Episode: <u>History of AI in Education Explorer</u>

Series: Al in the Classroom

Produced by: Digital Futures Institute, Teachers College, Columbia

University

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Hey, I'm Blake Danzig. I'm a doctoral student in the Instructional Technology and Media program at Teachers College. We've got lots of questions about what is generative AI in education. A lot of people feeling like this is very new. What do I do with this here? And they've been barraged with tons of messaging, and new tools, and new creations in AI and education. So, to really help them find their footing, this tool aims to help them explore the different multi-layered, intertwined histories of AI and education.

This tool was originally created as part of an overall generative AI in education course that we are creating for the instructors here at Teachers College. For everyone to have an ability to kind of work towards designing for the future, we really need to kind of understand how we got to where we are. How did we get to the point of discussing AI and what the benefits are for education?

What falls under the umbrella of AI and education? At first, that may seem like a simple question, but when you start to break it down, you realize there's pre-education, K through 12, higher education, professional development. You have things in AI like natural language processing, machine learning, AI tutors, using AI for generating new lesson plans, all sorts of things. So, this kind of allows learners to explore through the space what these different historical elements are. What we have here is the history of AI and education explore. As you kind of scroll through, we have all different kinds of views. In this initial view, you can see all the different milestones, you've got the visuals, you have the year, you have different tags, you have explanations of what they are. But, you can also go deeper into the specific examples.

You can see we have preset timelines. Also, we have other kinds of views. I've made one for all the chatbots. So, you have a really quick overview that starts in 1966 with ELIZA and lets you move through and see all the chatbots up to Claude for Education, which happened recently. But, let's say we go into ELIZA, we've also included cool emulators. So, in the ELIZA project for example, we actually have a built-in emulator of the initial tool. So, I can actually click on here and type in it says, "How do you do? Please tell me your problem." And I can say, "I am feeling tired today." "Is it because you're feeling tired today that you came to me," it responds. So, we allow for lots of actual testing and tinkering with some of these early tools, really to allow people to play with it and explore. Because, a goal for this tool is to really be more than just, "I'm telling you a timeline. These are the key points."

But, really to allow people to explore and play with the history and play with the different tools to make meaning out of it for themselves as well in their different projects, and within their work in the context of education. One thing that was really cool that I discovered as I was making this tool, and as I was going through the history, was really how much education was involved from the very beginning of the development of AI. And you start to see these people who were now siloed as AI researchers or education researchers, were actually working across both of these. You have people like Seymour Papert, whose early labs were actually AI labs. And you start to see how our early studies of understanding humans and understanding computers were intimately intertwined. And it's interesting to trace that and how that emerges throughout the history and the way we think about computers and the way we think about humans interaction with computers.

For the next step of this project, my plan is to design different landing pages for different use cases at TC. You may have some students who are brand new to a field and want to get a general overview. Maybe you have a professor who's giving a lecture on Al and education. Or perhaps a student for their big IP project for their master's thesis wants to really dive deep into Al in one area of education. So, I'm going to create different specialized pages that invite those different use cases to more easily use the tool.