

Charting New Paths: What AI-Enabled Transformation Looks Like in Four Early Adopter Districts

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Introduction

Amid uneven federal and state guidance and growing community backlash, most school districts have taken a cautious approach to adopting AI, primarily using it to support existing operations or to help teachers and administrators save time. But a small group of districts is doing something different: they're using AI to pursue bold changes to teaching, learning, and school design. Some are focusing on mastery-based learning or competency-based instruction; others are building out career-connected pathways or wall-to-wall academies.¹ All of them are exploring how AI can amplify genuine transformation.

In CRPE's [early 2026 study](#) of AI Early Adopters, our team conducted extensive research on districts² at the forefront of AI adoption. To better understand what AI-enabled transformation looks like in practice, we followed up with four of the school systems we identified as "Systems Changers" (see sidebar for study typology and definitions) for their use of AI to accelerate existing reform efforts: Anaheim Union High School District, ASU Prep, Elma School District, and Agua Fria Union High School District. In Agua Fria, Arizona, custom AI tools help teachers connect academic standards to the career pathway each student is pursuing. In Anaheim, California, an AI-powered learning management system allows teachers and students to track their progress in skills such as collaboration and critical thinking. At ASU Prep, an Arizona charter system, teams are building their own AI-enabled tools, including tutoring tools, tools that help teachers plan for rigorous and standards-aligned project-based learning units, and a tool that pulls student data from 15 separate systems into one place. And Elma, a small, rural district in Washington, built a custom AI tool that identifies the skills local employers need and connects them to what students learn in class.

1 A wall-to-wall academy is an approach to school where all students in a school select from a defined set of career-connected pathways, and all courses, not just career and technical education courses, provide content and applications that are relevant to each student's pathway.

2 We use the term "district" in this brief to include both traditional school districts and Charter Management Organizations (CMOs).

Through conversations with technology and instructional leaders from these school systems, we learned that:

- Existing partnerships are crucial, but inadequate for advancing AI-enabled transformation. In response, these districts are combining supports and filling gaps themselves.
- These System Changers act as R&D sites, building and adapting AI tools rather than just acting as consumers.
- Industry-workforce partnerships help keep AI-informed instruction grounded in real labor market demands.
- These System Changers see early signs that AI is helping them move faster on transformation work, but they have not yet assessed academic impacts.
- District leaders view AI as a tool that supports transformation efforts, whereas principals and teachers often see it as just another initiative.

AI EARLY ADOPTER TYPOLOGY

Our first Early Adopter study in April 2026 found that Early Adopter districts fell into one of five AI implementation categories. This brief follows up with four **System Changers**.

Table 1. Description of AI Adoption Categories

Level of Systemic Adoption	Category	Description
Not Yet Systemic Adoption	Dabbler	AI use is aspirational or symbolic, with no clear purpose or plan for scaling.
	Emerging User	AI use is active, without clear alignment to district strategy.
Systemic Adoption	System Improver	AI use strengthens the existing instructional and learning model and improves traditional outcomes.
	System Changer	AI use amplifies a preexisting reform effort aimed at changing the learning model and outcomes.
	Reimaginer	AI use explores fundamentally new models of learning, teaching, and system design.

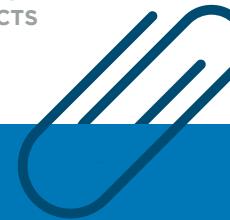
Our analysis reflects early learning and focuses on identifying emerging themes across these exploratory conversations with four System Changers. We've drawn on these conversations to provide case studies (see sidebars throughout this brief) on how these four particular System Changers are using AI. These findings are a starting point rather than a final verdict and are not meant to be representative of the experience of all districts pursuing AI-enabled transformation. Our findings may be interpreted differently by others or shift over time as more districts are studied and more evidence becomes available. The district leaders provided insight into what support districts need to pursue more AI-enabled transformation, including stronger state guidance, improved evaluation frameworks, investment in district AI leadership, and opportunities for peer learning as systems move toward more systematic AI adoption.

1. Existing partnerships are crucial, but inadequate for advancing AI-enabled transformation. In response, these districts are combining supports and filling gaps themselves.

Pursuing ambitious transformation efforts requires expertise and support that most districts cannot build entirely on their own. Similarly, developing technical fluency with AI is beyond the internal capacity of most school districts. To support the implementation of AI-enabled transformation efforts, System Changers are working with external partners in several ways. Instructional partners, such as technical assistance (TA) providers, help districts clarify and strengthen the core components of their transformation efforts. At the same time, AI-focused organizations and peer networks help districts stay current on the use of AI in education and develop initial policies and guidance on responsible use.

None of these four System Changer districts found a single external organization that could both help implement their instructional vision and increase the technical capacity needed to use AI in service of that vision. At the same time, leaning too heavily on any one partner risks letting that partner's vision of transformation drive the work, rather than the district's own. Instead, each district has developed a layered network of partners, some focused on instructional strategy, others on technical development, and still others on specific tools or use cases, and is actively managing how those pieces fit together. Where these districts have found no direct external support, they are working to build their own knowledge and capacity.

The approach of layering external partnerships requires the capacity to coordinate internally and with external partners, which can be challenging amid other operational constraints. But navigating multiple partnerships has provided several benefits. According to all four districts, it has pushed these districts to develop greater technical fluency than they might have if a single external partner had provided an off-the-shelf AI solution. System Changers have also found that building these balanced partnerships has allowed them to shape the transformation effort to the local context instead of allowing external partners to drive their work.



CASE STUDY: ANAHEIM UNION HIGH SCHOOL DISTRICT

Anaheim Union High School District in Orange County, California, serves more than 25,000 students across grades 7 through 12. Anaheim has been on a transformation journey for a decade, moving away from traditional measures of student learning. After engaging parents and business leaders, the district decided to reorient instruction and assessment around key skills and competencies. Anaheim worked with faculty at UC Irvine to develop and refine the vision. As the model took shape, district leaders realized that no existing learning management system (LMS) could support what they were trying to do, which led them to work with the ed tech organization eKadence to build a custom solution. Since then, Anaheim has combined that external partnership with its own growing internal capacity to build AI-powered tools within the LMS. This was a multi-year process that required leaders to deepen their understanding of the instructional model and the technological infrastructure needed to bring it to life. That sustained engagement has allowed Anaheim to remain in the driver's seat. As one Anaheim leader said, "We want to set the conditions. We don't want those conditions set for us. And we have relationships where we could do that."

2. These System Changers act as R&D sites, building and adapting AI tools rather than just acting as consumers.

These four System Changers distinguish them from other Early Adopters by their respective levels of technical fluency. While most Early Adopter districts are selecting and deploying existing AI tools from external vendors, these System Changer districts have developed sufficient technical fluency to assess whether existing tools can support their instructional vision. They have found that off-the-shelf AI tools are often inadequate for their needs, and they either work with external partners to develop custom tools, adapt existing tools internally, or build their own tools.

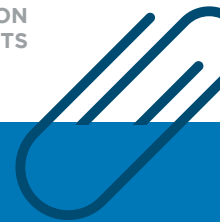
Whether that technical fluency comes from within or outside of the district depends on each district's capacity and needs. For some, like Anaheim and Elma, it means working with an external developer to build what they need while maintaining ownership throughout the development process. For others, like ASU Prep and Agua Fria, it means drawing on an internal engineering team to develop bespoke solutions.

CASE STUDY: ASU PREP

ASU Prep is a K-12 public charter school system affiliated with Arizona State University serving more than 33,000 full- and part-time students through brick-and-mortar campuses, hybrid schools, and fully online schools. ASU Prep's instructional goal is to move students from initial knowledge acquisition to fluency through mastery-based learning and project-based learning. But teachers struggle with the high-touch, individualized feedback that mastery-based learning requires, especially when they have large student rosters. Each of ASU Prep's school models uses platforms tailored to its specific curriculum and philosophy, so a single student's learning data can be spread across up to 15 different systems. To address these challenges, ASU Prep's Experience Design team started using AI-assisted coding to develop its own tools. These include Archie and Digit, personalized learning tools that give students real-time, personalized feedback when teachers can't, PBL Kickstarter, which uses multiple AI agents to produce a complete project folder for teachers, including a high-level overview and week-by-week instructional materials, and Honeycomb, an AI-enabled platform that allows teachers to see student data from multiple systems in a single dashboard.

3. Industry-workforce partnerships help keep AI-informed instruction grounded in real labor market demands.

These four System Changers are building substantive relationships with local industry that have shaped how they approach AI literacy and determine which skills employers actually need from the workforce in the age of AI. Anaheim's AIME internship program connects students directly with industry partners, while ASU Prep has created an "AI and semiconductor research experience" for teachers through a partnership with Intel and ASU. At Elma, a bespoke AI tool is helping the district align instructional priorities with local workforce needs in ways that a static curriculum framework cannot.



CASE STUDY: ELMA SCHOOL DISTRICT

Elma is a rural district in Washington State serving fewer than 2,000 students. Elma has a strong career and technical education focus. The district's instructional goal is to move toward mastery- and competency-based learning aligned with the workforce skills that are meaningful to local employers and transferable across industries. But keeping instruction aligned to constantly shifting workforce demands is difficult when no existing curriculum framework can keep pace. Elma turned to AI to solve this problem, but found that no available tool could meet their needs. Instead, Elma partnered with the ed tech organization Kovexa to build a custom tool that scans job descriptions and parses the embedded competencies, providing easy-to-use descriptions for students and educators. The result is a live connection to what employers actually need rather than a static list that could be outdated as soon as it is written. Next, the district is building tools to connect these competencies to the state standards students are learning in their courses.

Industry and workforce partnerships are relatively rare in the broader Early Adopter population. However, these System Changers show how crucial those partnerships can be in preparing graduates for postsecondary pathways. Without a real-world connection to the skills and competencies employers need, including up-to-date insights into how AI is being used in the workforce, there is a real risk that CTE curricula will be outdated almost as soon as they are developed.

4. These System Changers see early signs that AI is helping them move faster on transformation work, but they have not yet assessed academic impacts.

Each System Changer has identified specific bottlenecks in its transformation work and applied AI to address those challenges (see Table 2 below). These include connecting core academic content to multiple career pathways at scale, tracking student mastery across fragmented data systems, delivering individualized feedback to large student rosters, and designing complex project-based learning experiences that align to multiple standards frameworks.

Table 2. Overview of Systems Changers

District	State	Transformation/ Innovation Efforts	How the District Uses AI to Address Friction Points
Agua Fria Union High School District	AZ	Wall-to-wall academies; student AI literacy training	Agua Fria is using AI to help teachers connect academic content to career themes across multiple academies simultaneously, a coordination challenge that leaders say is difficult to sustain without AI support.
Anaheim Union High School District	CA	Deeper learning (competency-aligned and relevant)	AI is embedded in Anaheim's custom LMS to help teachers track and assess student progress in competencies—like collaboration and communication—that are hard to measure with traditional assessments. The LMS generates student profiles from work and performance task data, surfacing growth that was previously too time-consuming to document consistently.
ASU Prep	AZ	Mastery-based and project-based learning; learning model experimentation	Internal engineering teams use AI-assisted coding to rapidly prototype tools once too resource-intensive to build. These include self-developed tutoring tools that scale personalized feedback across large, distributed student populations, and a tool that helps teachers design standards-aligned projects, easing the planning burden that had been slowing implementation.
Elma School District	WA	Mastery, competency-based learning; aligning with workforce competencies	Teachers use AI tools to build the lesson plans, curriculum maps, and learning progressions their mastery-based model requires. Elma also partnered with an ed tech company to build a tool that scans job postings for in-demand skills and connects them to what students are learning, keeping their workforce-aligned curriculum current in a way a static framework cannot.

Leaders across all four sites describe AI as helping them move faster and more sustainably on the more challenging aspects of their transformation efforts. These districts also point to early operational benefits from using AI, including faster planning cycles, more manageable teacher workflows, and greater capacity to prototype tools.

CASE STUDY: AGUA FRIA UNION HIGH SCHOOL DISTRICT

In 2021, Agua Fria Union High School District in Avondale, Arizona, undertook an ambitious plan to create 21 career-connected pathways across their six high schools by the year 2031, paving the way for the district's 10,000 students to get high-wage, in-demand jobs and internships. To pursue this goal, the district turned its comprehensive high schools into industry-focused, wall-to-wall academies in 2024. In the wall-to-wall academy model, all courses, not just career and technical education (CTE) courses, provide content and applications that are relevant to each student's pathway. But teachers struggled to incorporate core subjects, such as English and math, into these new, career-specific academies. To support teachers and instruction, the district used AI to design and build its own set of tools. These include a tool that maps academic standards to career pathways, and another that draws on a resource repository of 300 "teaching through the lens" examples from specific careers. As one Agua Fria leader put it: "Yes, innovation's messy and all these things we're doing can be messy, but I think [AI] is helping us streamline. [What] was that movie, Everything Everywhere All at Once? Sometimes [innovation] feels that way, but I think AI has helped us from a strategic planning perspective for sure."

While all of these districts have created promising conditions for their transformation efforts, it is not yet clear whether the use of AI will translate into meaningful improvements in implementation quality or student outcomes. The districts themselves acknowledge that they have not developed the evaluation systems necessary to make any determinations about AI's effectiveness.

District leaders view AI as a tool that supports transformation efforts, whereas principals and teachers often see it as just another initiative.

However, all four System Changers are navigating a real and unresolved tension. What feels like coherent, exciting progress at the system level often lands differently for teachers and principals on the ground. Leaders, particularly AI leads, CTOs, and other technology-facing staff, view AI as a tool that supports and accelerates their instructional vision. Many teachers and principals, however, experience this "experimentation" as an

additional initiative layered on top of already demanding transformation work.

The System Changers are aware of this tension and are working to address it through several approaches: supporting teacher-leaders in demystifying AI adoption through peer learning, providing ongoing professional development and instructional technology coaches, celebrating wins, and keeping AI adoption optional for now. Two of the districts have organized AI convenings or summits to make space for honest conversations about AI. None of these efforts has fully resolved the tension, and districts acknowledge there is more work to do.

What do System Changers need to succeed in their transformation efforts?

These System Changers identified several areas where additional support would advance their work. In particular, districts are looking to state actors to provide supportive policy and clearer guidance, and to help them evaluate AI tools in a fragmented landscape. They also highlighted the importance of investing in human capital, learning from peer districts, developing their own AI leadership, and building stronger partnerships with higher education.

Evaluation support and shared measurement frameworks.

These districts use multiple AI tools across operational, instructional, and student-facing functions, making it difficult to isolate the contribution of any single tool. As a result, districts often rely on usage data and anecdotal evidence to make critical decisions. They need shared evaluation frameworks that reflect how districts are actually using AI across systems, but developing those frameworks is beyond the capacity of any one district. It will require support from researchers, states, and intermediary organizations.

Additionally, districts need support to learn how to effectively use the data that will emerge from these frameworks. Districts like these Systems Changers are expanding measures of student success and therefore need to build a culture that uses robust data to make decisions through continuous improvement, data for feedback, and “Plan-Do-Study-Act” cycles to test strategies on a small scale before moving to full implementation.

State sandboxes that provide relief from accountability requirements.

These districts have built internal cultures that allow rapid experimentation and productive failure. They do not feel their states are offering the same spaces for safe experimentation. At least one district is actively lobbying its SEA for a “regulatory sandbox” arrangement, in which the district receives accountability relief (i.e., the SEA does not assign a letter grade to a school or district) and flexibility in seat-time requirements.

Policy coherence and procurement support around student data privacy.

State guidance on student data privacy remains limited and fragmented, leaving districts without a clear framework for evaluating and negotiating data-sharing agreements with AI vendors. As a result, each district must navigate this time- and capacity-intensive process independently. These challenges will grow more acute as districts implement

agentic AI, which interacts with multiple data sources simultaneously and raises new privacy concerns. Districts need clearer state policy on student data privacy, as well as shared procurement support, to reduce the burden of vetting and negotiating with vendors on their own.

Peer connection with districts pursuing similar work.

These districts are relatively isolated, with few peers at a comparable level of ambition and AI fluency. This isolation forces them to navigate many implementation challenges on their own, which can slow down progress. Leaders across all four sites described a strong desire to connect with others navigating similar challenges. Some are building these networks themselves.

Aligned higher education and teacher preparation programs.

System Changers report that teacher preparation programs are not equipping new educators with foundational knowledge of either transformative instructional practices or basic AI literacy. Consequently, districts must provide extensive teacher training to build these capacities themselves. This burden will continue to fall on districts as long as teacher preparation programs remain misaligned with the goals of System Changers.

Funding for dedicated AI leadership roles.

Only one of the four districts has a full-time AI lead. The other districts distribute AI leadership across other roles, such as CTOs, superintendents, directors of Teaching and Learning, and instructional coaches, who must balance AI responsibilities with competing priorities. This limits their capacity to coordinate implementation, support educators, and sustain the momentum of the initiative. Current funding structures rarely support dedicated AI leadership, leaving districts without the capacity to lead AI efforts effectively.

Conclusion

These Systems Changers are leveraging partnerships, building technical fluency, and using aligned internal leadership to push the boundaries of what AI-supported transformation efforts can look like in practice. At the same time, our findings reveal familiar constraints. Limited evidence of impact, tension between system-level vision and on-the-ground implementation, and the absence of a support infrastructure built for transformational work are not unique to AI adoption. They reflect challenges that have long accompanied ambitious transformation efforts, well before the emergence of generative AI. These districts may be setting new bars for what is possible, but they are not exempt from the realities of systems change.

What makes their situation distinctive is that they are navigating these familiar barriers with an unfamiliar technology at a faster pace than their contemporaries. The question for policymakers, funders, and support organizations is whether the field will build the infrastructure these districts need to go further or leave the most ambitious districts to continue shouldering that burden alone.

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