

Al in Professional Learning – A Landscape Analysis

Brendon Krall July 16, 2024



Welcome!

As we wait for folks to join, please drop in the chat...

- 1. Name
- 2. Pronouns
- 3. Organization/district
- **4.** What emoji best describes how you feel about AI?



How to interact with us



CHAT your reactions/comments/thoughts/ideas



Q&A used to ask presenter(s) questions



You'll be muted unless you raise your hand and the presenter calls on you



Today's Presenter

Brendon Krall he/ him

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Why did we write this report?



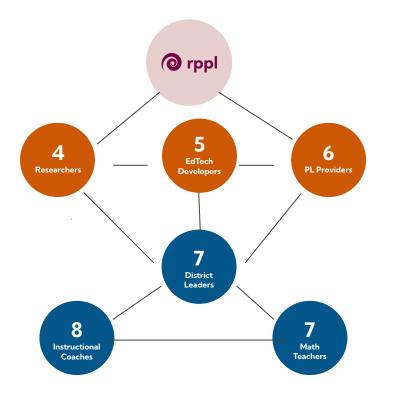
There has been far less attention to the ways that AI will change teachers' learning experiences. Yet these shifts are already happening.

Our purpose was twofold:

- 1. to examine the current use of AI in teacher PL and
- 2. to better understand how stakeholders perceive its potential future role in enriching teacher learning experiences.



Research Method & Sample



Primary Research Questions:

- **1.** How are organizations and districts currently using AI for teacher PL?
- 2. What potential future applications do stakeholders see for AI in teacher PL?
- **3.** What are the key challenges stakeholders are facing with regard to AI in teacher PL?



Findings Part 1: PL about Al



Reducing Teacher Burden

Interview participants were using AI tools to support daily tasks

- Generating course content, including supplemental materials that are designed to facilitate student engagement,
- Differentiating and translating course materials to increase accessibility,
- Diagnosing student needs to support data-driven instructional decisions,
- Providing feedback on student work, and
- Communicating with parents and family members regarding campus events or individual student progress.



PL About Al

Participants highlighted the **need for two specific types of PL** intended to support the effective use of AI to reduce teacher burden.



Al Literacy How does the technology work? What are its limitations?



Al Implementation What are the available tools? What are best practices for use?

In the chat:

- How do these questions resonate with the work you're doing in your organization?
- > What are some best practices to support districts with addressing these concerns?



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Al Literacy How does the technology work? What are its limitations? Al Implementation What are the available tools? What are best practices for use?

Some districts are:

- Creating a research-action team of teachers, coaches, and district leaders charged with exploring, aligning, and introducing AI tools to teachers.
- Holding an Al-focused PD day that includes a plenary session to discuss Al and breakout sessions for teachers to engage at the their level of comfort.
- Building capacity among instructional coaches to provide 1:1 support for available tools.



Findings Part 2: Al for PL



Take a moment to read this quote from an interview

"For the first time, if a million teachers knocked on the door tomorrow, we could support them all, with these high quality and completely differentiated experiences. And that's a really exciting vision for the future. Of course, we always want as many experts in the room and on the ground [with] teachers, but there's always that gap. And, we could turn on more computers and support more teachers."



Use Case 1

Scaling PL

Current Uses

 Virtual Coaching - providing virtual support to more teachers and leveraging data to identify individual, school, or district needs

Emerging Uses

- Chatbot-supported PLCs
- Classroom simulations
- Student work simulations

Use Case 2

Differentiating PL

Current Uses

• Virtual Coaching - teacher reflection and identification of need to inform coaching conversations

Emerging Uses

- Individualized PL plans based on teacher feedback and goals
- Differentiated evaluation systems

Augmenting PL

Current Uses

• Virtual Coaching - providing a point of entry for teachers who might be apprehensive about being observed

Emerging Uses

- Chatbot-supported Q&A during large-group PL
- Virtual coaching or chatbot supported reflective practice to maximize in-person PLC time



Use Case 3

Findings Part 3: Challenges & Concerns



Landscape

Systematic Challenges

Navigating an Ambiguous Legal Landscape

"what are some reasonable guidelines [...] it's really hard to come up with guidelines for something that's emerging and changing so fast. Because you don't really know where the guardrails should be, because you don't know what the next generation is gonna be tomorrow, next week or next month." - PL Provider

More Studies Required

"[District leaders] need to be slow, thoughtful, and strategic, and ensure that the tool is supporting a fleshed out theory of change. If we take the lessons from 15 years ago, you don't just put the product in front of the user." - PL Provider

Systems & Users

Context-Specific Challenges

Districts Face Unique Barriers to Adoption

"People are thinking about [AI tools] financially, but they might not also necessarily be thinking about it, in terms of the effectiveness and the uptake of the training." - District Leader

Users Don't Know Which Tools to Select

"[Tech providers] often are not incentivized to provide real data or evidence backing their impact or their effectiveness, especially, not for these different groups." - AI Researcher

Personnel are Time-Constrained

"So many times, there's professional development where we learn a tool, and then given something and said, great, go make it work... And then like I have to go teach kids in like five minutes. You don't have that time to make it work. And then it just gets pushed to the side collects dust and then you don't end up using it." - District Teacher



POLL - Biggest Challenge



Implications & Next Steps



Implications



Policy Makers

- Develop Clear Guidelines
- Regulate AI Tools and Data Practices
- Support Research
- Promote Awareness



- Develop District Policies
 Around Al
- Align Technology and PL Infrastructure
- Dedicate Time for AI Literacy
- Beware of Misleading Claims
- Take a Balanced Approach: Invest in Technology Leadership
- Monitor Implementation



- Adhere to AI Bill of Rights
- Ground Design in Learning Theory
- Customize Solutions
- Promote Equitable Access
- Implement Methods to Assess Al Biases
- Support Research
- Ensure Product Efficacy



Implications continued



Researchers

- Develop Strategies for Balancing Al Benefits and Human Expertise
- Create Solutions to Avoid Over-Reliance on AI-Driven PL Tools
- Evaluate AI Tools' Impact on Adult Learning
- Foster Participatory Research-Practice-Partnerships to Better Study AI



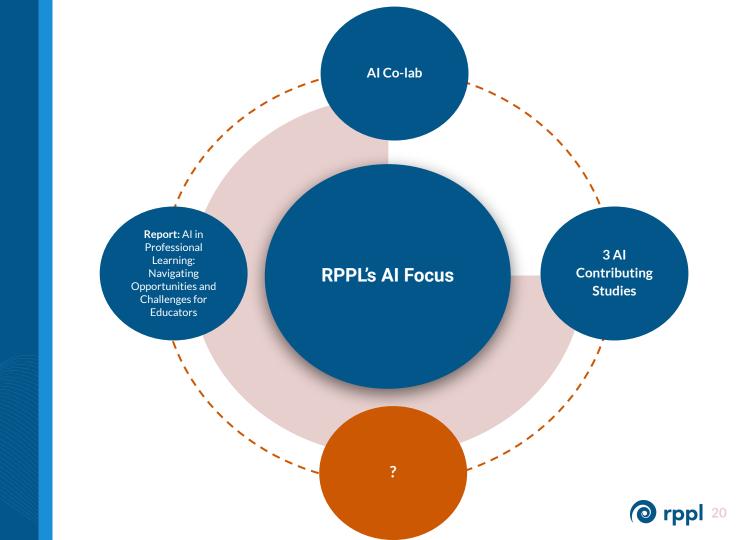
- Facilitate Sustained Partnerships
- Offer Support and Resources
- Start Small and Be Strategic
- Consider IP and In-House Development
- Promote Al as a Complement: Share Best Practices



- Funders
- Promote Equitable Access
- Support Research Partnerships
- Encourage Collaboration
- Monitor Impact and Accountability



What's next for RPPL



What's next for RPPL

Balancing Al Addressing Investigating the Impact of **Benefits with** Concerns of Al on Adult Human **Over-Reliance** Learning Involvement on Al **Evaluating** Ongoing **Al Bias and** Reporting Equity rppl





Thank you for joining us today!

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Research Partnership for Professional Learning

