

Local views of artificial intelligence: Regulation and education (part two)

(As published in The Oak Ridger's Historically Speaking column the week of April 27, 2026)

Carolyn Krause provides a review of a unique Oak Ridge program discussing Artificial Intelligence. It may well be that Oak Ridge is one of the very few places where this discussion could be held and where four experts with credentials such as these could be found. I feel we often undersell ourselves and tend to overlook the very special aspects of being a Science City, a Secret City, an Atomic City, and do not give ourselves credit for being one of the only places in the world where scientific discoveries and dialog about special things take place routinely.

A panel discussion involving scientists and public policy experts who considered the potential benefits and harms of artificial intelligence (AI) was presented Feb. 10, 2026, at the Pollard Technology Conference Center of Oak Ridge Associated Universities. The AI panel kicked off the fourth season of "Our American Roots," which is produced by the Oak Ridge Breakfast Rotary Club and the Oak Ridge Institute for Continued Learning to help build bridges between cultures and communities.

The program, entitled "Railroads, Radio and Artificial Intelligence," initially tried to address two questions: "How do the challenges and opportunities of AI compare with those of the railroads and radio? What lessons can we learn from our knowledge about past disruptive technologies to help us prepare for the uses of AI and their consequences?"

Members of the panel were Stephen Streiffer, director of Oak Ridge National Laboratory; Lynne Parker, associate vice chancellor emerita at the University of Tennessee, former principal deputy director of the White House Office of Science and Technology Policy and former founder of the AI Tennessee Initiative; William Lyons, professor emeritus at UT and associate director at the Institute of American Civics at the Howard Baker School of Public Policy and Public Affairs at UT, and Ashley Stowe, chief research and university partnerships officer at Oak Ridge Associated Universities.

The panel moderator was Alan Lowe, executive director of the American Museum of Science and Energy and the Atomic History Campus at K-25. He provided information about the history of American railroads and radio and asked the panel his questions and later questions from the audience.

After mentioning the Elimination of the Fairness Doctrine in 1987 in the history of radio, Lowe asked, "Should different uses of AI be regulated without hampering our ability to stay competitive with others in the world?"

Stephen Streiffer suggested that the dangers of AI cannot be underestimated. He implied that an AI-enabled robot could easily develop a nuclear weapon because of the availability of instructions on the internet on how to build one. AI might even be able to design a new disease. AI is the first technology, he said, that enables us to use our fingertips to access literally the entirety of human information that is on the internet.

"We know there are dangers and we don't know how to react," Streiffer said. "I think there's going to be an active period over the next few years where people will be going back and forth with what the right approach is. And we've got to get the right balance for the future of the world."

Ashley Stowe said that one AI area the government may be regulating early is the use of electricity by power-hungry AI data centers. He noted that Elon Musk's 300-megawatt xAI data center (the Colossus supercomputer) in Memphis "has gotten tremendous pushback from neighbors," who are mostly Black residents. The facility is powered by unpermitted methane gas turbines. They emit pollutants that can cause respiratory diseases and cancer. To cool the computers, xAI draws excessive water from the source of the city's drinking water.

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Streiffer said that companies like NVIDIA, Microsoft, Google, Amazon and the rest of the big-tech companies' ecosystem realize they should pay for the electricity they use for their data centers. "They are willing to do that so they can make money training their AI models," he added.

The AI data centers right now use about 4% of U.S. electricity, and over the next five years, they will probably consume about 10% of the nation's electricity, Streiffer noted. "For the first time in a couple of decades, the U.S. is seeing a general growth in electricity and energy demand overall. The problem is not AI, but it is AI that is hitting at a time when we already have an energy supply that's stretched." He said that one solution is to co-locate the electricity producers with the data centers. "It doesn't help if you have a lot of electricity in one part of the country when you actually need a lot more in a different part of the country," he added.

Lynne Parker offered a different perspective on the question about AI regulation.

"AI can be regulated as a technology, and that's what the European Union has attempted to do," she said. "They have put in place what's called the EU AI Act, which regulates AI writ large. And it has not been particularly well-received because it's trying to regulate all AI as a technology. That's an approach that the United States is not following.

"There is a lack of congressional regulation that works for all states. All 50 states are doing their own version of regulation so there are now thousands of bills across the country regulating AI. That means that companies that want to have an AI system that will operate in all 50 states will have to abide by 50 different sets of regulations."

She said that the president signed an executive order recently that states that the White House will work closely with Congress to write one federal rule governing the uses of AI that will apply to all 50 states. Her conclusion: "I think there will be regulation, but I'm personally hopeful that it will be sector-specific so then you can look at particular tasks rather than AI as a whole."

Bill Lyons said that "another way to regulate AI is by lawsuit. You can't really regulate social media, but you can sure sue people for damages."

A prompt to Google Gemini in reference to Lyons' comment elicited this reply: "Yes, there have been several high-profile lawsuits involving AI chatbots and user suicides. These cases have sparked a major legal and ethical debate over whether AI companies can be held liable for 'wrongful death' when their technology is accused of encouraging self-harm or creating dangerous psychological dependencies."

Lowe's final question was about the best ways for teachers and students to use AI in education and the potential pitfalls. "How do you distinguish between those uses that are very positive and those uses that can have potentially negative impacts?"

Stowe said, "If you have a Microsoft product with Copilot built in, you use text, it can write the code, copy, paste, and you have the answer. But that doesn't remove our responsibility to think. And so, shifting the way that we educate to focus more on critical thinking, embracing technology and teaching how to use the tools in the classroom makes possible a Socratic method of learning involving a conversation between a teacher and a student."

Lyons commented on education several times during the discussion. He noted that businesses want to make tasks easier and employees more efficient. It is well-known that ChatGPT can help employees write better emails and reports faster. But in the enterprise of education, he said, the goals are to teach students how to think and communicate, "not to get an outcome as quickly as possible" such as an AI-drafted essay in an attempt by the student to complete an assignment in time. The challenge, he added, is to teach students how to use AI tools to aid them in critical thinking.

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Stowe noted that AI can help teachers determine which students in a classroom have gaps in their learning and what the gaps are. The goal is to close individual students' learning gaps quickly, so they're not left behind in the class.

Stowe said that AI can be a private tutor but then asked the question, "How do I know if I can trust that private tutor?" His response was to "reach out to humans to test the information you're getting" and also "use more than one AI model," such as both ChatGPT and Google Gemini, "to gather information and compare outputs to test the accuracy of the information produced within different models. Use AI to validate AI."

"I'm a big advocate for teaching the teachers, particularly K-12 and maybe community college instructors to prepare our students for the AI jobs of the future," Lynne Parker said. "We need to be proactive and intentional and create programs and resources that can train teachers to be AI literate. We need examples of how AI can be used effectively in a classroom to help the teachers in their teaching, as well as students in their learning. Our children's futures depend on being able to use AI well."

Lyons said that the question of how AI can help in the teaching of humanities is unresolved. "The humanities especially are under threat at most universities," he noted. "People get frustrated over what value do they add. What the response in classrooms of my colleagues has been is to bring out the blue books and the pencils and hide all the technology."

"I think the humanities will be reconfigured to teach students to understand how humans operate, how they deal with others and how to react to them in a sensitive way. I think AI is going to empower teaching."

Lowe joined Lyons in defending the humanities. "A history major like me is the director of science museums," Lowe said. "We talk a lot at our museums about STEM and workforce development. But at the end of the day, we want well-rounded employees with soft skills." Lowe implied that education is more than "memorizing an aggregation of zillions of facts." A good education, he suggested, promotes an understanding of what is human, creativity and "what we might call wisdom."

Thank you, Carolyn, the AI Panel has amazing breadth of knowledge on AI, and you have captured it well. The third of the three-part series will continue the discussion by the panel and share even more AI insights.

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The AI Panel of William Lyons, Ashley Stowe, Alan Lowe, Lynee Parker, Stephen Streiffer, and Megan Millwood President and CEO of Oak Ridge Associated Universities (Courtesy of Ray Smith)

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Lynne Parker presented "Introduction to AI in 5 Minutes" to start the panel discussion (Courtesy of Ray Smith)