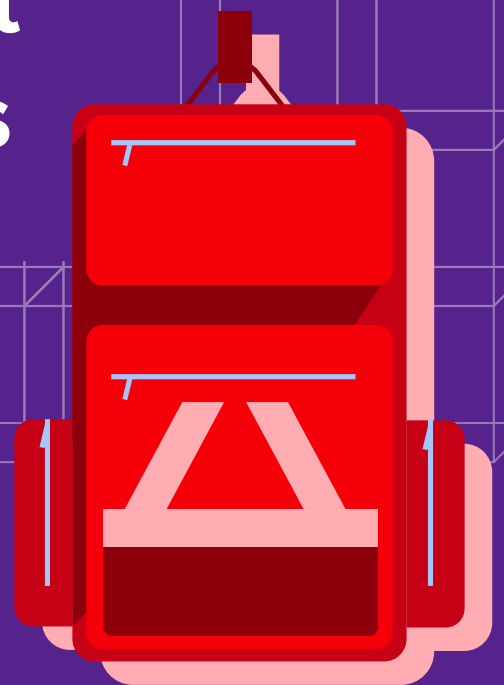


What medical students' AI study habits mean for teaching, assessment and clinical readiness



**A report designed for faculty, grounded in research
conducted with medical students.**

Introduction

Medical students are already using AI to reshape how they learn. But what does that mean for the people who teach them?

To better understand how AI is influencing medical education, we surveyed medical students about how they use AI in their studies, from revision and concept explanation to clinical reasoning, prompting behaviors and trust in AI-generated information. The findings reveal more than changing technology habits. They offer a window into how learning itself is evolving.

This report explores what those findings mean for medical educators. Drawing on student responses alongside wider developments in medical education, it examines the implications for teaching, assessment and clinical readiness, and considers how faculty can help students use AI safely, critically and effectively.

About the research

This report is based on original research conducted by McGraw Hill, exploring:

- **AI adoption and frequency of use**
- **Study behaviors and workflows**
- **Clinical reasoning and case-based learning**
- **Prompting and AI literacy**
- **Trust, verification and perceived risks**
- **Institutional guidance and support**

Drawing on the survey findings, this report explores what medical students' changing AI study habits mean for educators, and how teaching, assessment and curriculum design can evolve to support safe, effective and clinically relevant learning.



Research methodology

This report draws on original survey research conducted by McGraw Hill among medical students, exploring AI adoption, study behaviours, clinical reasoning, prompting habits, trust and verification, and institutional guidance.

A single 26-question survey - combining multiple-choice, open-ended, scale-rating, and yes/no questions, was distributed via two channels: a self-completion questionnaire (Typeform) sent to McGraw Hill's medical education database, and a linked poll series posted to the Boards & Beyond Instagram community between 8 April and 10 May 2026.

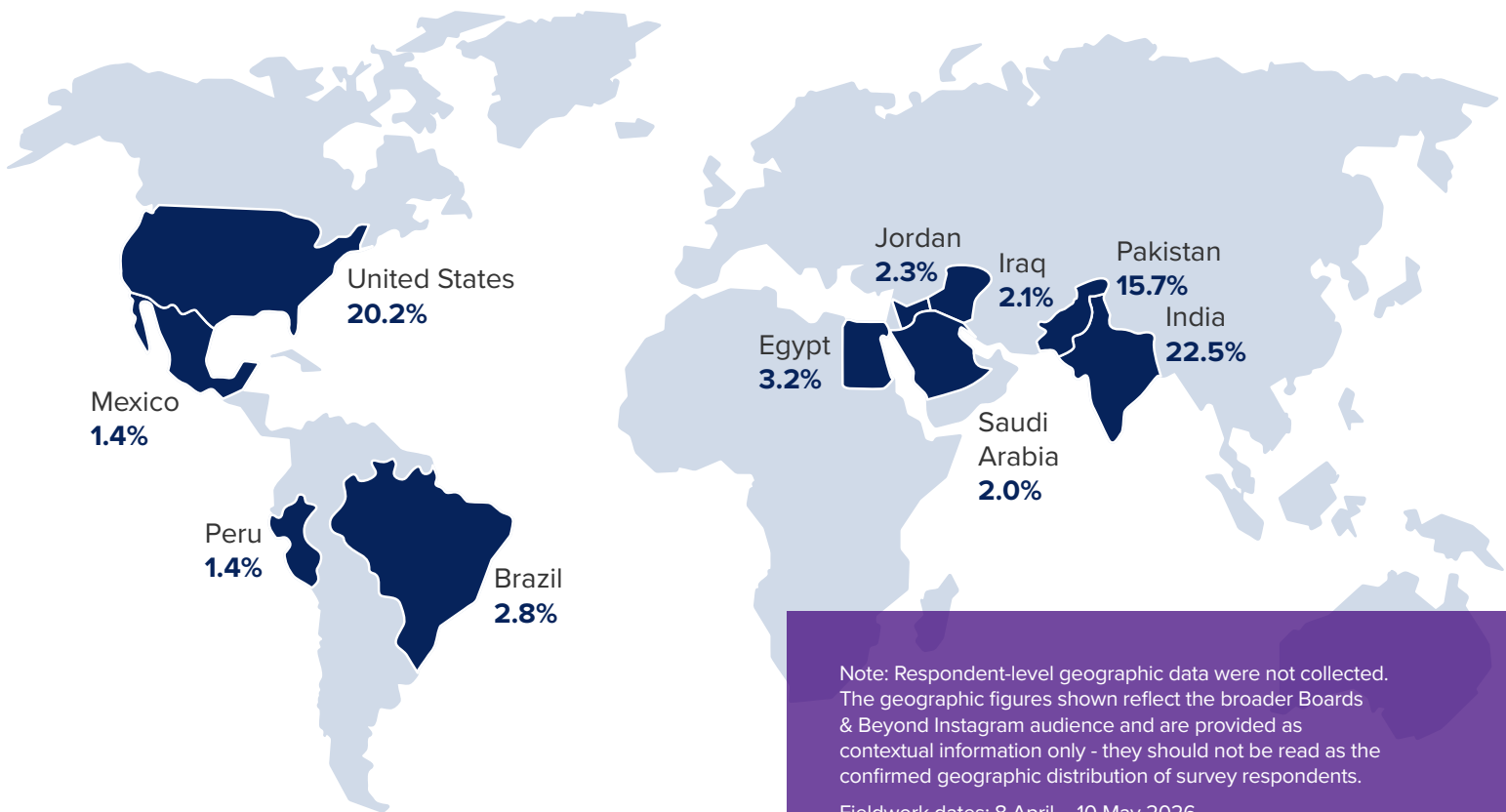
Given the self-selecting nature of the sample, findings should be read as directional and reflective of an engaged, AI-attentive segment of the medical education community.

Sample size
2,871 poll responses

Respondent profile
Self identified

2nd-year medical students	International medical graduates
43.75%	6.25%
4th-year medical students	Medical graduates
18.75%	6.25%
Postgraduate medical trainees/ residents	
25%	

Geographic context: Boards & Beyond Instagram audience



Note: Respondent-level geographic data were not collected. The geographic figures shown reflect the broader Boards & Beyond Instagram audience and are provided as contextual information only - they should not be read as the confirmed geographic distribution of survey respondents.

Fieldwork dates: 8 April – 10 May 2026

Key finding 1:

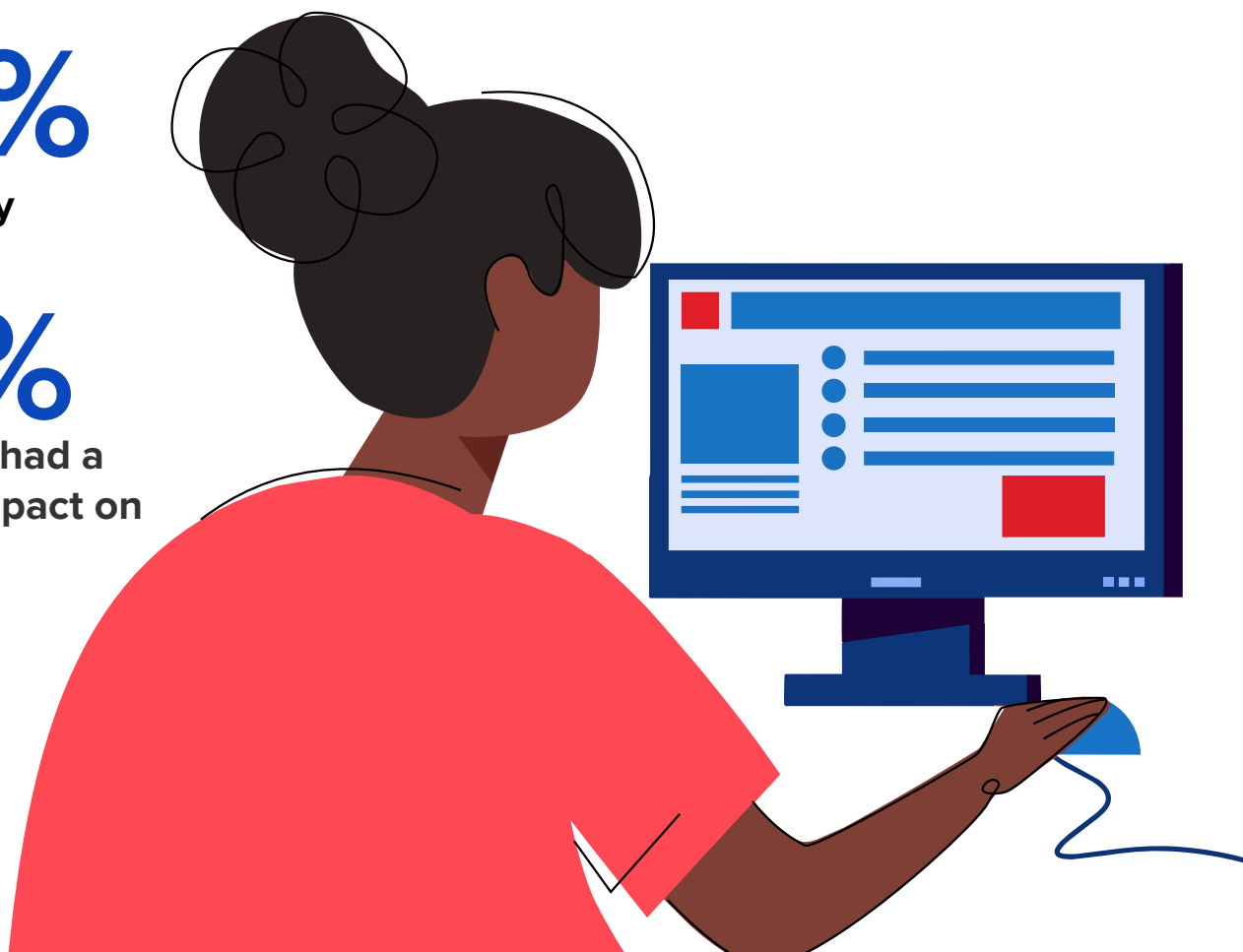
The learning model has already changed.

73%

use AI daily

91%

say AI has had a positive impact on their study



"I use AI alongside my lecture notes to explain concepts I don't fully understand."

What this suggests:

AI has become part of the everyday study routine for many medical students. Students increasingly describe AI as one tool within a broader study routine, alongside textbooks, question banks, flashcards and lecture materials.

Rather than replacing traditional resources, students are integrating AI into established study routines to explain concepts, reinforce understanding and support revision. This shift suggests that the assumptions underpinning many teaching approaches may no longer reflect how students actually learn outside the classroom.

What faculty should consider:

The widespread use of AI creates new opportunities for personalised and self-directed learning, but gives faculty less visibility into how students are learning and validating their knowledge outside formal teaching. This makes it increasingly important to understand the tools and approaches students are using independently, and consider how teaching and assessment can adapt accordingly.

Key finding 2: AI is filling gaps in immediate support, explanation and feedback



74%

use it to explain difficult concepts and revise

61%

use AI conversationally to ask follow-up questions

"When professors are not available, [AI tools] help me explain complex concepts."

Students aren't replacing learning - they're enhancing it.

Top use cases:

- Explaining complex concepts
- Creating study materials
- Practice questions
- Revision support
- Clinical reasoning
- Summarizing content

What this suggests:

Students are using AI to deepen understanding, not simply to find quick answers. This seems less about replacing learning and more about replacing waiting. This generation of medical students increasingly expect immediate clarification, personalized explanation and on-demand feedback. AI is meeting those expectations in ways traditional teaching cannot always provide outside the classroom.

What faculty should consider:

Students are turning to AI not only when faculty are unavailable, but increasingly because it offers something traditional teaching does not always provide: immediate clarification, repetition on demand and personalised feedback. Faculty have an opportunity to consider how the learning experience itself can evolve to meet those expectations.

Key finding 3: Students are developing their own approaches to AI

64%

report receiving little or no AI guidance from institutions

84%

prefer AI connected to trusted medical resources



"I taught myself how to write better prompts."

Student adoption is outpacing institutional guidance. As AI becomes embedded in study routines, many students are developing their own approaches with little formal direction.

What this suggests:

Many students are learning how to use AI through trial and error rather than formal education.

What faculty should consider:

AI literacy is developing informally. Without shared institutional guidance, students may develop inconsistent learning habits, while faculty are left to navigate AI adoption independently. This presents an opportunity for medical schools to establish common expectations around responsible AI use.

Key finding 4: Clinical reasoning is becoming the new differentiator

77%

simulate clinical reasoning through AI



"I ask AI to walk me through differential diagnoses."

As AI becomes better at retrieving knowledge, the uniquely human skills at the heart of medicine become even more important.

What this suggests:

The use of AI has moved beyond revision support. Increasingly, students are using it to practise the kind of thinking that sits much closer to real clinical decision-making before stepping into clinical settings.

This changes the educational conversation. If AI can increasingly retrieve information and suggest possible diagnoses, the value of medical education shifts even further towards developing the skills AI cannot replace: interpreting evidence, managing uncertainty, weighing competing possibilities and making sound clinical judgments.

The question is no longer whether students should use AI to support clinical learning. It is how institutions can ensure that AI strengthens clinical reasoning rather than shortcuts it.

What faculty should consider:

- Setting clear expectations for when and how AI should be used in clinical learning.
- Designing activities where students must explain and justify their reasoning, rather than simply provide an AI-generated answer.
- Teaching students to critically evaluate AI outputs, identify inaccuracies, and verify information against trusted clinical sources.
- Using AI-supported cases and simulations to practise differential diagnosis, decision-making, and management in a structured environment.
- Creating opportunities for students to compare their own reasoning with AI-generated suggestions and reflect on differences.
- Ensuring assessments continue to evaluate independent clinical reasoning and judgment, not only the ability to reach the correct answer.

Key finding 5: Assessment needs to evolve

88%

have received incorrect or misleading AI responses

60%

consistently verify outputs



The challenge is no longer whether students use AI, but how medical education helps them demonstrate sound judgment when they do.

What this suggests:

Students are already aware that AI isn't infallible. The challenge is helping them move from recognising that risk to consistently applying critical judgment when using AI-generated information.

As AI becomes part of everyday study, the educational challenge shifts. Students don't just need to find information quickly. They need to evaluate its accuracy, recognize its limitations and apply it appropriately in different contexts.

What faculty should consider:

Assessment has an opportunity to evolve alongside student learning. Rather than focusing solely on what students know, assessment can increasingly reveal how they think. Tasks that require students to explain their reasoning, evaluate AI-generated responses, justify clinical decisions or compare alternative approaches can help develop the judgment and critical thinking that remain essential in medical practice.

This isn't about assessing whether or not a student has used AI. It's about assessing whether they can question it, evaluate it, and apply it with confidence.

The resulting opportunity for faculty

As AI becomes embedded in learning, shaping how students engage with it through building AI literacy to strengthening reasoning, judgment and application is becoming increasingly important.

1. Recognize AI as part of today's learning environment

Students are already integrating AI into their learning, regardless of where institutional guidance is today. Teaching should begin from the reality of how students already learn.

2. Make AI literacy an explicit learning outcome

Don't assume students know how to prompt effectively, verify responses or recognize limitations.

3. Focus teaching on reasoning, judgment and application

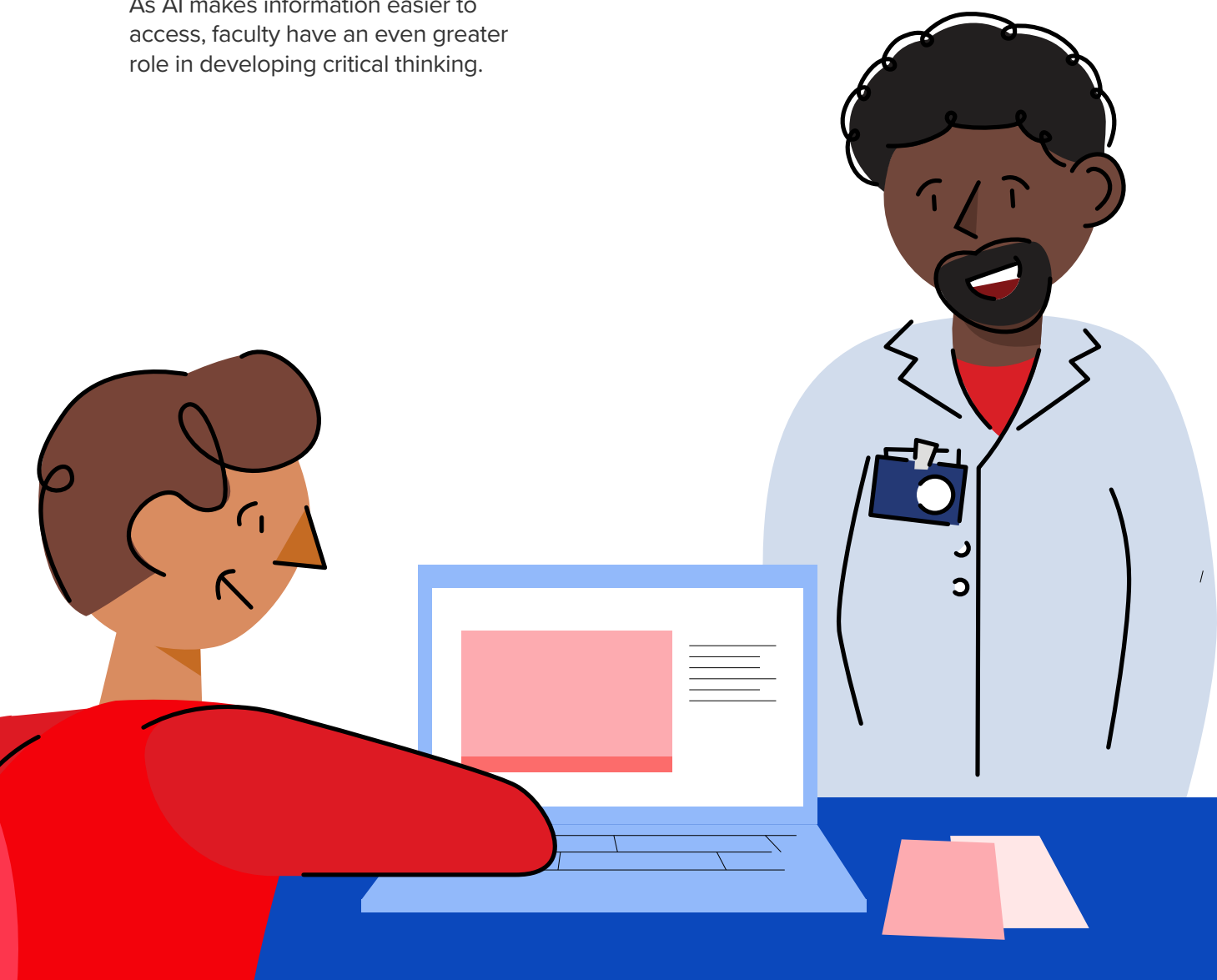
As AI makes information easier to access, faculty have an even greater role in developing critical thinking.

4. Design assessment for an AI-enabled world

Reward interpretation, justification and decision-making, alongside knowledge acquisition.

5. Build trusted, connected learning experiences

Students don't want AI in isolation. They want it integrated with authoritative resources, expert guidance and structured learning. Institutions can help students use AI more effectively by providing reliable, expert-authored resources they can use to verify and cross-check AI-generated information – making verification a habit, not an afterthought.



From student behaviour to educational strategy

Students have already changed the way they learn.

The opportunity now is for institutions to respond intentionally, creating learning experiences that develop clinical judgment, responsible AI use and confidence for practice.

The reassuring reality is that students aren't looking for less teaching. They're looking for different teaching.

They still value lecture notes, textbooks and trusted educational resources. What has changed is their expectation of how learning should happen: with faster feedback, more dialogue, personalized explanation and opportunities to practice whenever questions arise.

By providing trusted resources, clear guidance and learning experiences that prioritize clinical reasoning and responsible AI use, institutions can help students critically evaluate AI-generated information against authoritative sources, making verification a habit rather than an afterthought. This can help ensure AI becomes a safe, effective partner in preparing tomorrow's clinicians.

At McGraw Hill, we believe AI should strengthen, not replace, trusted medical education. By combining authoritative content, expert guidance and AI-enabled learning tools, we aim to help educators prepare students with the knowledge, judgment and confidence they need for clinical practice.

**Explore McGraw Hill
Learning Solutions**