Teachers are the most important school-based factor in advancing students’ learning and supporting their social-emotional development.

Through decades of shifting school reforms, policymakers have consistently called for stronger and more effective teacher learning opportunities as a means to school improvement. However, while research shows that effective professional learning (PL) can improve teacher practice and student outcomes, as a field we have struggled to develop PL opportunities that translate into improved student outcomes at scale.

A recent synthesis of research on math and science PL programs found that fewer than half significantly shifted teacher knowledge and practice, and only one third moved student outcomes. And across the country, many teachers report that they are not satisfied with the learning opportunities available to them.¹

Unfortunately, despite a large body of research on PL, we do not have great evidence on how best to design effective programs. Calls to improve PL tend to rely on a relatively slim set of design principles derived from studies that generalize common features across effective programs. However, most PL programs are designed as comprehensive packages, and much of the existing research tests only whether these programs work. This makes it difficult to isolate individual features that drive teacher learning. Because so much of the existing PL research is unable to isolate design choices faced by PL providers, these studies provide relatively little insight into what it will take to generate more effective PL at scale.

“As we launch yet another school year in the midst of a pandemic, we are relying on our nation’s teachers to take on a dizzying array of challenges.”

As we launch yet another school year in the midst of a pandemic, we are relying on our nation’s teachers to take on a dizzying array of challenges that include growing academic disparities, widespread trauma, and contested discussions of racism and inequality alongside ever-changing technologies.

To meet these challenges, we must accelerate our learning about PL and expand our understanding of what works, what doesn’t, and why.

¹ For more information, see the full learning agenda at rpplpartnership.org/learning-agenda.
Improving Teacher Professional Learning

Our partnership—the Research Partnership for Professional Learning (RPPL)—unites PL organizations with leading researchers who study teacher learning and improvement to drive a transformation of PL research and practice in the United States.

We aim to create a more equitable system of schooling for all students by deliberately testing multiple design options for PL programs and working to understand their effects on teachers and classrooms.

Our model calls for a series of studies that will test central questions about the design of teacher learning opportunities. Results will inform organizational decisions and build a broader PL knowledge base about what works, for whom, and in what context.

We believe PL research investments will be more effective if they are directly grounded in the questions being asked by PL designers and school system partners. As such, our work will leverage a collaboration between PL organizations that are already working with over 700 school systems across the country and researchers with expertise in developing and executing rigorous studies. We will look within programs to understand how programs work and to identify the specific design features that best lead to teacher learning, to changes in teacher practice, and ultimately to improved student outcomes.

Working together as researchers and PL designers, we aim to:

**Refocus the types of questions that PL researchers study.** Currently, most PL research seeks to identify whether specific programs are effective or not, evaluating them in a “thumbs up or thumbs down” manner. Instead, we are interested in studies that contrast programmatic design features to shed light on their comparative effectiveness.

**Build knowledge across organizations and contexts.** Each PL organization within RPPL has a different theory of action and model for professional learning. Some focus more centrally on content, others on teacher mindsets and expectations; some engage teacher teams in PL, while others work through coaches or instructional leaders. Furthermore, they work in a wide range of state and district contexts. Understanding the answers to the same questions across models and across sites will rapidly increase our knowledge about successful practices and how contextual any learnings are.

**Leverage research designs that support causal inference.** Our studies will use gold-standard randomized experiments to vary specific features in existing programs, building knowledge about what works in a comprehensive manner. We will also develop more consistent, practical measures for PL providers to use in these studies.

---

**What is professional learning?**

We define professional learning as learning opportunities designed to improve teacher classroom practice and effectiveness with students. These opportunities vary by both **content focus** (what teachers are learning) and **design features** (how they are learning it). PL focused on a single area (such as equitable teaching practices) may use a range of different design features. In our learning agenda, we disentangle these two dimensions of teacher PL.
We expect that our collaborative work will encompass both hypothesis testing and hypothesis generation as new questions and issues emerge over time.

Working together in partnership, we can dramatically accelerate not only student learning but also our collective understanding of how best to advance ongoing teacher learning and development.

Key Questions

Our learning agenda is rooted in a synthesis of the existing research base on teacher PL and adult learning more broadly, which suggests that improvement depends on building teacher motivation, knowledge, and skills around specific content—at the individual level and across the broader system—while creating the conditions for this work to become sustainable over time.

Program Design

Our theory of action highlights a series of key design questions for PL providers that will anchor our research in coming years:

**How to increase teacher motivation for and engagement in PL.** A central tenet of adult learning is that motivation precedes change in practice. To benefit from PL, teachers and leaders must be motivated to invest in it, not only with dollars but also with time and energy. Yet many studies of PL proceed as if teachers’ investment and trust are pre-established facts. Shedding light on ways to increase teacher engagement with PL can lead to better outcomes from investments in teacher learning.

**How to design PL opportunities to accelerate skill development, changes in practice, and improvements in student learning.** Most PL opportunities seek changes in teachers’ knowledge and skills, their classroom practices, and ultimately students’ learning. Yet many current approaches to achieving these goals—for instance, targeting teacher mindsets, providing teachers quick turnaround feedback, or designing more intense PL—remain untested. We will ask whether these and similar approaches result in reaching PL goals.

**How to ensure sustained changes to both teacher and student outcomes over time.** For PL to be truly transformative, changes in practice need to “stick.” We will ask how PL structures, resources, and sustained backing from school leaders can support teacher and school persistence in transformed teaching and learning.

**How to ensure the right conditions are in place for adult learning.** Contexts matter in PL implementation; contexts effective in one context may not be effective in another. Programs may benefit from leadership support, alignment with content standards and curricular materials, strong professional environments, and resources (e.g., time) to engage in this work. Different schools also have teaching workforces with different skills and capacities. We will explore how these local conditions support or constrain improvements in teacher learning and practice.

Program Content

We will study PL design features in the context of specific areas of practice that are central to the field of teacher PL and to the improvement of classrooms more broadly. Our learning agenda calls out three primary content areas that RPPL partners have identified as fundamental to their ongoing work:
**Equitable teaching practices.** Calls for more racially just classrooms have led to an explosion of equity-focused PL for teachers and schools. Descriptive research suggests strong benefits to students’ well-being and achievement from equitable teaching practices.

**Classroom climate and environment.** Students learn best when they have a sense of belonging in the classroom, when they find their academic work interesting, and when their relationships with teachers are strong.

**Instructional materials.** Now more than ever, teachers must deliver rich, content-focused, curriculum-based instruction to all students by making wise use of high-quality instructional materials.

**What’s Next?**

Over the next 5 years, RPPL plans to accelerate our learning about PL by developing collaborative research infrastructure, building the PL knowledge base, and sharing learnings across organizations and with the field. We will begin with a set of initial studies in key priority areas that will inform organizational decision making and enable us to learn how to do this work together, better and faster. We will then leverage this robust research infrastructure to conduct more and larger studies that can address complex questions and scale influence on practice.

We aim for our learning agenda to become a living document, informed over time by ongoing learning and by new questions from the field. We see tremendous opportunity in collaborations that allow us to use this agenda as a framework for study that extends beyond RPPL. As we learn, we will build a portfolio of linked studies and publish research syntheses, reports, and briefs that capture our developing understanding in specific areas of focus. We hope that the lessons we collectively learn will move beyond our member organizations to reach the broader PL universe in schools across the country.

**Only by working together and building innovative partnerships will we make the kind of rapid progress that our field demands and that the students of this nation deserve.**

**Join the RPPL Community**

- Read the full learning agenda at [rpplpartnership.org](http://rpplpartnership.org).
- Subscribe to our mailing list.
- Follow us on Twitter [@rpplpartnership](https://twitter.com/rpplpartnership).

To discuss collaborating with RPPL, contact us at [team@rpplpartnership.org](mailto:team@rpplpartnership.org).

**About RPPL**

The Research Partnership for Professional Learning (RPPL) is a collaborative of professional learning organizations, researchers, and funders committed to advancing the collective understanding of how to support teacher professional learning that leads to equitable student outcomes for historically marginalized students. RPPL partners include Achievement Network, Instruction Partners, Leading Educators, Teaching Lab, TNTP, and UnboundEd. The research team is led by experts in teacher learning and improvement at the Annenberg Institute at Brown University, including Drs. Heather Hill, Susanna Loeb, John Papay, and Nathaniel Schwartz, with Dr. Robert Q. Berry III of the University of Virginia advising.