Enhance learning with AI-powered study tools built for higher education.

See how it's possible.
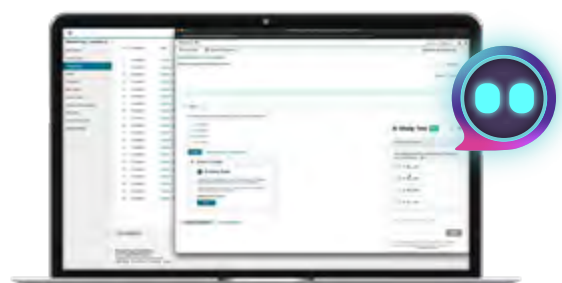
»Pearson

# In today's rapidly evolving educational landscape,

Artificial Intelligence (AI) has become a key player in shaping how knowledge is imparted and absorbed. At Pearson, we understand the wide range of feelings instructors have about integrating AI into teaching and learning. On the one hand, many thought leaders believe AI offers unprecedented opportunities for personalized learning and enhanced student engagement. When ChatGPT was released, Sal Khan from Khan Academy said AI was poised to cause the "biggest positive transformation that education has ever seen." Ethan Mollick, Associate Professor at the Wharton School of the University of Pennsylvania, has written about how generative AI (GenAI) could "democratize the creation of new tools for learning and teaching," allowing instructors to use the technology in transformative ways. Alongside these

promising benefits, concerns about misinformation, cheating, and the changing role of teachers are legitimate and growing. For instance, recent studies, including one from the University of Pennsylvania, have demonstrated how AI tools like ChatGPT, if misused for quick answers, can lead to poorer learning outcomes. These concerns underscore the critical need for thoughtful, educator-driven AI implementations. At Pearson, we are committed to navigating these complexities to develop AI solutions that not only respect the invaluable role of educators but also genuinely enhance educational experiences.

Insights into our journey

Understanding the needs and constraints of students is at the heart of our AI-powered study tools development. At Pearson, we regularly survey students to understand their study practices and preferences. In fact, our recent survey on using GenAI for learning reveals that students often require extra support when tackling challenging topics. 63% of students who currently use GenAI for learning use it to answer their questions and clarify concepts and 44% want GenAI to walk them through how to answer a problem without giving them the solution. The reality of students' schedules also means they often need this support at times when instructors are not available, like late at night. Recognizing these realities, Pearson's AI-powered study tools are designed to provide this crucial, just-in-time support, right when students need it most.
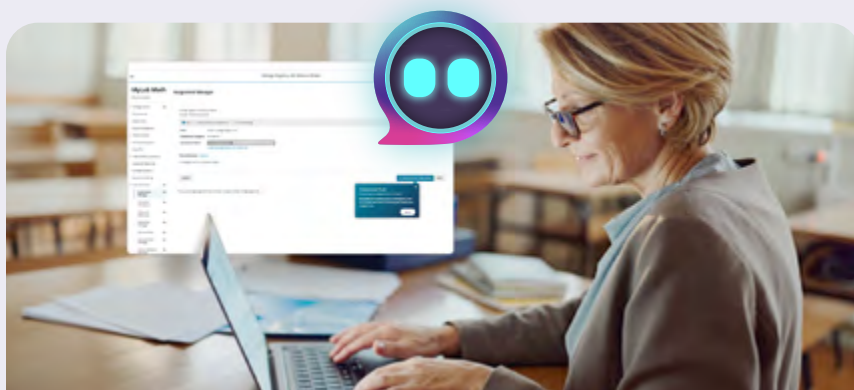
Other reasons to choose our AI-powered study tools

They're intuitive

A user-friendly interface enables student use without extensive training.

They're safe to use

All sensitive personal information is handled responsibly and protected from unauthorized access or misuse.

They're part of an all-in-one learning experience

We've seamlessly integrated the AI-powered study tool into our MyLab® and Mastering® platforms offering an uninterrupted learning experience.

Our eTextbooks (eTexts) now feature the AI-powered study tool, a co-pilot that assists students as they navigate through their reading materials, providing personalized and timely support in various forms. When a student encounters a difficult section or concept, the AI-powered study tool generates simplified explanations that make complex material more accessible. Furthermore, it produces concise summaries of chapters or sections to help students focus on key topics, along with practice materials such as multiple-choice or short-answer questions specific to chapters, sections, or topics.

In our MyLab and Mastering platforms (MLM), the AI study tool offers an additional layer of personalized support. Here, students can interact with a wide array of practice problems. When students need a little help answering a question, the AI-powered study tool walks them through a set of scaffolded multiple-choice questions that cover steps or prerequisite knowledge needed to solve the problem. Students can also chat with the tool to get clarification on concepts and key terms that are important to know when solving the problem.

We recognize the potential of AI to alleviate some of the routine, administrative burdens that instructors face, thereby enabling them to spend more time on meaningful interactions with students. To that end, our AI-powered instructor tools are designed to assist faculty in managing and preparing course content. They automate the creation of assignments by generating them based on specific inputs, such as the number of questions, their difficulty, and the topics covered. This not only saves valuable time but also ensures that the assignments are perfectly tailored to meet course objectives and enhance learning outcomes.

The Pearson difference

Pearson recognizes the concerns educators and students have regarding the use of GenAI tools like ChatGPT, particularly around the accuracy of content and data security. To address these, our AI-powered study tools are meticulously designed to ensure the information provided is both precise and secure. Unlike general AI platforms, our eTextbook AI-powered study tool pulls from vetted Pearson content, using a process called retrieval augmented generation (or RAG). For example, when a student requests an explanation on a specific topic, the tool is supplied with information relevant to that topic from the textbook, promoting accuracy and ensuring responses are tailored to the textbook. In our MyLab and Mastering platforms, the AI-powered tool has similar access to verified solutions for practice problems, ensuring the tool guides students through problem-solving processes accurately. Prior to launch, our AI-powered study tools are robustly tested by content experts, allowing us to identify and correct any potential inaccuracies. Moreover, we prioritize data privacy by ensuring that interactions with our AI-powered study tool are not shared with the provider of the AI model or used to train external models, maintaining a secure environment that respects the privacy of users.

In contrast to generic AI tools like ChatGPT, our AI-powered study tools are designed with learning in mind. Our tools are grounded in a robust framework of evidence-based, Learning Design Principles. For instance, learning is most effective when it pushes students beyond what they can do on their own but can still be completed with support. Our MLM tool offers exactly this type of scaffolded support, guiding students through the necessary steps to solve a problem, rather than simply giving them the answers.

Many learning activities are passive and involve simply receiving information. Making learning more active supports deeper cognitive engagement and stronger learning gains. Attempting to recall information from memory by answering practice questions is an effective active learning strategy, and this is a core feature of our eText tool. Students can ask ChatGPT to give them practice questions, but we've made this process more seamless and offer practice questions aligned to individual textbook chapters and sections, along with specific topics. Furthermore, active learning is complemented by immediate and constructive feedback. Within our AI-powered study tools, when students tackle practice questions, they receive detailed explanations that not only address why certain answers are incorrect but also reinforce why the correct responses are right. Students won't get this from ChatGPT without some very thoughtful prompting, a skill most students do not currently possess.

Evidence of outcomes

It is important that we understand how students are using our tools and the impact this might have on their experiences and outcomes. Analysis of usage data and student surveys reveal several exciting trends.

Overall, students are quite satisfied with the AI-powered study tool. In a survey conducted during the Fall 2024 semester, more than three-quarters of users found the tool helpful or extremely helpful. Usage patterns also suggest that students are using it at times when they can't get help from instructors. In Fall 2024, around 60% of all usage happened between 9:00 p.m. and 8:00 a.m.

Usage patterns revealed that students are primarily using the tools to ask questions (and are not just asking for the answer to their homework). In Fall 2024, 74% of tool interactions were asking questions about or requesting explanation of book topics. We conducted a detailed review of student questions in Campbell Biology to better understand the types of questions students ask. Students mostly used the tool for foundational learning, such as seeking help remembering factual knowledge (e.g., asking for definitions) or understanding conceptual knowledge (e.g., asking for explanations of how different ideas are related). However, a meaningful minority of the questions (32%) indicated higher levels of cognitive engagement, with questions reflecting application, analysis, and evaluation. These findings counter concerns that AI is dumbing things down or causing students to turn off their brains.

In interviews, several students noted how the experience was different from just using ChatGPT. One student said, "ChatGPT, I don't feel is very reliable. But with the AI in the Pearson book, I felt like that was pretty reliable because the information was coming directly from the book." Students were also satisfied with the detail and complexity of the explanations in the AI-powered study tool. As another student states "I did use ChatGPT a lot, but ... I have some issues with that. ... I feel it can tend to go too in-depth with something ... I need a simple explanation to start. Then I can go into that deeper portion and learn more about it. I definitely feel there's those levels ... in the Pearson AI."

Most encouraging is that using the AI-powered study tools appears to push students to be more engaged users of the eText in general. Of the students who were not engaged in their eText during Spring 2024, the ones that went on to use the AI study tool in Fall 2024 were 2.6 times more likely to become actively engaged. Actively engaged students more frequently display effective learning behaviors such as highlighting/bookmarking, taking notes, revisiting notes and highlights, and self-testing. They also tend to have more frequent study sessions in the eText, and their sessions tend to be longer than those of students who aren't using the AI study tools. These findings suggest that students are using the AI-powered study tools as an effective supplement to their other digital learning materials.

Pearson's AI-powered study tools are not just technological innovations. They are part of our broader commitment to use technology in a thoughtful way to empower educators and enrich the learning experience of students. Since the beginning, students and instructors have been at the heart of our AI-powered study tools, and we will continue this partnership as we refine and enhance these tools. Together, we can embrace the potential of AI to transform learning while addressing the challenges it brings, ensuring that our educational tools serve as valuable allies to students in their learning journeys.

Learn more about the AI-powered study tool.

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