

#219 — Preparing Students for an AI World

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SPEAKERS

Paul, Transition

Paul Beckermann 0:01

Welcome to Tech Talk for Teachers. I'm your host, Paul Beckermann.

Transition Music 0:05

Check it out, check it out. Check it out. Check it out. What's in the tool kit? What is in the tool kit? So, what's in the tool kit? Check it out.

Paul Beckermann 0:17

The topic of today's episode is Preparing Students for an AI World. In the last 10 months, artificial intelligence or AI has taken the world by storm. It's dominated headlines and has been a steady topic of conversation. Thought leaders are even beginning to refer to this as the age of AI, or the fourth industrial revolution. To put that in context, it means that people are equating the impact of AI to the impact of past inventions like the steam engine, electricity, and the computer. That's a big deal. Since each of these innovations fundamentally changed how we work and how society functions, increasingly, many people believe AI will have a similar impact. The World Economic Forum released a Future of Jobs Report this year, predicting that AI will disrupt 44% of existing worker skills. Some jobs they say will be replaced by AI, particularly those jobs with repetitive tasks that can be easily automated. And we're already seeing this in check-in kiosks at airports and AI-powered customer service bots. Whereas those previous revolutions typically disrupted blue collar jobs, artificial intelligence is poised to have the most significant impact on white collar jobs. Now, while some jobs may be lost, especially as I mentioned in white collar jobs, others will be created.

The Future of Jobs Report predicts that as many as 13 million new jobs may be generated by the AI industry and its offshoots. This research also suggests that 75% of companies are looking to adopt AI tech in the next five years. Essentially, that means that the vast majority of jobs will be impacted in some way by artificial intelligence. With such impactful changes on the horizon, schools will need to get involved and adapt in ways that prepare students for an AI-infused world and workforce. This is going to be complicated work, but it's not too soon to begin. So in

the podcast today, I'm going to suggest five ways that schools and educators can get started with this work.

Transition Music 2:34

Here are your five, your five...here are your five tips.

Paul Beckermann 2:40

Number one, educators need to learn about AI. With generative artificial intelligent apps like ChatGPT, Bing Chat and Google Bard still in their relative infancy, it's likely that many educators are in the dark about exactly what these tools are and what they can do. If we as educators, however, are going to lead and support our students, we need to learn as much as we can about it and engage in the conversation. The best way to do this is to set up an account and try it out. On many platforms, it's free, quick and easy to do. For example, you can go to chat dot open ai.com and quickly set up a free ChatGPT account. This is a really good place to start. The interface is very simple, with a single search box at the bottom, and a little arrow icon to click in order to submit the query. Although it's not connected to the live web, it feels a lot like a Google search. One good task to start trying out is to brainstorm lesson ideas. Maybe search for activities to teach your grade level a certain concept, or perhaps ask for authentic ways to assess a certain academic standard. These chatbots are really conversational and great at brainstorming. And they're open to follow up questions. So talk to it like you would a human being. Try it out. And I think you'll be instantly more comfortable with this type of AI. Using it goes a long way toward demystifying it.

Number two, educators must engage in the conversation. I mentioned this earlier. but as a collective, educators need to talk about AI and plan a path forward. These plans will undoubtedly change. After all, AI is evolving daily. Nonetheless, we need to start. We should ask questions like what do we need to learn about AI? What potential benefits can it offer us as educators? What are the risks it presents to our current way of teaching and in what ways do we need to modify how we do things? Most importantly, we need to ask how we can empower our students so that they can be successful in an AI world. It can be really helpful to develop a district or school plan, as well as an individual action plan to help guide your personal path forward. Ideally, these plans should be in alignment with each other. While we will need to be ready to revise our plans on a regular basis, we can't wait until we have all the answers to begin the conversation. If we do that, we'll never start.

Number three, teach students about AI. If our students are going to succeed in an AI world, they need to learn about it, the International Society for Technology and Education, or ISTE, in their introduction to Hands-On AI Projects for the Classroom, a Guide on Ethics and AI states: We believe that, in order to be successful in school and in life, all K–12 students need a foundational understanding of what AI is, how it works, and how it impacts society. AI education is important across all subject areas, not just computer science classes. The authors also add, we are convinced that the language of future problem-solving will be the language of AI. Similarly, Alex Kotran, co-founder and CEO of aiEDU believes the need to teach AI is urgent. In a recent interview with The Hill, he said, "I would say if in three years, every single student in

America doesn't learn about artificial intelligence while they're in school, we will have massively failed." Now this may sound like an intimidating task and a big challenge. But fortunately, teachers don't have to be the experts in AI to introduce it to their students. There's some great resources already created for us to use, and many are free. For instance, the AI education project or aiEDU has created a wide variety of activities for teachers. They have an introduction to AI module, a collection of AI snapshots, which are 5-minute activities for students to engage in conversations about AI, and even a project dashboard with a 10-week project-based curriculum. These are posted and available for free on their website at aiedu.org. The Day of AI website from MIT also has free curriculum and activities and ISTE offers a guide for teachers called Hands-On AI Projects for the Classroom. We'll post links to these resources on our podcast page at AvidOpenAccess.org. You can also find them by doing a web search.

Number four, help students develop future workforce skills. The World Economic Forum's "Future of Jobs Report" states that the top six most in-demand workforce skills of the future will be analytical thinking, creative thinking, resilience, flexibility and agility, motivation and self awareness, curiosity and lifelong learning and technology literacy. These are all transferable skills that will benefit students in any context. In a rapidly changing world where the future of work seems uncertain, these skills will benefit students regardless of their career path. So in that context, we need to develop learning experience that gives students opportunities to acquire these skills. That means using a lecture worksheet, test-learning format, will likely not get the job done. Our students will need to engage in creative projects, problem solving scenarios, project based learning, inquiry and high level discussion. Now this doesn't mean we need to throw out everything we're doing now. Not at all. Teachers are doing amazing work every day to empower our students. What it does mean, however, is that we need to be intentional about designing our lessons so that they're student-centered, challenging, and preferably a bit open-ended. These types of experiences will help students learn the skills they will need, and empower them moving forward.

Number five is a little more complicated and will vary depending on the age of your students. Number five is, whenever possible, engage students in using artificial intelligence. While it's important to teach them about AI, it's not going to be enough to fully prepare them to use AI effectively in the future. For them to become proficient at using it, they need to actually get their hands on it and use it. The terms of use for each platform will drive much of this. So currently, it seems that most generative AI tools require users to be at least 13 years old, some older than that. If your students are old enough to use it, and your school allows it, consider how you can structure guided learning experiences around it. You'll certainly want to establish clear expectations and have some guardrails in place for proper use. And if your students are too young or don't have access to using it themselves, you can model it and use it as a class, getting prompt suggestions from your students while you drive at the keyboard. Perhaps have your students analyze the results of an AI query, maybe checking for accuracy. And don't forget, you probably already have access to some student-appropriate AI in your classroom, tools like Grammarly or spellcheck, or maybe even Khan Academy's Khanmigo. These are good places to introduce AI to students and help them understand how the artificial intelligence is helping them in their work. Call them out as examples of AI tools when you're using them.

There are certainly other ways to empower students for work and life in the AI revolution. But these five might be a good place for you to start. Above all, keep learning and engaging in the conversation. Our students are counting on us to prepare them for their future.

To learn more about today's topic and explore other free resources, visit AvidOpenAccess.org. Specifically, I encourage you to check out our collection of articles about AI. You can find it by going to AvidOpenAccess.org and searching for "AI in the K–12 Classroom." And, of course, be sure to join Rena, Winston, and me every Wednesday for our full-length podcast, Unpacking Education, where we're joined by exceptional guests and explore education topics that are important to you. Thanks for listening. Take care and thanks for all you do. You make a difference.