Bellwether

Built for Learning: How DREAM Uses and Creates Student-Centered Artificial Intelligence Tools

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Series Overview: The integration of artificial intelligence (AI) into ed tech tools has raised myriad questions about how such advanced technology can both ease burdens for students and teachers and facilitate deep learning. Building on Bellwether's prior work examining how AI could amplify productive struggle and how to measure the impact of AI-powered ed tech tools, this case study series showcases those concepts in practice by spotlighting select organizations and describing their design approaches, trade-offs, and implementation choices. The case studies in this series are drawn from interviews conducted with organization leaders in summer 2025, and each profiled organization reviewed its case study for accuracy in October 2025. **Learn more by reading Bellwether's Built for Learning series.**

A Case Study on DREAM

Introduction

AI in education presents a wide range of potential use cases, from personalizing learning to creating more efficient processes.[1] However, not all tools are high quality or fit the needs of a particular school, and the number of possible tool options can be overwhelming for district and school leaders.[2] DREAM, a New York City-based charter school network, helps to illustrate how school leaders can think about vetting and building AI tools.

DREAM serves approximately 2,500 pre-K through Grade 12 students in seven schools in East Harlem and the Bronx.[3] DREAM is building a wide range of AI tools to support instruction and operations, designed to integrate with educator workflows and "to enhance human judgment and capacity, not to replace it."[4] DREAM may serve as a useful example for other system leaders by illustrating:

1. How to keep humans in the loop to improve existing workflows when building new AI tools.
2. When a school system may opt to build or partner rather than buy.
3. Ways to design a pilot process that incorporates stakeholder feedback as part of a continuous improvement cycle.

From Issue to Impact

DREAM is building AI tools to meet the needs of its students.

DREAM sees potential in AI tools as a way to strengthen operations and learning. Although the network has found a lot of power in using generalized AI tools (e.g., ChatGPT and MagicSchool), when DREAM staff tried using other existing AI products, they found those tools insufficient, as the charter network's workflows, systems, and language

required more customization than off-the-shelf products could support.[5] Existing student-facing tools seemed more suited to already high-achieving students. To fill this gap, DREAM set out to create its own AI tools.

Since fall 2023, DREAM has used a variety of approaches to build AI tools, including developing in-house GPTs and Playlab chatbots as well as partnering with an external vendor.[6] The most extensive AI-building effort was redesigning the charter network's interim assessment process. Traditionally, the scoring process alone would take at least an entire professional development day.[7] This left little time for teachers to develop reteach lessons for students tailored to the specific learning gaps identified through the interim assessments.[8] DREAM partnered with EnlightenAI and ultimately created the AI-Enabled Assessment Data Cycle, which includes:

- **An AI-Assisted Scoring System**: Auto-scores student written responses for all subject areas based on a rubric and provides individualized feedback.

- **A Gap Analysis and Data Meeting Generator**: Builds a data meeting plan based on trends in the assessment data to identify instructional areas for teachers to focus on (i.e., "high-leverage standards" or questions representing foundational content that students struggled to answer).[9]

- **A Response to Data Lesson Generator**: Chatbots that draft reteach or intervention plans that teachers refine.

For the 2025-26 school year, DREAM plans to continue building.[10] The network's AI road map includes:

- **AI Personalized Learning Dashboard**: AI-powered tutoring assistant for educators in Grades 3-8 English language arts (ELA) and math with a portal to pull certain data (assessments, socioemotional learning, interests) and student schedules to provide just-in-time recommendations and personalized student-facing materials.

- **Teacher Development Platform**: Develop GPTs to customize teacher training that includes adaptive modules with tailored feedback for teachers in different areas such as content expertise development, internalizing lesson plans, and facilitating student conferences.

- **Automating Certain Talent and Operations Functions**: Train Network Support Team staff to build AI tools to increase productivity. The tools may include AI agents for recruiting, scheduling, inventory, and communications to reduce time spent on clerical work.

- **AI Literacy Curriculum for All Students**: Develop curriculum and teach students "how to effectively and responsibly use and build AI tools."[11]

DREAM is measuring for impacts beyond time savings.

For its AI-Enabled Assessment Data Cycle, DREAM leaders estimated saving $225,000 in time not spent grading, analyzing data, and writing lesson plans, as well as 3,700 hours to do other activities like "discuss data trends, refine lesson plans, and practice reteach lessons."[12] The new system resulted in earlier data meetings with teachers and instructional leaders that allowed teachers to reteach skills earlier, and more opportunities for teacher and instructional leader collaboration and practice to support intentional and effective instruction focused on addressing student misconceptions and tailoring interventions.[13]

Since implementing the new tool, DREAM has seen an increase in student learning, as measured by growth from October 2024 to February 2025 on ELA and math assessments compared with the previous year.[14] The network has also seen teacher retention increase by 3 percentage points,[15] and in spring 2025, 86% of staff agreed that AI has helped them be more efficient and productive in their work (an increase from 53% in fall 2024).[16] DREAM also surveys its teachers on their active usage, technical confidence, and magnitude of productivity gains over time.

Using AI With Intention

DREAM has used a variety of approaches when selecting and building AI tools, most of which are for teachers.

DREAM has taken three different approaches in selecting AI tools. The first approach is participating in pilots for student-facing AI tools. To date, DREAM staff believe that many of the student-facing products serve highly skilled and motivated students well but do not work as well for students with low skill or motivation. Through pilot participation with different ed tech vendors, DREAM can commit fewer resources (time and money) to trying out new student tools and contribute to the improvement of future tools.

The second approach is self-builds. DREAM created internal capacity to build DREAM-specific ChatGPT or Playlab chatbots. The advantage of this approach is the ability to train the chatbot on the charter network's model, language, and systems at a low cost.[17] For instance, the response to a data lesson generator is a DREAM-created chatbot.

Finally, DREAM has partnered with vendors to create more sophisticated tools. For instance, DREAM partnered with EnlightenAI to build the custom assessment tool that provides scoring and feedback for constructed-response items.[18] The decision to partner was twofold: DREAM wanted to increase the accuracy of the AI scoring compared to what was possible in ChatGPT so it would more closely match DREAM's teacher hand-scoring. DREAM also wanted to have the process fit more easily within a single workflow compared to stringing together multiple prompt processes. More recently, DREAM has contracted with a developer to oversee the process of creating a small language model that will be used for the AI personalized learning dashboard and teacher development platform. As part of the development process, DREAM works closely with the contractor to co-design and test the model at every stage.

Amplifying Learning

DREAM's AI Theory of Action is based on the potential to use AI "to enhance human judgment and capacity, not replace it."[19] DREAM leaders look for opportunities to embed tools within existing workflows.

For example, DREAM positions the lesson plan generator as a way to help amplify, not replace, teacher judgment. DREAM leaders emphasize that the lesson plans are first drafts that teachers will need to refine. DREAM sees the tool as an opportunity for teachers to have more time to internalize the lesson. The tool also provides additional time for teachers and instructional leaders to collaborate on addressing the student misconceptions identified through the gap analysis and on tailoring the interventions.[20]

DREAM's implementation process engages educators and students in pilots.

DREAM also prioritizes "testing these tools in real-time with students and staff."[21] For instance, the pilot processes for the Response to Data Lesson Generator included initial tests with the Network Academic Team followed by a pilot with one school-based academic dean and a small group of teachers.[22] During the pilot, DREAM leaders discovered that the tool was not intuitive to users. To better understand how educators with different roles might use the tool, they expanded the pilot to five more academic deans and observed users as they followed the prompt. This user testing helped to improve the tool's prompt structure and flow to make it easier to use.

Similarly, for the upcoming AI-Powered Personalized Learning Tutoring Assistant, DREAM plans to first test the tool with network leaders, pilot with school leaders and teachers, and start using it in one subject area (math) before expanding to other subjects.[23]

A critical aspect of implementation was building staff members' AI capacity.

Building and vetting useful AI tools requires staff time and judgment. DREAM built this capacity by having staff participate in the AI for Equity cohort, establishing a 15-person AI task force that spanned network teams and grade spans, and creating professional development for different teams. DREAM sequenced professional development so it started with the curriculum and instruction team, expanded to the data team, and then shifted to the executive team and finally to school leaders. Over time, that professional development also evolved from broad introductions to AI to targeted training in specific technical skills.

Change management to implement new systems is always a challenge. In addition to training on new tools, when rolling out the AI scoring tool, DREAM provided three weeks of on-the-ground support to teachers. This is in addition to codifying implementation by creating playbooks that can be shared both internally and externally.[24]

Conclusion

School systems have a plethora of choices when it comes to adopting AI tools for both students and teachers, and DREAM's example of building its own tools offers an alternative to complicated procurement. A key prerequisite for success was developing team capacity, which DREAM sequenced intentionally by starting with a small task force, experimenting, and then expanding professional development across the organization. DREAM's strategy to keep humans in the loop has also been important, both in the AI tool-building process and in how the tools are integrated into workflows. Multiple pilots that iterate on successes and failures have allowed DREAM to build tools that actually work for their users and ensure that the tools are designed to enhance teacher judgment, not replace it. ✦

Endnotes

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2 Michelle Croft, Amy Chen Kulesa, Marisa Mission, and Mary K. Wells, *Measuring Artificial Intelligence in Education* (Bellwether, 2025), https://bellwether.org/publications/measuring-ai-in-education/; Michelle Croft, Nora Weber, and Kelly Robson Foster, Surveying School System Leaders: *What They Are Saying About Artificial Intelligence (So Far)* (Bellwether, 2025), https://bellwether.org/publications/surveying-artificial-intelligence-and-schools/.

3 "The DREAM Difference—2024 Year in Review," DREAM, https://2024.wearedream.org/; Personal communication, Adam Feiler, October 19, 2025 for 2025–2026 school year enrollment data.

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5 Ibid.

6 "DREAM AI Overview," presentation, DREAM, spring 2025, https://docs.google.com/presentation/d/1ipcBWkb7puLOlDOGZlyrt4CXb3SJ0_DrHs7kpcBExYY/edit; "Memo: Overview of Current State and Long-Term Strategy of GenAI at DREAM," DREAM, internal memo (n.d.); Adam Feiler, Katie Doctor, Eric Chan, and Caroline Kemp Lopez, "How DREAM Is Using AI to Transform Data-Driven Instruction," *Stories and Lessons from Our Schools* (Charter School Growth Fund), July 22, 2025, https://stories.chartergrowthfund.org/how-dream-is-using-ai-to-transform-data-driven-instruction-479beebff724.

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13 "DREAM's Use of AI for Data-Driven Instruction," DREAM; "DREAM AI Overview," DREAM.

14 "DREAM's Use of AI for Data-Driven Instruction," DREAM; "DREAM AI Overview," DREAM.

15 Personal communication, Adam Feiler, October 19, 2025.

16 "DREAM AI Overview," DREAM.

17 "Memo: Overview of Current State and Long-Term Strategy of GenAI at DREAM," DREAM.

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19 "DREAM's AI-Powered Personalized Learning Tutoring Assistant," DREAM.

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21 "DREAM AI Overview," DREAM.

22 Feiler, Doctor, Chan, and Kemp Lopez, "How DREAM Is Using AI to Transform Data-Driven Instruction."

23 "DREAM's AI-Powered Personalized Learning Tutoring Assistant," DREAM.

24 "DREAM AI Overview," DREAM.

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About Bellwether

Bellwether is a national nonprofit that works to transform education to ensure young people — especially those furthest from opportunity — achieve outcomes that lead to fulfilling lives and flourishing communities. Founded in 2010, we help mission-driven partners accelerate their impact, inform and influence policy and program design, and bring leaders together to drive change on education's most pressing challenges. For more, visit **bellwether.org**.

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