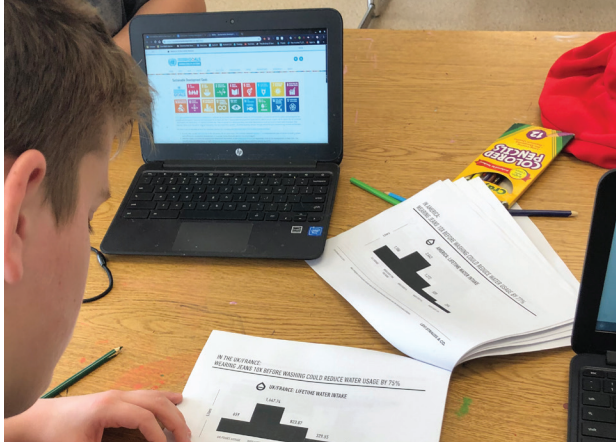
Artificial Intelligence Explorations

and Their Practical Use in School Environments

ISTE | GENERAL MOTORS



For Melissa Englert, a teacher and innovation and learning coach at Chillicothe Middle School in Missouri, artificial intelligence presented an opportunity to add an exciting new participatory component for students in her global citizenship class.

The students were learning about the environmental costs of manufacturing blue jeans. AI gave them the opportunity to try to mitigate those costs by creating a chatbot to educate people on how to change their shopping and laundry habits using guidelines from the UN Sustainable Development Goals.

"The chatbot project deepened students' understanding about both AI and environmental issues," Englert said.

Hands-on student learning with AI

"With the chatbot, students were able to act out conversations as if they were the bot," she said. *"This way, they were able to learn not only more about how AI actually functioned, but were able to comprehend and teach the material that they were actively learning."* This development process brought computational thinking skills around coding and algorithmic thinking to the classroom in a way that engaged and inspired students.

Englert's project with her students was part of her participation in the ISTE course *Artificial Intelligence Explorations and Their Practical Use in Schools*. The program introduces educators to AI and shows them how to incorporate it into project-based student learning.

Looking Ahead

With the AI project, Englert's students *"were able to learn not only more about how AI actually functioned but also use AI in design thinking to help understand real-life problems such as protecting the environment and using sustainable ways to manufacture blue jeans."*

Englert said the project also sparked questions about other big issues. *"We talked a lot about the ethics of AI and what our responsibility with technology is, so that was a real conversation starter with the students,"* she said.

The project was an encouraging introduction to AI in the classroom for Englert and her students, providing answers and sparking questions about AI technologies. *"I think technology and AI makes students more interested in projects and it prompts more questions and curiosity about topics,"* she said.

MELISSA ENGLERT

Innovation and learning coach and teacher

CHILLICOTHE MIDDLE SCHOOL

Chillicothe, Missouri

DEMOGRAPHICS

1,870 students in a rural school district; 90% white, 4% Hispanic, 2% African-American; 49% of students qualify for free or reduced price lunch

"I think AI can open the process of looking at how to apply information students have learned and to see it as a tool to learn more. Not only is there a learning aspect, but there is also a creative aspect in developing unique solutions to problems."

The International Society for Technology in Education is proud to offer extraordinary professional learning opportunities for K-12 educators, leaders, and edtech specialists through a GM grant-funded program, **Artificial Intelligence Explorations and Their Practical Use in School Environments**©. This initiative created an **online course** and **community of practice** that helps educators develop and share knowledge about using AI in classrooms. By bringing the power of AI to the classroom, the project helps educators cultivate future AI programmers by supporting student-driven AI explorations, targeting schools that serve student populations who have traditionally been underrepresented in the STEM workforce. This case study was completed as part of an external evaluation by **MN Associates**. To learn more about the initiative or join the hundreds of educators who have begun their AI in education journey, contact **ai@iste.org**.

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