

PK-12 Lesson Design Competition Awards

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PK-12 LESSON DESIGN COMPETITION

Hundreds of tiny, colorful, plastic cubes lay strewn across tables; dozens of ideas are tossed about; and a crowd of people are gathered with a common goal to effectively integrate technology for teaching and learning. This was the PK-12 Lesson Design Competition at the 2024 Association for Educational Communications and Technology (AECT) International Convention. The Teacher Education Division (TED) of AECT sponsored this competition as part of their mission to promote theory, research, and *practice* that supports teachers and teacher educators to design effective learning experiences for diverse learners.

Integrating technology into learning by creating and implementing technology-rich lessons and teaching is a complex process. Research shows effective technology integration involves teachers' values, prior experiences, contextual factors, and awareness of technology's potential (see Kopcha et al., 2020). The PK-12 Design Competition has become a space for colleagues to share experiences, discuss contextual factors, and collectively expand imaginations.

While TED has a strong history of promoting research and theory (c.f., Neumann et al., 2021), the division seeks to further amplify the voices of PK-12 educators and highlight their teaching and design practices. In support of this goal, TED sponsored the first PK-12 Lesson Design Competition in 2023. The competition recognizes educators, researchers, and academics who design original, hands-on, curricular materials (with an identified tool) that amplify or transform student learning in a PK-12 setting. Participants submit a lesson overview, a design prototype (made with the tool), and instructions for how the prototype will be used in the lesson.

2024 TOOL: BLOXELS

During the 2024 competition, participants interacted with Bloxels (n.d.) EDU Bundle kits and created lessons that incorporated self-designed Bloxels prototypes (see Figure 1). Bloxels allows users to generate original pixel art using eight distinctly colored block types and a construction frame to import into a video game design application with the goal of creating 13-bit games. Although Bloxels launched in 2015, several conference attendees mentioned that it was their first time hearing about this tool. Many people were intrigued by the colorful characters made with tiny blocks and stopped by the table to gain greater awareness of the tool.

Those who stayed longer explored and observed multiple uses that Bloxels might support. Strangers became colleagues as they helped others consider how Bloxels might be integrated effectively or creatively in lessons. For example, a small group formed around how the animation of characters might support a lesson in different ways. One participant animated a comet to serve as a hook for a content-specific lesson in ELA, and another discussed how to scaffold students learning to animate their own characters in a technology-focused lesson. The competition tables each year are a flurry of activity. They have provided experiences with new tools, expanded perceptions of possibilities, and advanced AECT's mission to lead the application of new technologies for learning (AECT, n.d.).



Figure 1 PK-12 lesson design competition table.

2024 WINNERS

The winners for the 2024 PK-12 Lesson Design Competition were Elisa Shaffer (Figure 2) and Brittany Musgrave Rivera (Figure 3) who both, serendipitously, created lessons for the fifth grade, wonderfully displaying the varying complexities and uses of the selected tool. To further amplify the voices of innovative PK-12 teachers and make their materials easy-to-access for others, these winning PK-12 Lesson Designs Competition lessons are published in this issue.

Elisa Shaffer's lesson, *Join the Sons of Liberty! Exploring 1773 Bloxels Boston*, engages students in a teacher-made simulation of the key events and figures associated with the Boston Tea Party. In this lesson, Bloxels serves to gain learners' attention, teach relevant content knowledge, and assess learners' understanding through the creation of a colonial Bloxels character.

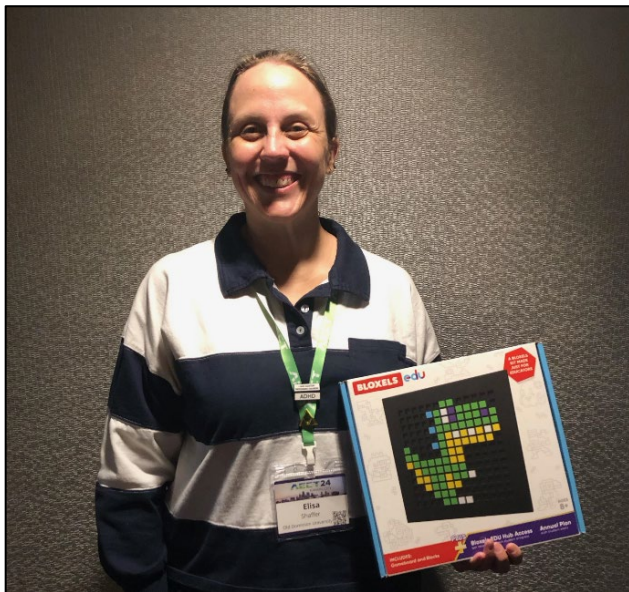


Figure 2. Elisa Shaffer with Bloxels (n.d.) EDU bundle.

In Brittany Musgrave Rivera's lesson, *Understanding Author's Purpose: 5th Grade Becomes the Authors!*, the Bloxels tool supports an English Language Arts lesson. The instructional materials provided (e.g., the infographic and rubric) help to guide and set expectations for students as they write and animate a brief narrative.

Bringing technology-rich learning representations to life during the PK-12 Lesson Design competition is

always exciting. While the novelty of the tool hooks people, the interactions between colleagues and the robust discussions of engaged learning through technology are the important outcomes of the annual event. Likewise, the competition's design products have been noteworthy outputs of a grander goal to support a community's professional growth through the design of technology-rich learning activities.



Figure 3. Brittany Musgrave Rivera with Bloxels (n.d.) EDU bundle.

According to Kopcha et al. (2020), "The act of designing technology-rich lessons opens the door to understanding how [technology integration] decisions are made and what impacts those decisions" (p. 743). With support from TED, AECT, and the *Journal for Technology Integrated-Lessons and Teaching (JTILT)*, the PK-12 Lesson Design Competition may be the door the broader community of PK-12 educators need to operationalize technology-integrated teaching and learning in a meaningful way. TED looks forward to welcoming new voices into the competition next year, engaging them in the design process, and continuing to celebrate the many award-worthy practices of PK-12 educators.

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