partner with practitioners and policymakers | * Positioning practitioners in the envisioning phase and extend the collaborations all the way to the translation and distribution of findings
* Respecting teachers, school leaders, and policymakers as experts in application and seek out their knowledge about how best to implement change
 |
| Study implementation and use knowledge to improve | * Using improvement science to reveal how specific institutional dynamics directly affect SCL principals’ uptake and impact in schools
* Designing rapid-cycle studies within active researcher-practitioner partnerships to illuminate in real time what is (and is not) working and why
 |
| Foreground equity | * Recognizing that any effort to bring SCL principles to scale will have to intentionally and strategically foreground equity to prevent defaulting to the status quo
* Using equity as a lens to examine the design, objectives, and methods of the Collaborative as well as evaluate its outcomes
 |

## **HOW THE RESEARCH COLLABORATIVE WOULD BE STRUCTURED**

An array of options exist for how a Research Collaborative could be organized in order to best address the needs and recommendations detailed above, each with numerous decision points along the way. We have tried in the following to strike a careful balance between describing the structural components culled from interviews with leading scholars and deliberations among JFF and NMEF staff with those best finalized in collaboration once the practitioner and policy leaders are in place and the first researchers chosen.

The previous two sections established why a Research Collaborative is needed and what leading scholars recommend it should do. In this section, we use that knowledge to suggest how the Research Collaborative should be organized and how talent and resources should be allocated to maximize its impact.

## **Two Approaches to Achieving Impactful Student-Centered** **Outcomes**

Based on our analyses of the current state research in student-centered learning, the landscape of school reform, and the needs of researchers, practitioners, policymakers, and—most of all—the needs of students, we propose two complementary approaches the Collaborative should support. The first and likely the largest approach in terms of allocated resources and personnel is basic exploratory research whose purpose is to build the evidence base. The second approach would involve more focus on application and implementation and would use improvement science as its core methodology. Each is described separately below.

## **Building the Evidence Base: The “Why”**

The primary area of focus we believe the Research Collaborative should prioritize is basic exploratory research.[[5]](#endnote-6) Conducting research into which student-centered approaches, cognitive and psychosocial factors, and pedagogical techniques are likely to produce the most robust outcomes will establish for researchers, practitioners, and policymakers the utility of student-centered learning both as an organizing framework for teaching and as a reform initiative in education. Likewise, investigating where the most promising and unexplored areas of student-centered learning reside, and then studying which components offer the greatest leverage for change, will generate momentum for its wider implementation in the decades to come. To achieve these goals, the Research Collaborative would support research that adheres to specific core criteria such as those cited in the criteria below.

##### **Criteria for Research Collaborative-Funded Studies**

* be relevant to the principles of student-centered learning
* demonstrate methodological rigor
* take an interdisciplinary approach
* produce valid and reliable evidence
* address issues of racial, linguistic, and economic inequity
* facilitate collaborative partnerships among researchers, policymakers, and practitioners
* leverage rather than duplicate pre-existing/parallel efforts
* ultimately suggest scalable interventions that might be explored further in subsequent studies

Today we know a great deal about why the principles of student-centered learning can be such a powerful catalyst for achievement in today’s classrooms and schools and in tomorrow’s more varied learning environments, but important areas remain unexplored. Some questions in the basic exploratory research realm that arose in our interviews and investigations include:

* What competency-based models of instruction tend to avoid known pitfalls of standardized testing regimens that can reinforce rather than dismantle inequities?
* Which specific techniques of personalization and differentiation promote the greatest student engagement? And which also allow the teacher to balance (seemingly arbitrary) pacing levels required by district, state, and national curricula with more developmentally rooted variations of pacing that accelerate the closing of racial and economically defined achievement gaps?
* What kind of scaffolding is needed to make sure our full diverse range of students all progress in and through rich, personalized learning experiences? In particular, what student-centered learning techniques facilitate the transition away from remediation to ensure that students, such as English language learners or those who qualify for special education services, experience the forms of deeper learning and access the same opportunities afforded their peers?
* What are the best ways to capture and measure the relative success of teachers who are using student-centered forms of instruction? How might that knowledge inform, for example, teacher evaluation instruments and school reform initiatives?
* Are competency-based methods more successful in some subject areas than others (e.g., math vs. ELA)? If so, why? Does it make sense to have competency-based departments working alongside departments that aren’t, in the very same school?
* How/when/where does student agency contribute to learning? When are opportunities for voice and choice most impactful, and when might they be counter-productive?
* Which forms of anytime, anywhere instruction and which digital tools have the greatest positive impact on our most underserved students?
* How should we understand the variations and evolution of instructional practices that promote the development of important foundational skills versus those student-centered approaches that foster more complex and deeper learning outcomes?

Exploratory studies that investigate questions like these will provide powerful indicators about which student-centered learning approaches can and do result in dramatically improved outcomes.

### **Understanding the Complexities of Application: The “How”**

The second area of focus we believe the Research Collaborative should prioritize is implementation (please see the “Study Implementation and Use it to Improve” section on p. 8 for further rationale). Here the focus would be on how student-centered principles are applied and adapted in real-life classrooms, schools, and districts; what happens to students and educators when those principles are integrated with professional development, institutional structures, classroom pedagogies, and adopted curricula; which structures and policies can be counted on to yield measurable systems change; and how individual and collective understandings of teaching and learning are transformed through the implementation process. To examine these phenomena, improvement science integrates a variety of research methods drawn from psychology, sociology, economics, and systems theory (among others). Examples of research questions that implementation studies might investigate include:

* How do school culture, school climate, and teacher receptivity to reform influence the consideration and eventual application of student-centered principles in classrooms over the course of a semester or year? What interventions impact that process?
* Across a series of diverse sites, which principles of student-centered learning were most readily adopted? Which were heavily adapted or resisted/rejected? How? Why? And what happened when specific supports were offered or barriers removed?
* In situations where students who qualify for special education services are not progressing as rapidly as others, what forms of competency-based interventions most promote equitable achievement and inclusion? In other words, how are competency-based techniques successfully infused in special education contexts over time, and what barriers need to be overcome if that infusion is to be truly student-centered?
* How do teacher beliefs change as a result of an X-week student-centered learning professional development curriculum? And how do those changed beliefs drive subsequent changes in classroom pedagogies and student outcomes, if at all? What effect do various follow-up interventions have on those beliefs over time?
* Across several sites with high populations of traditionally underserved students, which student-centered learning methods tend to produce the most positive outcomes, and for which groups of students? Which methods were most easily infused in content area curricula and pedagogies, and why? Which methods were most resisted by teachers and students, and why? What methods were tried, and how were they adapted to meet the needs of stakeholders?
* How do successful district and school leaders build consensus about the need for student-centered learning implementation and subsequently ensure fidelity and continuous improvement in application over time? What cultural and institutional barriers do they encounter and how are they overcome? What techniques did they use and why were they successful?
* Comparing several different sites’ implementation of specific student-centered learning methods over time, which confluence of factors (e.g., leadership capacity, demographics, financial resources, structural features, teacher induction, and support features, etc.) tend to produce the greatest positive outcomes in student performance, particularly for underserved students and English language learners? Conversely, which factors tend to most impede student-centered learning’s adoption and adaptation? And more specifically, how might antiquated structural features (i.e., seat-time Carnegie units, age-based grouping, curricular pacing, learning restricted to the classroom, etc.) function as such impediments? How do practitioners and policymakers address these issues and adapt over time?
* After implementing a curriculum inspired by student-centered learning in X content area over X number of weeks in a set of racially, ethnically, socioeconomically, and linguistically diverse schools, how do students, parents, and teachers make sense of the approaches’ cultural responsiveness? What effect is the curriculum having on marginalized populations of students, and how might it need to change to improve those effects?

By using improvement science techniques to conduct detailed analyses of factors and phenomena like these, then tracing their influence on both the understanding and adoption of student-centered principles in real-life settings, a Research Collaborative would generate actionable theories of change that are capable of guiding policymakers and practitioners as they implement student-centered learning approaches in their own contexts, both in and outside of schools.

With multiple research teams pursuing concurrent lines of inquiry directly related to the principles of student-centered learning, and a support staff and leadership charged with organizing the work and convening regular meetings to facilitate collaboration among the Research Collaborative’s membership, the project would involve many moving parts and require resources commensurate with its projected impact. To organize that effort, we describe here the three main goals, each with several possible associated activities over the life span of the Collaborative, and an overview of the structures of the Collaborative. Following that, we lay out the current Year One and Two plans for the Collaborative to move toward reaching these goals.

### **Goal 1: Support new and innovative research on the principles of student-centered learning to catalyze development and build coherence within the field**

By building the evidence base for the principles of student-centered learning and showing how they can be imple­mented at scale, the Collaborative will be attracting attention to a major educational reform lever while building momentum for the application of student-centered approaches in schools and other learning environments, first throughout the region, and eventually throughout the nation. In part, this is why the Research Collaborative may be understood to be the vanguard of a movement. As such, it will need to deliver highly visible and impactful research findings, communicated through 21st-century channels to the audiences best positioned to advocate for and innovate student-centered learning. In the long term, the aim is to cite tangible evidence of a paradigm shift in educational research from one that accepts current systemic features and assumptions as givens to one that supports reforms that produce strong student-centered learning renditions and elevated student outcomes. Some examples of potential deliverables aligned with this goal include:

* Incentives for interdisciplinary research partnerships in which leading scholars collaborate with policymakers and practitioners to study the implementation of student-centered learning approaches in contexts that reflect most of what today’s students and educators encounter
* Paper prizes and symposia to attract attention to research that most informs and advances the principles of student-centered learning
* Awards for school leaders, educators, and legislators who have been most effective in implementing research-proven student-centered learning approaches
* Competitive “proof of concept” micro-grants awarded to researcher-practitioner collaborations in which the viability of a specific student-centered approach is tested

### **Goal 2: Serve as the communicator and sense-maker of the Collaborative’s work as well as the curator and clearinghouse for all studies related to student-centered learning**

The Research Collaborative will become the single-source home for all scholarship pertaining to student-centered learning. This consolidation would focus the field’s inquiries and applications, create demand for additional materials and designs, and elevate attention to student-centered learning and the many ways it can and will enhance equity, innovation, and rigor in our schools. It would also help to reframe public conversations about the purposes and practices that constitute good teaching and powerful learning, and would anchor those conversations in scientific evidence. Complementing the ample resources already available at the Students at the Center Hub website, the Collaborative’s activities related to Goal #2 would support a comprehen­sive articulation of student-centered learning practices and definitions. Examples of some possible deliverables aligned with this goal include:

* Regular press releases describing progression in the field and its positive effects on students and systems
* Infographics, animations, interviews, and video clips detailing the measurable positive effects of student-centered learning on academic outcomes and the effective messaging about such gains to the general public
* White papers for practitioners and policymaker audiences to help them understand the rationale for and impact of student-centered learning
* A documentary film, television, or podcast series to demonstrate what we know about student-centered learning approaches and why it works
* Webinars for policymakers and practitioners to help them recognize the importance of student-centered learning as a reform lever and equity-enhancer
* Multimedia presentations for the general public to convince parents, guardians, families, and communities that specific changes suggested by student-centered learning frequently benefit all students, particularly those who have been least served by our K-12 schools
* Series of symposia to broadcast findings and distribute knowledge to relevant stakeholders in and outside of schools

### **Goal 3: Continue to build the evidence base of good implementation, and develop approaches that help practitioners and policymakers apply** **research on student-centered learning in their unique settings**

The heaviest lifting in student-centered learning reforms in our K-12 schools will not likely be done by researchers; it will be done by those most tasked with the challenges of implementation—our state, district, and building-level leaders and our classroom teachers. Consequently, if the Research Collaborative is to be successful in the long term, it will need to generate the forms of curiosity, communication, innovation, and application that will keep student-centered learning at the forefront of what is being done in schools. Aligned with this objective are the following potential deliverables:

* “Show Me How” toolkits and in-depth examples for educators, all derived from ordinary sites where student-centered learning approaches have been implemented successfully
* A “Road Map for Student-Centered Learning Implementation” aimed at particular audiences (i.e., separate maps for classroom educators, teacher educators, principals, district officials, community members, parents, media representatives, philanthropists)
* A “How-To Guide to Make Student-Centered Learning a Reality in our Schools” that provides specific policy recommendations and walks legislators through the research and the steps necessary to overcome actual and perceived obstacles, support specific practices, and measure successes
* Software applications (a.k.a., “apps”) that help teachers, students, and families understand and use student-centered learning approaches in their own teaching and learning
* Professional development modules that teach practitioners how to apply student-centered learning approaches at their grade level in specific content areas and use that application to enhance equity and raise achievement
* Content-based curricula for educators to use in classrooms with accompanying exemplar videos depicting teachers using student-centered learning approaches in their work
* Summer “Student-Centered Practitioner Academies” in which educators learn the latest research and are supported to modify their curricula in line with current scholarship
* Student-centered teacher observation protocols that teacher education faculty, school administrators, university supervisors, and instructional coaches can use to evaluate both preservice and inservice teachers, plus an associated list of core competencies that drive state-level teaching standards
* “Student-Centered Legislative Summits” held for policymakers during times of legislative drafting, with district officials, researchers, and practitioners all participating in envisioning and enacting true student-centered reforms

### **Structural and Organizational Parameters**

Where would the Research Collaborative focus its work? Who would join the Collaborative? How would its work be organized? This section briefly answers these questions by outlining some proposed structural components of the Research Collaborative. Each is designed to achieve the goals and support the activities articulated above.

### **Regional Focus**

Given the NMEF’s commitment to reshaping education in the six New England states and the deep connections it has established with researchers, practitioners, policymakers, and other funders in the region these last 15 years, the Research Collaborative would likely begin by prioritizing the study and support of student-centered learning developments within New England. This means the Collaborative’s membership and research sites would be drawn initially (but not exclusively) from educational institutions located in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. This tighter geographic focus permits more manageable logistical considerations during the initial phases of the Collaborative, and it would also provide a solid foundation for later growth. In an effort to inform and advance practices in the region and pave the way for later extension beyond the Northeast, however, the Research Collaborative may elect to study some innovations and implementations outside the geographic boundaries of these six states. We recognize that some of the more advanced student-centered learning models may lie beyond New England, which is why a broadened inclusivity may be needed to ensure that what is learned nationwide accelerates and deepens student-centered learning applications in the home-base region.

### **Fellowships**

A small number of research, practitioner, and policy fellows will be selected for a two-year term with optional renewals. Fellows will inform future study designs, strengthen student-centered learning’s connections within and across the fields of research and practice, assist with study and tool dissemination for their respective audiences, and comment on drafts of research papers prior to release. In exchange, Fellows will receive deep learning experiences, ample networking opportunities, invaluable leadership development, enhanced visibility, an annual stipend of $10,000, and a tangible role in a powerful educational reform movement. Jobs for the Future and the Nellie Mae Education Foundation staff developed the format for application, the means of recruitment, and the criteria for the first class of Fellows (released March 14, 2016).

**Research Fellows** will be junior and senior scholars in and outside university settings who have proven expertise in specific areas of inquiry related to student-centered learning. To advance the field and contribute interdisciplinary insights, Fellows would be selected from a variety of disciplines, some of which may fall outside what is commonly understood to be traditional educational research (e.g., systems theorists, organizational sociologists, game theorists, etc.). Given the goals above, scholars with expertise in instrument development, research methodolo­gies, program evaluation, social psychology, improvement science, and content pedagogies should be prioritized—particularly those with a proven track record of collaboration and innovation within and outside the university.

**Practitioner Fellows** will be junior and senior educators and school leaders with proven expertise in achieving positive and equitable academic outcomes using student-centered learning approaches in largely ordinary settings. Drawn from a variety of grade levels and subject areas, these Fellows would likely include educators with a solid record of achievement, highly re­garded mentor teachers in teacher education programs, department heads known for their innovation and commitment to reform, prominent building leaders (principals, vice principals, counselors) with demonstrated receptivity to student-centered learning approaches, and/or widely known and respected educators working outside of school who have a history of producing positive academic and social outcomes for diverse students. Given the objectives above, Practitioner Fellows with a clear and continuous dedication to equity and innovation should be prioritized.

**Policy Fellows** will be district and state officials who have instituted (or want to institute) student-centered reforms that yield clear indicators of success for all students, particularly those students who have been traditionally underserved. These Fellows would be drawn from urban, suburban, and rural districts operating within fiscal, institutional, and legisla­tive contexts typical of most public schools (i.e., they would fit the “dramatic examples in ordinary places” rubric). Policy Fellows would also be drawn from state- or federal-level policymakers who have successfully written, passed, and are in the process of imple­ment­ing legislation (or are interested in doing so) grounded in the principles of student-centered learning, school reform and innovation, and the enhancement of equity.

### **Advisors**

Rather than establishing a standing steering committee that can introduce its own set of logistical and collegial challenges, the Research Collaborative is seeking out the advice and oversight of a small group of highly respected senior leaders, scholars, and educators to serve as Advisors. Called in on an ad hoc basis to advise the Collaborative during its initial phases and at various points during the project, these Advisors will provide invaluable perspectives regarding the development of the requests for proposals, the identification and recruitment of Fellows, the research questions being explored, the activities of convenings, the progress of the Collaborative, and the eventual deliverables it generates. In particular, the Advisors will be called upon to push Fellows to think, investigate, and apply the principles of student-centered learning in ways that depart from sometimes calcified expectations common in both research and practice contexts. This “outside the box” orientation will be invaluable as the Collaborative seeks to elevate and illuminate innovations in the field.

### **Funders Collaborative**

As described above, the Research Collaborative would be well served by a parallel Funders Collaborative. Designed to coordinate efforts across various foundations and centers and to avoid duplication of research and concepts, this Funders Collaborative would be regional and national in scope. Members would communicate regularly and meet at least annually to build on one another’s successes, collaborate to overcome challenges, and generally promote the field of student-centered learning and related efforts as they take different shapes in different venues.

### **Research Director**

This person would oversee all components of the project and lead JFF staff, researchers, practitioners, and policymakers through the various phases of the Collaborative. With expertise in both educational research and project management, the Director would provide organization, communication, and logistical support to maintain the vision of the Research Collaborative and ensure its success. The Director will also serve as a liaison between the Fellows, Advisors, NMEF, other funders, research sites, and media outlets.

### **Year 1 and 2 Activities**

Planning for Year 1 began twelve months prior to the first Fellows gathering and involved: selecting advisors; planning and budget allocation; convening initial group of practice, policy and research thought-leaders in New England to help shape the design; RFP and RFF writing; and agenda setting for initial meetings/retreats.

### **Year 1: Agenda setting, team building, and initial learning**

**May 2016:** Nine fellows selected. Fellows, advisors, and aligned funders convening.

**June 2016:** Landscape mapping of research, funding, and locations of evidence-building activity for student-centered learning completed.

**September 2016: *Official public launch***. Three teams selected to complete two-year study, including two basic exploratory science projects and one improvement science project.

**November 2016, May 2017:** First and second full convenings of Research Collaborative—Fellows, Advisors, Research Teams, Partners, Funders. Studies underway.

**September 2016 – Summer 2017:** Building the interdisciplinary partnerships and learning plans among the Fellows; supporting study teams as they refine the research questions and methodologies, integrate practitioners and policymakers into planning and decision making, and cultivate and formalize relationships at sites; and plan and begin regular “What We’re Learning So Far” communications in which Fellows, research teams, and staff describe for both scholarly and lay audiences the initial findings of the Collaborative

### **Years 2: Harvesting - data gathering and analysis, continued and final reporting**

The second year of the project would be dedicated to data gathering, data analysis, and the initial collaborative interpretation of results for audiences outside the Research Collaborative. This reporting could be done through traditional research journals, but to garner greater visibility and enhance impact we will work carefully with Fellows and research teams to design communication tools and vehicles geared for particular audiences. This phase would therefore have a dual purpose: to watch and learn, but also to show and tell. Additional tasks in this span are likely to include:

* Biannual convening of the Collaborative to share findings, lessons learned, and deeper understanding of how to translate research across sectors.
* Annual Fellows retreat.
* Ongoing support of study teams.
* Regular and sequenced “What We’re Learning So Far” postings in which Fellows describe for both scholarly and lay audiences the initial findings of their studies.
* Investigating and applying for other funding sources to expand current studies and carry the momentum of the Research Collaborative forward. Options may include to-be-determined Student-Centered Learning Funders Collaborative projects, IES Education Research and Development Center Program Grants (CFDA Number: 84.305C; 2015 RFP available at <http://ies.ed.gov/funding/pdf/2016_84305C.pdf>); and/or public/private partnerships that come about as a result of the relationships formed in the initial years of the Collaborative.

### **CONCLUSION: AN OPPORTUNITY FOR LASTING IMPACT**

The success of the Research Collaborative would hinge in large part on the extent to which school systems’ reforms and teachers’ changed practices produced measurable gains in student achievement due to the implementation of student-centered learning approaches. The extent to which our most underserved students realized those gains would further demonstrate the value of student-centered learning as a lever for change and driver of equity in education. The evidence base already makes clear that student-centered approaches can produce such impacts and the Research Collaborative would likely bolster that conclusion.

Another primary impact of the Research Collaborative would be the formation of a cadre of school-based practitioners capable of owning the work, building institutional capacity, and leading subsequent innovations. These would be teachers well trained in how kids learn best—not in simplistic tricks that reduce professionals to technicians, but in the broad and specific findings from research that show how students build understanding and skills over time, in relationships, and through personalized forms of instruction. The ripple effects of these educators would be a lasting and tangible legacy of the Collaborative.

A successful Research Collaborative would impact policymakers as well. By helping them to envision and enact institutional, procedural, and financial supports that keep student-centered learning at the forefront of what we do in public education, the Collaborative would elevate public understand­ing of and demand for rigorous and equitable student-centered initiatives in districts and schools. When the work produced by the Collaborative is relied on in public debates and policy initiatives—and its prescriptions are occasionally, if not routinely, followed—the project would have effectively moved from investigation, to translation, all the way to implementation.

Lastly, the Research Collaborative would impact researchers by offering them a way to:

* leverage their existing research agenda
* apply their methodological expertise in domains known to produce positive outcomes for students
* form a rich network of partners in universities, schools, and legislatures
* track how research impacts policy, practice, and public understanding
* gain greater scholarly and societal visibility so the insights generated by their investigations are actually used in our schools.

When subsequent grants arise from the Collaborative’s work, researchers would also be able to extend these initial growth opportunities and further promote meaningful dialogue about how best to impact schools and students. This would not only advance scholars’ careers but may actually inspire them to delve deeper and push harder into why and how student-centered learning approaches can be even more impactful in the decades to come.

**Appendix A**

Listed alphabetically, the scholars we consulted are:

**Donna Alvermann**

Research Professor of Language and Literacy Education

University of Georgia

**Sujeeta Bhatt**

Senior Program Officer

National Academies of Sciences, Engineering, and Medicine

**Gina Burkhardt**

CEO

Jobs for the Future

**Kristine Chadwick**

Senior Director of Programs

Educational Policy Improvement Center

**Marc Chun**

Education Program Officer

The William and Flora Hewlett Foundation

**Maria Cormier**

Postdoctoral Research Associate

Teachers College Columbia University

**David Daniel**

Professor of Psychology

James Madison University

**Jacquelynne Eccles**

Distinguished Professor of Education

University of California, Irvine

**Camille Farrington**

Senior Research Assistant

University of Chicago Consortium on School Research

**Mike Garet**

Vice President and Institute Fellow

American Institutes for Research

**Steve Graham**

Mary Emily Warner Professor

Arizona State University

**Rochelle Gutierrez**

Professor, Curriculum and Instruction

University of Illinois

**Rafael Heller**

Principal Policy Analyst

Jobs for the Future

**Mette Huberman**

Senior Research Analyst

American Institutes for Research

**Mizuko Ito**

Chair: Research Network on Connected Learning

UC Irvine

**Ann Jacquith**

Director of Linked Learning

Stanford Center for Opportunity Policy

**Joe Kahne**

Professor of Education and Research Director, Civic Engagement Research Group, Mills College

**Jim Kemple**

Executive Director

Research Alliance for NYC Schools

**Catherine Lewis**

Distinguished Research Fellow

Mills College

**Milbrey McLaughlin**

Emeritus Professor

Stanford Graduate School of Education

**H. Richard Milner**

Faculty Director

University of Pittsburgh

**Jenny Nagaoka**

Deputy Director

University of Chicago Consortium on School Research

**Jennifer O’Day**

Managing Research Scientist and Institute Fellow

American Institutes for Research

**Jeannie Oakes**

Founder and Former Director

UCLA/IDEA

**Andreas Oranje**

Director of Statistical Analysis

Educational Testing Service

**Jim Pellegrino**

Professor, Co-Director

UIC Learning Sciences Research Institute

**Lauren Resnick**

Adjunct Faculty

University of Pittsburgh

**Michelle Riconscente**

Director of Learning and Assessment

GlassLab, Inc.

**David Rose**

Chief Education Officer

CAST

**Jorge Ruiz de Velasco**

Associate Director

Gardner Center, Stanford

**Steve Seidel**

Director, Arts in Education Program

Harvard Graduate School of Education

**Eric Toshalis**

Independent Scholar, Education Consultant

EngagingResistance.com

**Tanner LeBaron Wallace**

Faculty

University of Pittsburgh

**Kirk Walters**

Principal Researcher

American Institutes for Research

**Ruth Wei**

Director for Assessment Research and Development

Stanford University – SCALE

**David Yeager**

Faculty Research Associate

University of Texas at Austin

**Kun Yuan**

Behavioral Scientist

RAND

In addition, we are grateful to the following thought leaders who contributed to the establishment of the research collaborative:

**Stefanie Blouin**

K-12 Program Officer

Next Generation Learning Challenges

**Jessica Brett**

Research Associate

Education Development Center

**Kate Callahan**

Senior Research Associate

Research for Action

**Susan Curnan**

Professor and Director

Brandeis University

**Chad d’Entremont**

Executive Director

The Rennie Center

**Nicholas Donohue**

President and CEO

The Nellie Mae Education Foundation

**John Downes**

Associate Director

Tarrant Institute for Innovative Education, University of Vermont

**Eliza Fabillar**

Senior Project Director

Education Development Center

**Eve Goldberg**

Director of Research

Nellie Mae Education Foundation

**Virgel Hammonds**

Chief Learning Officer

KnowledgeWorks

**Mary Harrison**

Vice President for Programs

Nellie Mae Education Foundation

**Sarah Hatton**

Program Manager

Jobs for the Future

**Alison Hramiec**

Headmaster

Boston Day And Evening Academy

**Eugenie Inniss**

Communications Associate

Jobs for the Future

**Mark Kostin**

Associate Director

Great Schools Partnership

**Stephanie Krauss**

Senior Fellow

Forum for Youth Investment

The Cady-Lee House

**Paul Leather**

Deputy Commissioner

New Hampshire Department of Education

**Donald Leu**

Endowed Chair in Literacy and Technology

University of Connecticut

**Eliot Levine**

Senior Research Manager

UMass Donahue Institute

**Brian Lord**

Principal Research Scientist

Education Development Center

**Beth Miller**

Managing Director of Research and Communications

EL Education

**Steve Netcoh**

Graduate Teaching Fellow

University of Vermont

**Britt Neuhaus**

Program Officer, Innovative Schools

Overdeck Family Foundation

**Mark Olofson**

Research Fellow

University of Vermont

**Jennifer Poulos**

Associate Director

The Rennie Center

**Kendra Rickerby**

Doctoral Candidate

Lesley University

**Sarah Ryan**

Research Associate

Education Development Center

**Larry Schaefer**

Senior Staff Associate

Connecticut Association of Public
School Superintendents

**Neil Schiavo**

Senior Research Associate

Education Development Center

**Toby Shepherd**

Grant Programs Officer

The Rhode Island Foundation

**Andresse St. Rose**

Senior Director of Research,
Evaluation and Policy

Center for Collaborative Education

**Erika Stump**

Research Associate

University of Southern Maine

**Charlie Toulmin**

Director of Policy

Nellie Mae Education Foundation

**Rebecca E. Wolfe**

Senior Director, Students at the Center

Jobs for the Future

1. Please see: <http://www.jff.org/initiatives/students-center/topics> for a complete list of JFF’s Students at the Center research syntheses and sources. In addition, the edited volume *Anytime, Anywhere: Student Centered Learning for Schools and Teachers* (Wolfe, Steinberg, and Hoffman eds., Harvard Education Press, 2013) contains numerous sources used in framing this definition. [↑](#endnote-ref-2)
2. Ibid. [↑](#endnote-ref-3)
3. A few recent examples include:

Gutiérrez, K. D., & Penuel, W. R. (2014). Relevance to practice as a criterion for rigor. *Educational Researcher*, *43*(1), 19-23.

Bryk, A. S. (2015). 2014 AERA Distinguished Lecture: Accelerating How We Learn to Improve. *Educational Researcher*, *44*(9), 467-477.

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America’s schools can get better at getting better*. Cambridge, MA: Harvard Education Press.

Snow, C. E. (2015). 2014 Wallace Foundation Distinguished Lecture: Rigor and Realism: Doing Educational Science in the Real World. *Educational Researcher*, *44*(9), 460-466.

Lewis, C. (2015). What is improvement science? Do we need it in education? *Educational Researcher*, *44*(1), 54-61. [↑](#endnote-ref-4)
4. This statement reflects perspectives gathered from multiple sources, including: our interviews with 19 leading scholars; a September 2015 luncheon with prominent researchers, co-sponsored by Jobs for the Future and the American Institutes of Research; and a scan, conducted by staff at Student at the Center, of institutes, centers, and collaboratives related to student-centered learning that are currently or recently operating. A core conclusion of these investigations is that duplication is a growing and largely under-scrutinized problem. Researchers repeatedly expressed to us their frustration with foundations that successfully brand their individual concept or approach but then seem unwilling or unable to think across interrelated issues or engage important work being done in overlapping areas. While promising collaboratives sponsored by the Hewlett and Gates foundations are showing that it is possible to reverse this trend, the problems with duplication across funders persists. A primary contribution of the proposed Research Collaborative, therefore, would be to spur needed cooperation and integrate related findings so that duplication is limited and progression is enhanced. [↑](#endnote-ref-5)
5. See *Research Primer: Basic Exploratory vs. Improvement Science* for a definition of these terms: <http://www.jff.org/sites/default/files/Research%20Primer-%20Basic%20Exploratory%20vs.%20Improvement%20Science.031116.pdf> [↑](#endnote-ref-6)