

# Al in Professional Learning: A Network Survey of PL Providers

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# **About RPPL**

The Research Partnership for Professional Learning (RPPL) is a collective of professional learning (PL) focused organizations and researchers committed to advancing educational equity for students historically pushed to the margins of our education system.

# Acknowledgements

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2Revolutions

Achievement Network (ANet)

Catalyst for Educational Change (CEC)

**Collaborative Classroom** 

**Danielson Group** 

Institute for School Partnership at Washington

University in St. Louis (ISP)

LessonLoop

M-Powering Teachers

**MQI** Coaching

Sibme

Stem4Real

**Steplab** 

**Student Achievement Partners** 

**Teaching Matters** 

The Learning Accelerator

**Throughline Learning** 

**World Savvy** 



# A Network Survey of PL Providers

# Introduction

Over the past two years, RPPL has been exploring how artificial intelligence (AI) can strengthen teacher professional learning (PL) and, in turn, improve student outcomes. In 2024, we published <u>AI in Professional Learning: Navigating Opportunities and Challenges for Educators</u>, mapping emerging tools, use cases, and unanswered questions. The paper called for coordinated, practitioner-driven inquiry to unlock AI's potential in PL. In response, we launched the AI Co-lab—an exploratory group of RPPL network organizations—in June 2024, bringing together 17 network organizations in a structured learning community to track AI uptake, surface challenges, and collaborate to address problems of practice arising from the development and utilization of AI tools.

Early this year, we conducted a network-wide AI scan—our most comprehensive to date—capturing current investments, early outcomes, persistent challenges, and research needs across the field. Separately, we've updated RPPL's 2026–2028 strategy to focus on three priorities: building AI-enabled infrastructure for PL, enhancing the speed and quality of PL research, and studying the effects of AI-enabled PL on teachers and students.

This report summarizes RPPL's 2025 AI network scan findings and examines them alongside insights from our 2024 landscape paper and learnings from the AI Co-lab. It highlights where AI is beginning to influence professional learning, where gaps between aspiration and implementation persist, and what the field must do next. While some PL organizations leverage AI for operational efficiency, most focus on its potential to personalize learning and generate instructional insights. Yet, few have translated those goals into widespread use—most remain in early-stage adoption, relying on tools like analytics dashboards and chatbots rather than fully integrated instructional applications.

To bridge this gap, PL providers call for more substantial evidence, better implementation support, and ethical guidance. Case studies featured in this report show how organizations at different stages of Al engagement are putting ideas into action. As the field evolves, we believe it is time to move beyond asking "Are you using Al?" to ask: "How is Al advancing instructional coherence and deeper student learning?"

# **Data**

This scan is based on reports from 31 PL provider organizations within RPPL's network who provided updates through a short survey administered in February/March 2025. The survey included open-response items where organizations could share longer descriptions of strategic choices and early wins, as well as closed items about investment levels and ongoing product use. The complete set of survey questions is included in the appendix.

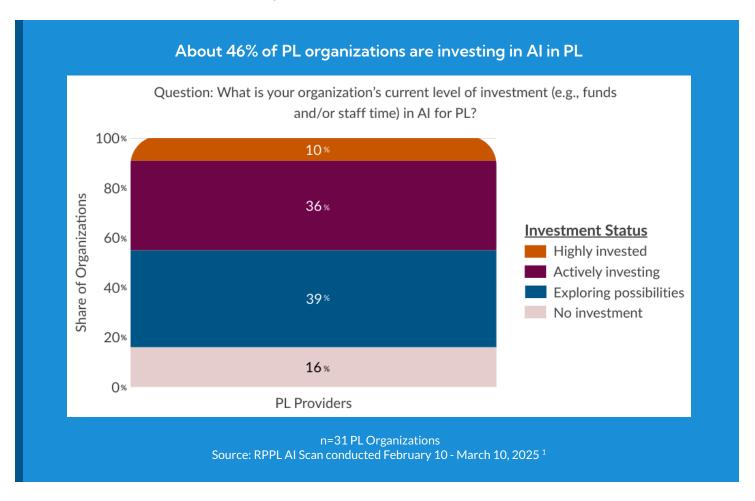
# What We See Across the Network

About half of RPPL organizations actively invest in Al solutions, and most PL organizations are at least exploring investment possibilities

Across our sample, most organizations (85%) are considering AI investments. At the same time, only around half have invested in AI, and a relatively small percentage consider themselves "highly invested" in the work.

These investments and explorations are taking a variety of forms:

- A small but ambitious group of organizations (10%) is leading the charge—hiring AI specialists, running multiple AI-powered systems, and setting aside dedicated budgets to scale AI solutions.
- Another (36%) are actively investing in AI, launching pilot programs, bringing on consultants, or teaming
  up with tech providers to integrate AI into their work.
- A larger share (39%) is still in the exploratory phase, engaging through conferences, webinars, and informal staff discussions to imagine what's possible.



<sup>&</sup>lt;sup>1</sup> All figures follow the same notation unless otherwise indicated



# Highly Invested in Al: What PL Orgs Are Doing

<u>Throughline Learning</u> has partnered with <u>PlayLab</u> to develop an adaptive, AI-powered tool that provides educators personalized, on-demand guidance for Tier 2 literacy and math interventions. By merging culturally responsive strategies with insights from Throughline's validated <u>Student Experience Survey</u>, the platform delivers targeted next steps in developing academic skills, mindsets, and SEL competencies.

Ultimately, the tool helps educators link academic mindset, critical-thinking skills, and content objectives to meaningful tasks that make learning more relevant and motivating for students.

# Actively Investing in AI: What PL Orgs Are Doing

<u>LessonLoop</u> has embedded generative AI directly into daily instruction: educators pick a human-written strategy, and the platform helps personalize the strategy to create an engaging activity from 5 to 45 minutes to transform student engagement in their next lesson.

LessonLoop's Blindspot Checker is an Al quality assurance feature focused on equity and inclusivity. Offered as a selection after an Al-generated activity is produced, the BlindSpot checker assesses bias and provides feedback and suggestions to improve each Al-generated activity for cultural inclusiveness, accessibility, and language neutrality. LessonLoop's overall approach to boosting student voice and reducing bias was recognized by Digital Promise's "Prioritizing Racial Equity in Al Design" certification.

# Exploring Possibilities in Al: What PL Orgs Are Doing

<u>Leading Educators</u> and <u>The Learning Accelerator</u> launched a year-long <u>School Teams Al Collaborative</u> in October, which positioned school-based teams as pioneers in crafting Al-driven instructional practices that push the boundaries of teaching and learning in this new digital era.

This community of ~80 educators from 19 school teams nationwide:

- Collaboratively explored strategic uses of AI in instruction that led to the creation of <u>resources</u> for sharing emerging trends, best practices, and insights with other educators.
- Had access to ongoing support, guidance, and feedback from experts in the field and other cohort members.
- Stay tuned for a resource hub and report.

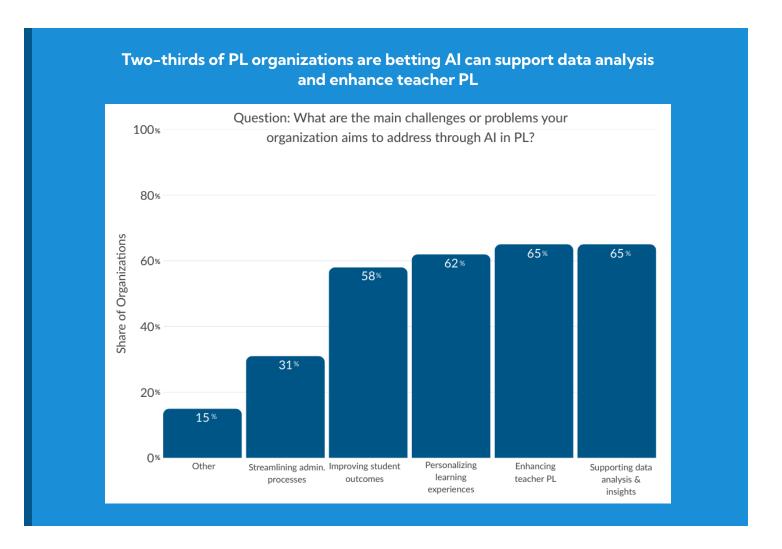


# Some organizations are counting on AI for organizational efficiencies, but most hope to use AI for better data analysis or PL personalization

Among the 26 PL organizations that reported currently investing in or exploring AI, about one-third aim to streamline administrative processes, but the majority aim to put AI to work in improving student outcomes.

These investments divide across two key priorities, with some organizations investing in both:

- Most investing organizations (17 organizations) said they are working to expand capabilities around data analysis and insights.
- A similar contingent of organizations (16 organizations) said they are using AI to personalize learning experiences for teachers.





# The organizations investing the most in AI are betting on AI's potential to personalize teacher learning

When we break investment priorities out further based on organizations' level of investment, we find that the organizations making deeper investments in AI are primarily focused on personalization, while interest in using AI to strengthen PL and data-driven decision-making cuts across all levels of investment.

Specific areas of focus include:

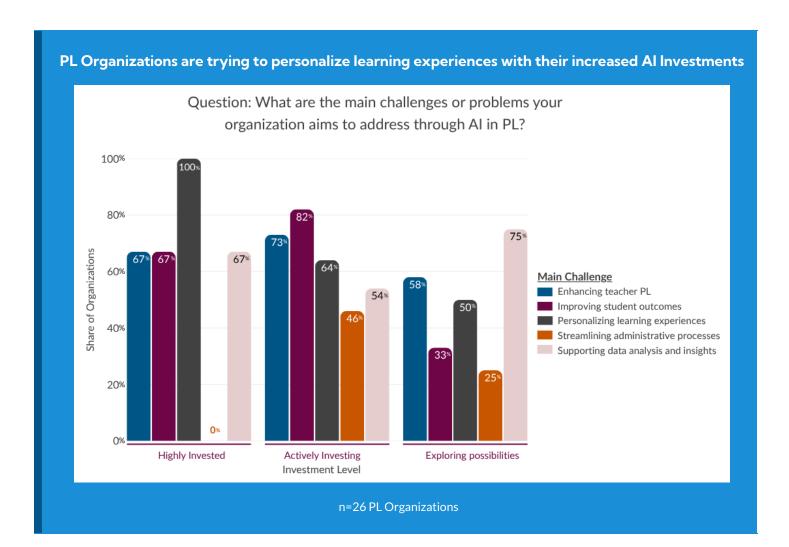
### Al-Driven Instructional and Assessment Tools

- Personalizing learning: Creating adaptive and differentiated assessments and instructional strategies
- Improving equity: Checking instructional materials for bias and ensuring culturally responsive content
- Data-driven insights: Generating real-time feedback and tailored learning activities based on student data

# AI-Enhanced Coaching and PL Support

- Enhancing coaching effectiveness: Offering automated, data-backed feedback to refine coaching practices
- Scaling professional learning: Developing tools to support teacher coaching and sustain continuous learning even when external support is not on site
- Improving decision-making: Using AI to analyze classroom and coaching data informs personal development and instructional improvements



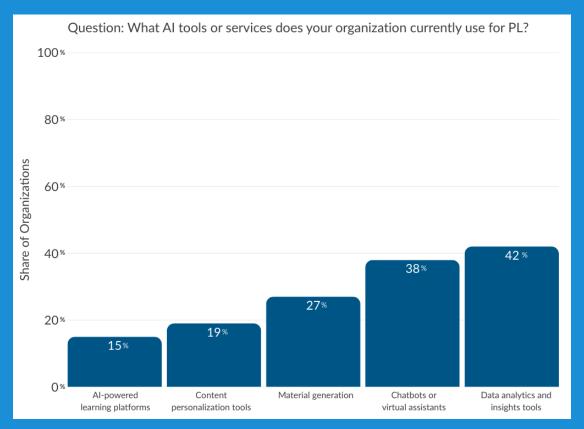


# Current use of Al across organizations does not yet reflect their investment priorities

Although organizations are optimistic about using AI to enhance and personalize PL opportunities, few organizations are using the technology in these ways for professional learning. Only a handful of organizations reported using AI-powered learning platforms (15%) or AI for content personalization tools (19%). These organizations aim to develop proprietary tools for automated feedback, personalized instructional strategies, and equity-focused analysis.

In contrast, PL organizations' most common AI use cases center on data analytics tools and chatbot or virtual assistant technologies, reflecting the broader influence of GPT and other large language models on the market. Among the organizations that are actively investing in or exploring AI, the top reported uses include data analytics and insight tools (42%), chatbots or virtual assistants (38%), and material generation (27%).





Note: Results reported for 26 PL Organizations. The 35% of PL organizations not currently using Al are not shown.

# PL providers are looking for robust evidence and research about Al's impact and what it will take to support the implementation of a new technology

PL providers are looking to partner with research institutions, AI tool developers, and other education organizations to share best practices, validate the impact of AI tools, and co-design scalable solutions. They value networks that enable them to learn from early adopters and collaboratively refine AI applications for professional learning. A long list of research questions from across the RPPL organizations offers a first draft of a potential learning agenda focused on the use of AI in PL:

# **Educator Needs**

- How do teachers feel about AI in PL? Are they excited, trusting, or apprehensive about its use?
- What are the best practices for supporting change management as AI is integrated into educational



### settings?

# Teacher and Coach Support

- How can AI effectively support and scale customized, just-in-time learning for coaches, educators, and students?
- How can Al assist with administrative tasks, allowing coaches and teachers to focus on relationship-building and instructional improvement?
- How can coaches use AI to synthesize data from multiple sources (e.g., student achievement, observations, surveys) to enhance teacher effectiveness?

### Personalization and Effectiveness

- How can AI-driven content personalization and material generation improve the effectiveness of PL experiences for educators?
- How can we leverage AI to tailor PL to local contexts (curriculum, standards, etc.)?

# Data Integrity and Impact

- How do we measure and monitor the integrity of AI-generated outputs and their impact on teaching and learning?
- How can we ensure data confidentiality while developing and deploying AI-powered products?

# Legal, Ethical, and Practical Considerations

- What are the legal implications (data ownership, liability, intellectual property) surrounding the use of AI in education?
- Where do AI capabilities excel, and what are their limitations when deployed at scale?
- How do we ensure that AI remains a tool to enhance human expertise rather than replace critical thinking?

# Where We Go From Here

The landscape of AI in professional learning is rapidly evolving, and our investments must translate into tangible benefits for educators and students. Our scan revealed a field full of energy and experimentation, but also one lacking clear direction. Many PL organizations are eager to use AI to personalize learning and generate data-driven insights. Yet, few have the tools, infrastructure, or research to do so effectively—this gap between ambition and implementation risks fragmented efforts, inequitable access, and missed impact. At the same time, we found that most current use of AI remains concentrated in areas like analytics and chatbots, falling short of the deeper instructional goals many providers envision. But it also presents a critical opportunity—by acting now, we can shape how AI supports teacher and student learning—before it scales in ways that reinforce existing challenges.

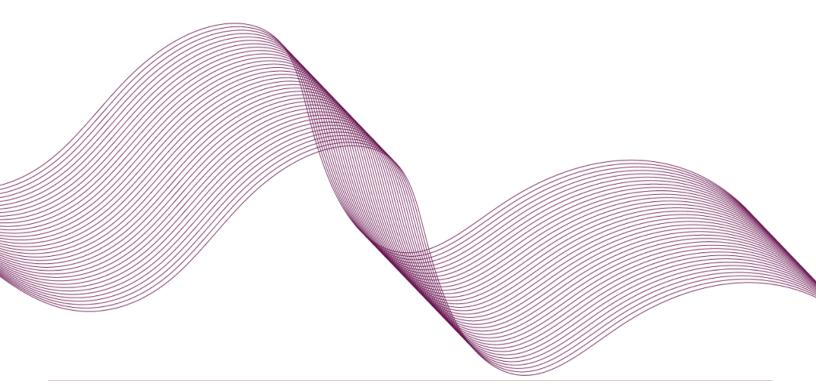


Drawing on insights from our 2024 landscape paper and this scan, we offer the following field-facing recommendations generated in partnership with our AI Co-lab to guide the next phase of work:

- Advance a shared, PL practitioner-informed research agenda. The Co-lab surfaced urgent questions
  around educator trust, change management, legal guardrails, and ethical use. Aligning future research to
  these priorities will ensure relevance, rigor, and uptake.
- **Co-develop and study real-world use cases.** PL providers need more than abstract possibilities—they need grounded implementation studies. Testing promising Al applications in classrooms, coaching, and leadership contexts will clarify what works, for whom, and under what conditions.
- Facilitate structured peer learning. The Co-lab reinforced the power of shared experimentation. Facilitated learning cycles and communities of practice can accelerate innovation, surface practical insights, and reduce duplication across the field.
- Build tools and shared resources to support decision-making. With an influx of AI tools on the market, PL organizations need support sifting through options to address emerging issues as well as equity implications, especially those aligned with local curriculum and instructional goals.

RPPL is committed to advancing these recommendations and is well-positioned to do so. Over the next three years, we will launch targeted AI research collaborations and continue to support network-wide analysis of AI adoption trends. More specifically, we will focus on three priorities: building AI-enabled infrastructure for PL, enhancing the speed and quality of PL research, and studying the effects of AI-enabled PL on teachers and students.

We invite you to join us by contributing your experiences, collaborating on research, or participating in shared learning. Together, we can move beyond fragmented experimentation toward coherent and evidence-driven integration of Al in professional learning.





# **Appendix: Survey Items**

- 1. Name (free response)
- 2. Organization (free response)
- 3. Title (free response)
- 4. Please briefly describe (free response)
  - a. 1) the AI-related products or services your organization is developing or purchasing,
  - b. 2) the likely release date, if applicable, and
  - c. 3) the main challenges these aim to address in professional learning.

If you have written descriptive materials, please upload these in the next question.

- 5. Please upload any materials relevant to the question above. (option to add files)
- 6. What is your organization's current level of investment (e.g., funds and/or staff time) in AI for professional learning? (multiple choice)
  - a. No investment in AI: The organization has not allocated any budget or staff time to exploring AI applications; AI is not part of strategic discussions or planning.
  - Exploring possibilities, but no active investment: Attending conferences or webinars;
     Conducting internal brainstorming or research about potential AI uses; Informal meetings or discussions among staff about AI trends without dedicated resources.
  - c. Actively investing in AI initiatives: Developing pilot programs to use AI-powered tools; Allocating funds or hiring consultants to explore AI applications; Partnering with tech providers to implement AI applications.
  - d. Highly invested, with dedicated resources and ongoing projects: Employing AI specialists or data scientists to manage AI-driven projects; Operating multiple AI-powered systems; Maintaining a dedicated AI budget for scaling advanced AI solutions across the organization.
- 7. Please share any early wins or successes that your organization has experienced in this space. What has been working? (free response)
- 8. What are the main challenges or problems your organization aims to address through AI in professional learning? (checkboxes)
  - Enhancing teacher professional development
  - Personalizing learning experiences
  - Improving student outcomes
  - Streamlining administrative processes
  - Supporting data analysis and insights
  - Other
- 9. What AI tools or services does your organization currently use for professional learning? (checkboxes)
  - Al-powered learning platforms



- Chatbots or virtual assistants
- Data analytics and insights tools
- Content personalization tools
- Material generation
- o Not using AI tools yet
- o Other\_\_\_\_
- 10. What types of partnerships and/or research and evidence from RPPL would help you accomplish your Al-related work? If you are at an early stage, what Al-related research questions are priorities for your organization? (free response)
- 11. Al Point of contact and email address-if different from you (free response)