Artificial Intelligence Explorations

and Their Practical Use in School Environments

SIÉ

GENERAL MOTORS







Lisa Coburn, a technology coordinator in the Westville School District in Westville, Illinois, had a twofold learning goal in mind in introducing a group of students to artificial intelligence: The students would learn about AI by creating an AI device that would facilitate learning for other students.

"I had hoped to make the entire classroom process easier for teachers, whether that meant helping students with special needs,

or how AI can help with classroom management, or how can AI help an English-language student practice verbal skills," she said. That interest in making teaching easier would, she reasoned, also lead to a better learning experience: "I wanted to facilitate more effective teaching and learning."

Hands-on student learning with Al

To accomplish her goal, Coburn supported her students to write a chatbot script to customize responses for a natural language recognition app for use in the classroom. The goal was to have it respond to simple, repetitive tasks, like asking students to line up for lunch, or to help with simple instruction. The idea was is to harness the power of AI to make teaching more efficient and, subsequently, effective, so that teachers would eventually use AI in lessons. Three of Lisa's students were able to showcase their projects to the public, including members of the Illinois State Senate and House of Representatives.

"I learned that students knew more than we did and they wanted to go above and beyond the AI that we had initially started with, so it was amazing to see that they are thinking three steps ahead," she said.

Looking Ahead

"Not only did they have to anticipate various responses to questions, but they had to anticipate what would happen if they received a response that they did not want," she said. "Maybe they had to change their wording, maybe the AI misunderstood...They had to map out the various paths that the AI could take, and how to accommodate and adjust to that."

Coburn found that because students already had experience with AI in their daily lives, mainly for their own entertainment purposes, looking at AI through a more educational lens was new but not difficult.

"I like to find creative ways to motivate all students to step outside of their comfort zone. Having them create chatbot scripts gives them an opportunity to be collaborative problem solvers....I just love how this project worked out and I'm excited to see where it can go from here," she said.

LISA COBURN

Technology coordinator

WESTVILLE SCHOOL DISTRICT

Westville, Illinois

DEMOGRAPHICS

1,323 students in a suburban school district; 92% white, 4% Hispanic, 1% black; 60% of students qualify for free or reduced priced lunch

"This program was a real eye opener in that I realized just how prevalent artificial intelligence is in our daily lives. Incorporating AI brought on more excitement with the students, so that was fantastic as well."

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 a bout the initiative or join the hundreds of educators who have begun their AI in education journey, contact ai@iste.org.