LAUSD BOARD GENERATIVE AI AD HOC COMMITTEE | NOVEMBER 13, 2026

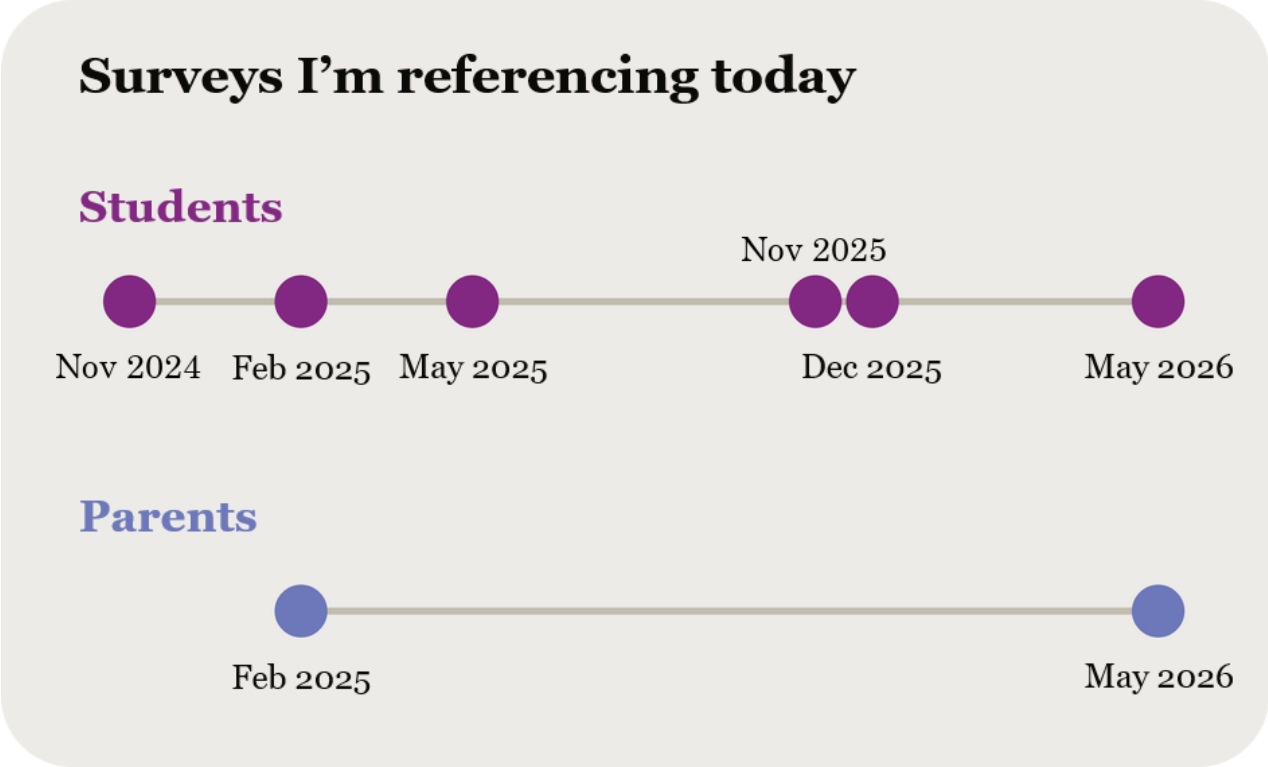
# AI AND STUDENTS

## What the Research Says and What LAUSD Can Do

Heather Schwartz, Director, RAND Education, Employment, and Infrastructure

# RAND is tracking national trends in students' use of AI

- **Who is RAND:** A nonprofit, nonpartisan research organization.
- **Data source:** Surveys administered to RAND's **American Youth Panel** and **American Parents Panel**—nationally representative survey panels of about 2,000 youth ages 12–21 and about 3,500 parents
- **Limits:** snapshots of national (not just Los Angeles) samples. Findings show associations, not proof of cause.



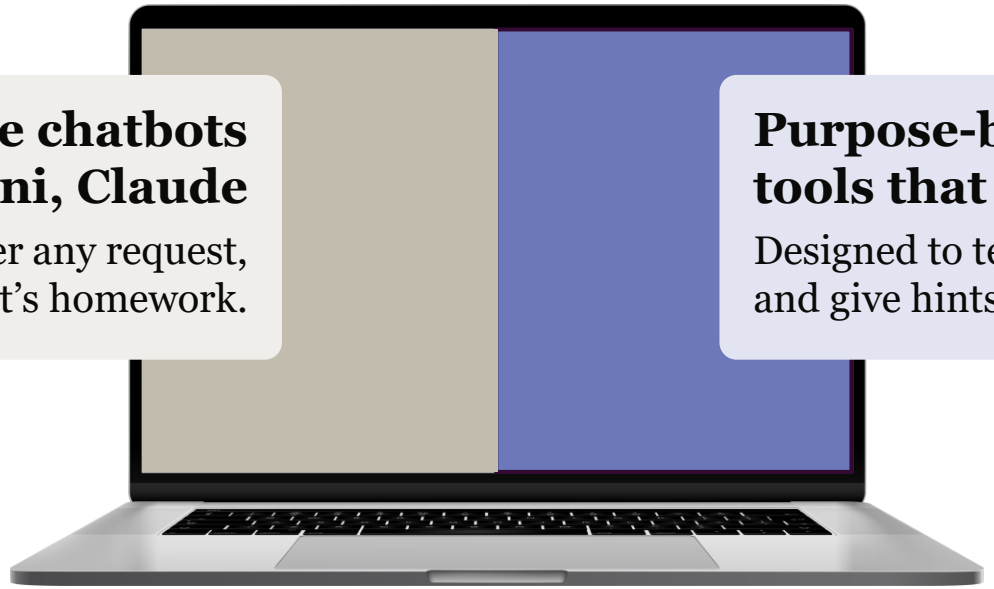

Sources: RAND American Youth Panel and American Parents Panel. More at RAND Survey Panels.

# Generative AI produces text, images, and answers on demand, which is why students often use it as a shortcut

## Two kinds of tools the Committee will hear about

**General-purpose chatbots like ChatGPT, Gemini, Claude**

Built to answer any request, including a student's homework.



**Purpose-built education tools that use AI**

Designed to teach: they ask questions and give hints instead of answers.

# Key takeaways

1. Students are using AI for homework in large and growing numbers, and two-thirds of them **think it hurts their critical thinking**.
2. The **gap in AI use by income** is growing, partly because parents set the example.
3. Research to date shows **harm when AI replaces a student's first attempt**.
4. There is some evidence that **AI tutors show small gains** when students are guided to use them, and little when they are not.

# My bottom-line takes for LAUSD

## PK-12 students shouldn't have access to general-purpose, unrestricted AI for school

- Keep Gemini turned off for students
- Ask Google for search function with no AI summaries
- Too much evidence of cognitive offloading rather than skill building
- Students perform worse on unassisted exams after using unrestricted AI

## Evaluate individual purpose-built AI educational tools on a case-by-case basis

- Early promise in purpose-built AI, with small gains so far
- Require evidence of efficacy before adopting
- Ask for usage data from tool developers

## Whatever the rules on AI use, they should be school-wide and well communicated

- Rather than teacher-to-teacher rules
- As LAUSD is doing, teach students AI literacy, including productive and undermining uses of AI
- Parents need talking points about what kinds of AI use to encourage or discourage, if any

Evidence for these takes is on the following slides.

# How students are using AI

Source: RAND student survey

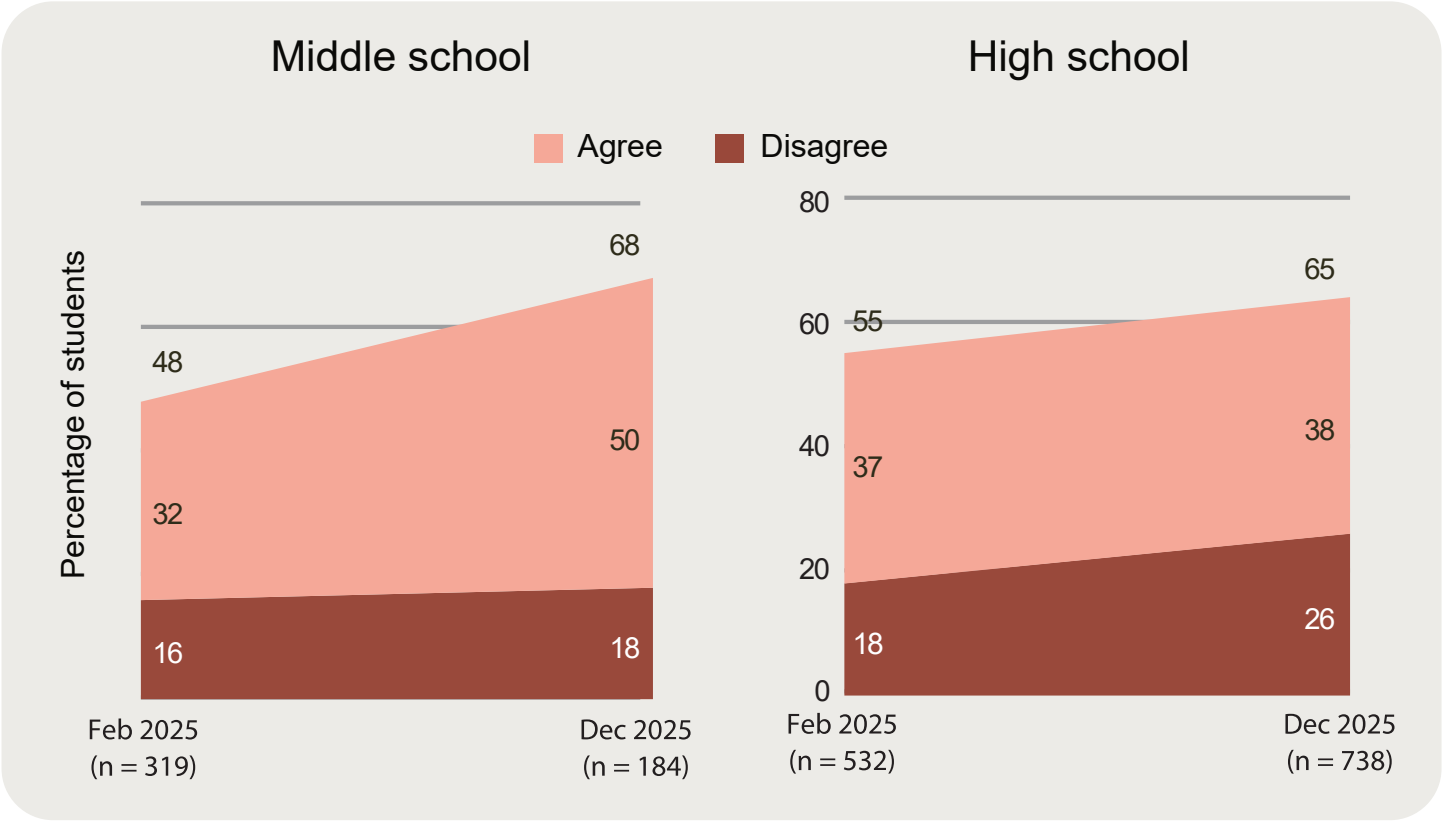
# Students increasingly use AI for homework, yet two-thirds say AI harms critical thinking

**40% → 49%**

of teens used AI for homework,
May 2025 to May 2026[1]

**54% → 67%**

of students agree that "the more students use AI for their schoolwork, the more it will harm their critical thinking skills"
Feb 2025 to Dec 2025[2]

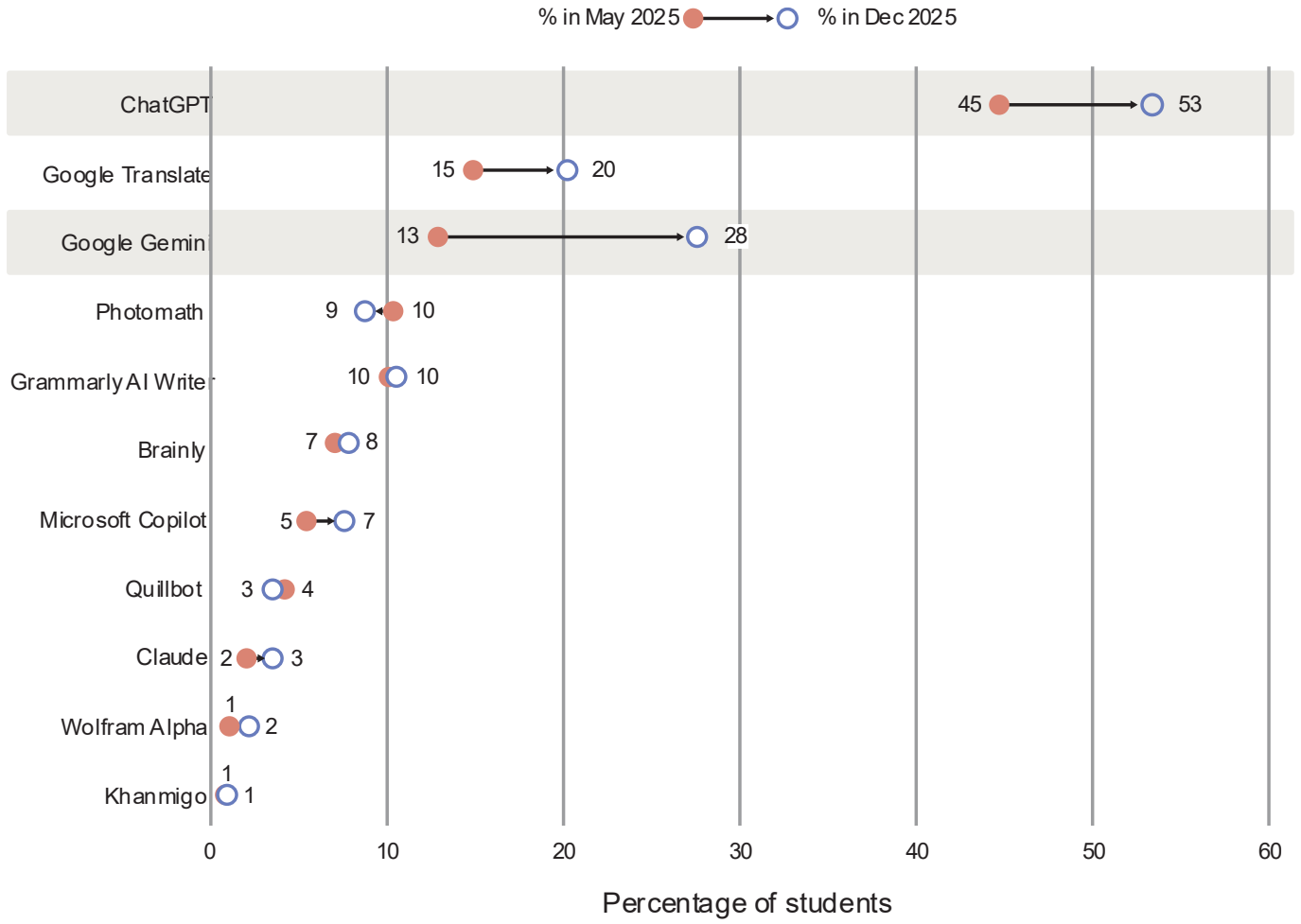



[1] RAND American Youth Panel, teens, n = 1,890 (May 2025) and n = 1,810 (May 2026), RR-A4742-5. [2] RAND American Youth Panel, teens, RR-A4742-1, Figure 2.

# Students mainly say they use general purpose AI (chatbots), rather than AI built for education

**53%**

of students used ChatGPT in Dec 2025, up from 45% in May 2025. Gemini use roughly doubled.[1]




[1] RAND American Youth Panel, age 12-29 enrolled in school, n = 2,032 (May 2025), n = 1,214 (Dec 2025), RR-A4742-1, Figure 4.

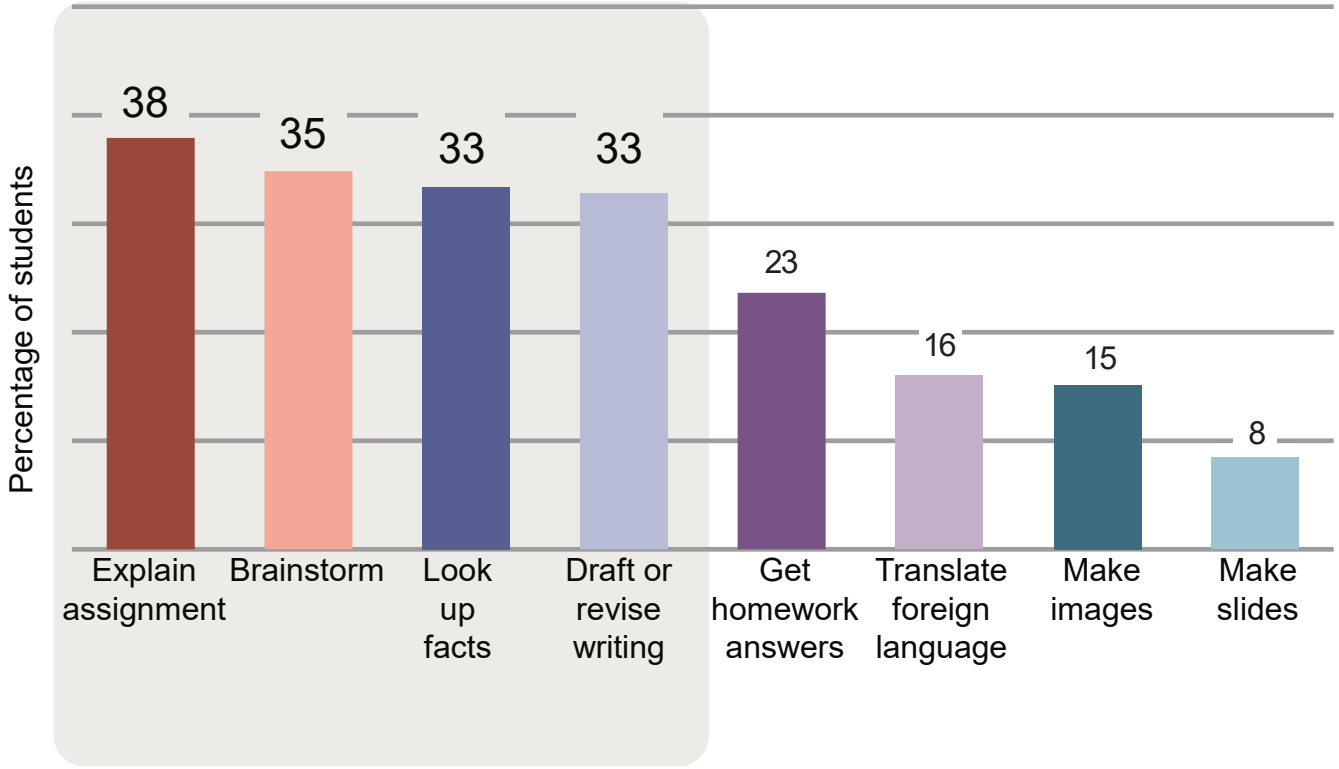
# Students most often use AI to get explanations and brainstorm, but a third use it to draft or revise their writing

**Top uses**

Explain assignments (38%)
Brainstorm (35%)
Look up facts (33%)
Draft/revise writing (33%)[1]

**75%** use AI for at least one school purpose; the typical student uses it for two.[1]

AI-using students generally do not call these uses cheating, except getting answers to homework.[2]




[1] RAND American Youth Panel, ages 12-29 enrolled in school, n = 1,214 (Dec 2025), RR-A4742-1, Figure 5.

[2] RAND American Youth Panel, ages 12-29 enrolled in school who reported using AI for the specific school purpose, n = 448 (Dec 2025). RR-A4742-1, Figure 6.

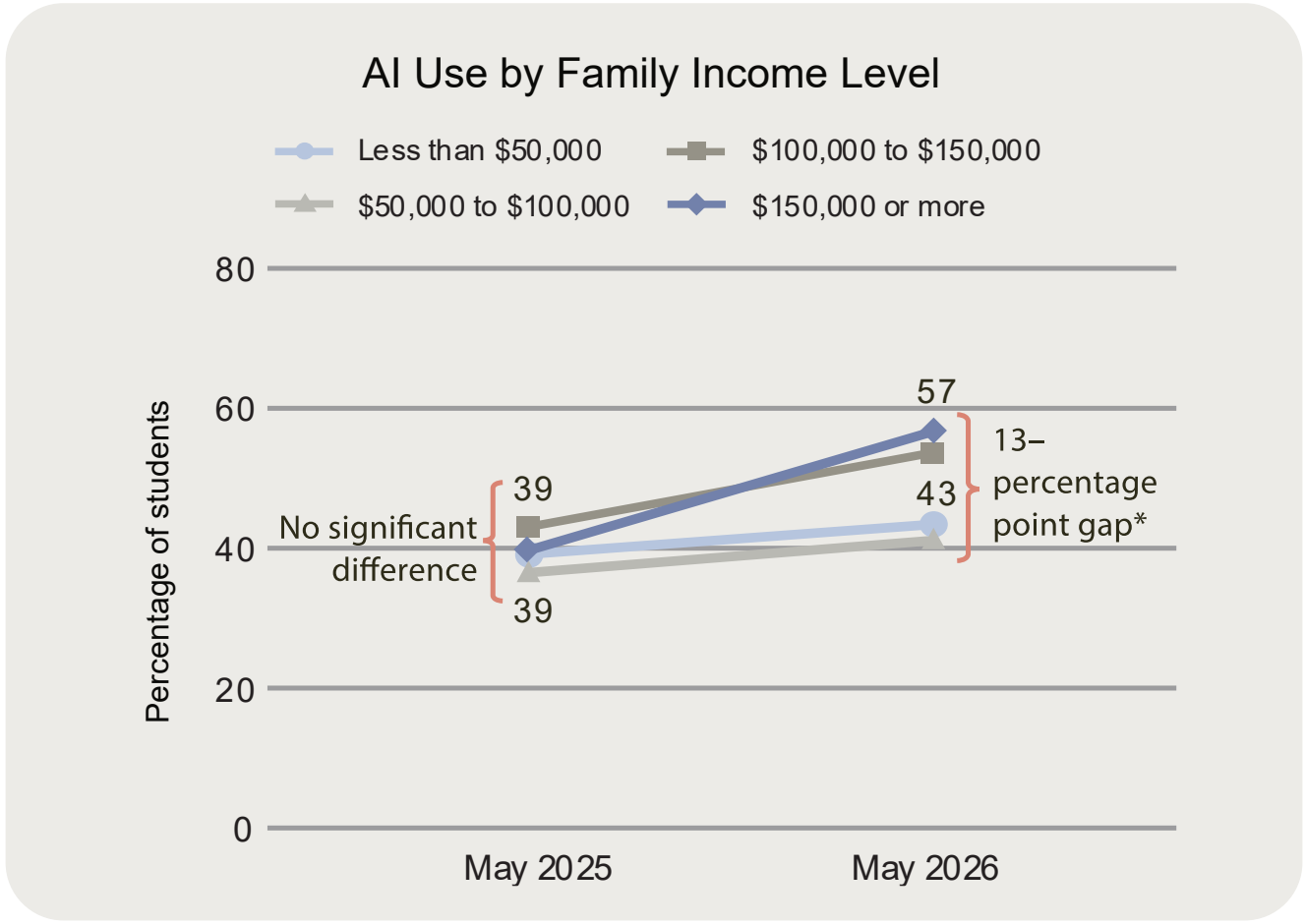
# An income-based gap in teens' AI use is opening

**+4 points**

Growth in AI-for-homework use among **teens in the lowest-income families**[1]

**+17 points**

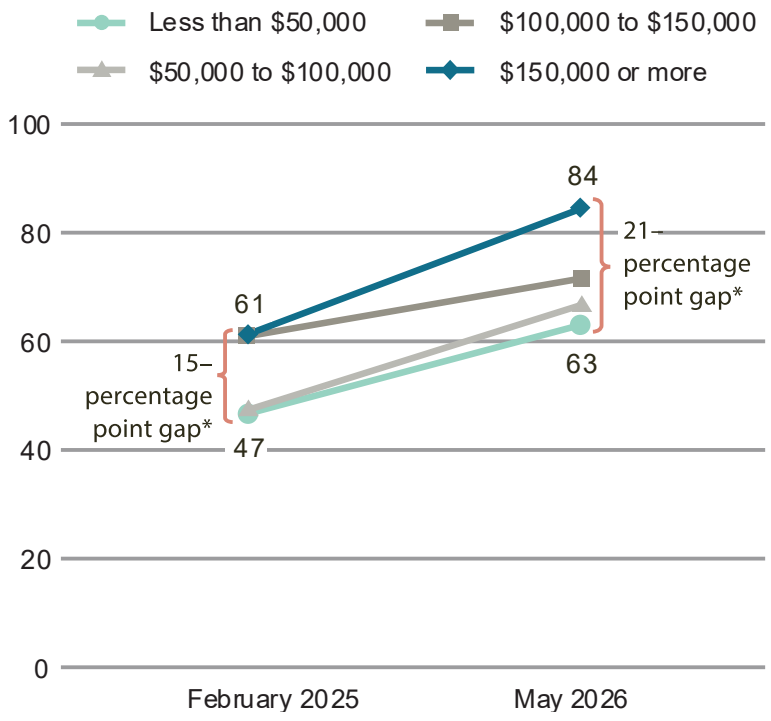
growth in AI-for-homework use among **teens in the highest-income families**[1]



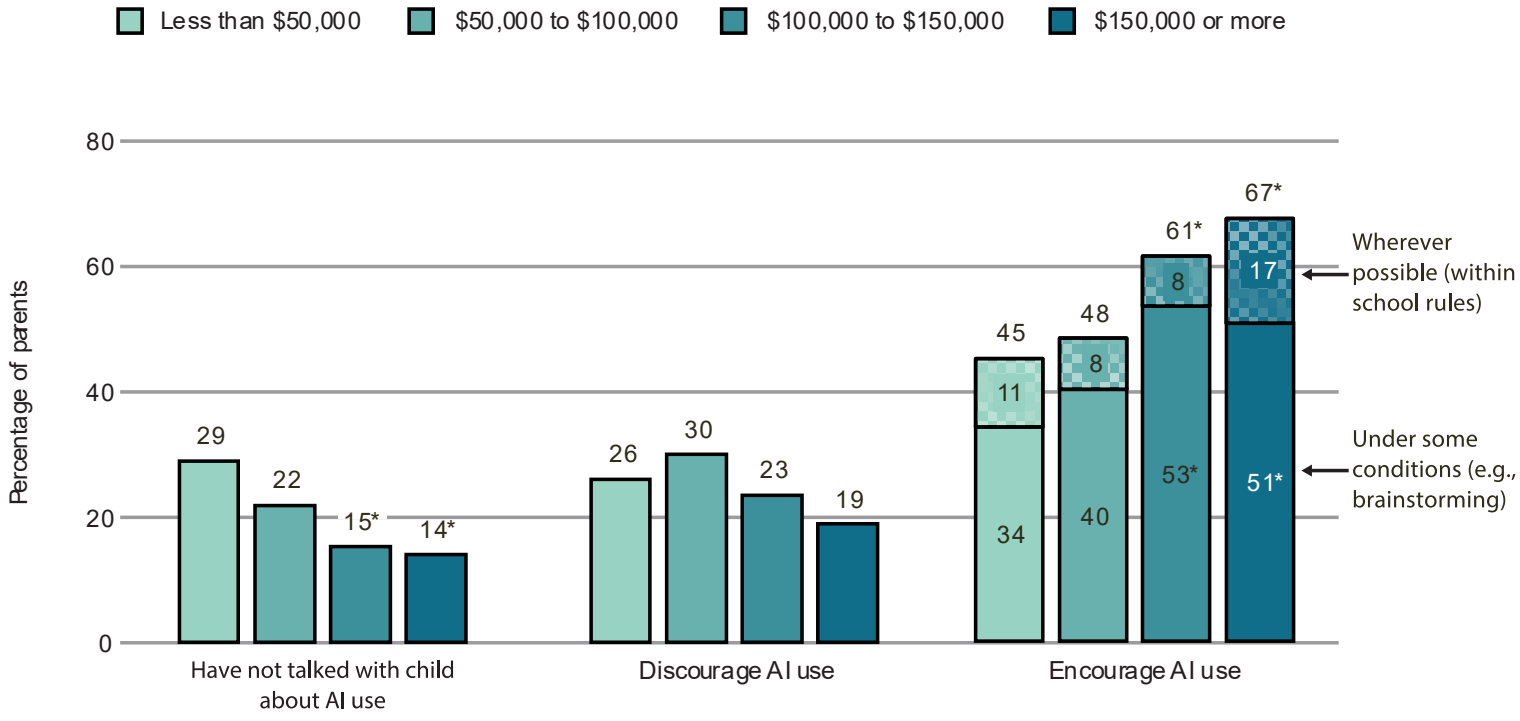

[1] RAND American Youth Panel, teens; n = 1,890 (May 2025) and 1,810 (May 2026), RR-A4742-5, Figure 4

# Higher-income parents use AI more and are more likely to encourage their children to do the same

**54% → 72%** of parents use AI for work or daily life[1]

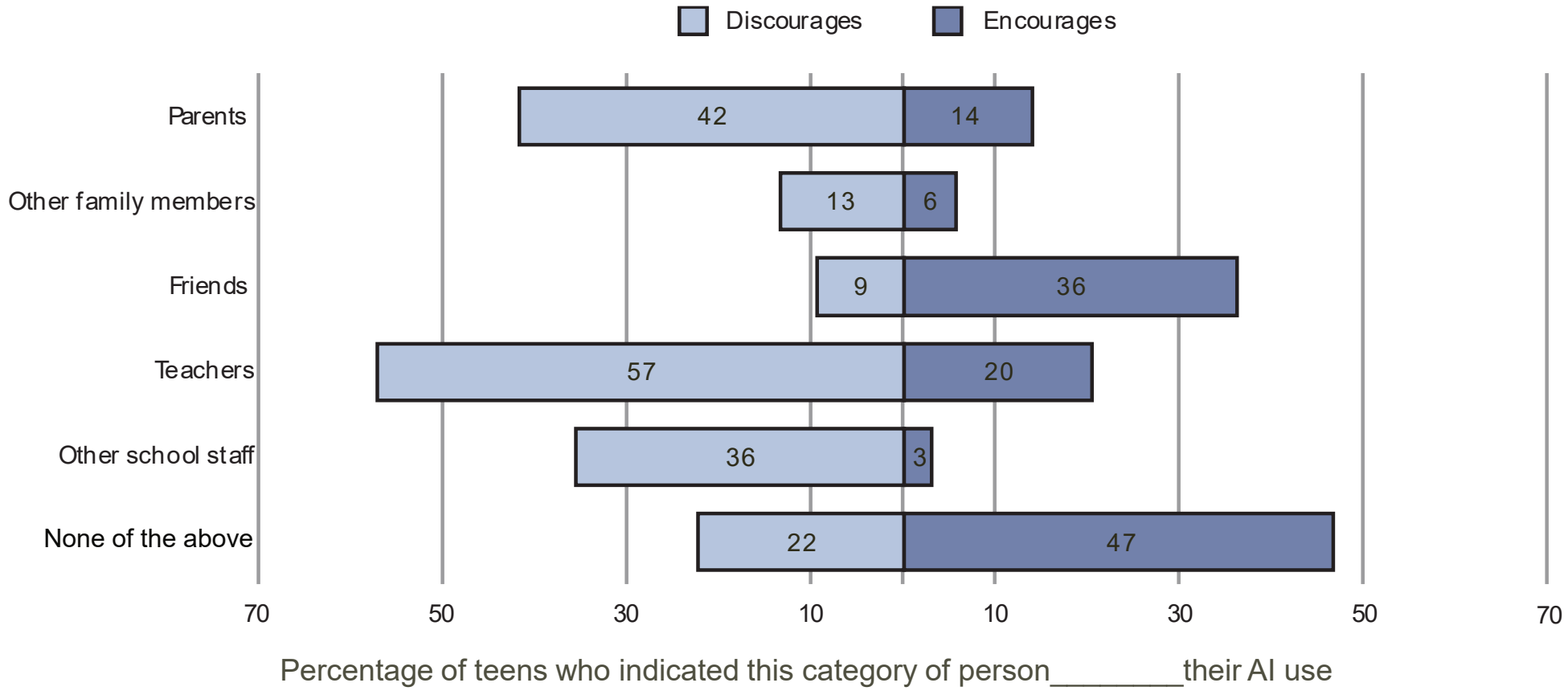



**22 points** gap between highest- and lowest-income parents encouraging their teen to use AI for school uses[1]




[1] RAND American Parents Panel, n = 984 (Feb 2025) and 1,000 (May 2026). Chart on right fromMay 2026. RR-A4742-5, Figures 1 and 2.

# Students get mixed signals about whether to use AI




RAND American Youth Panel, teens, n = 1,807 (May 2026), RR-A4742-5, Figure 7.

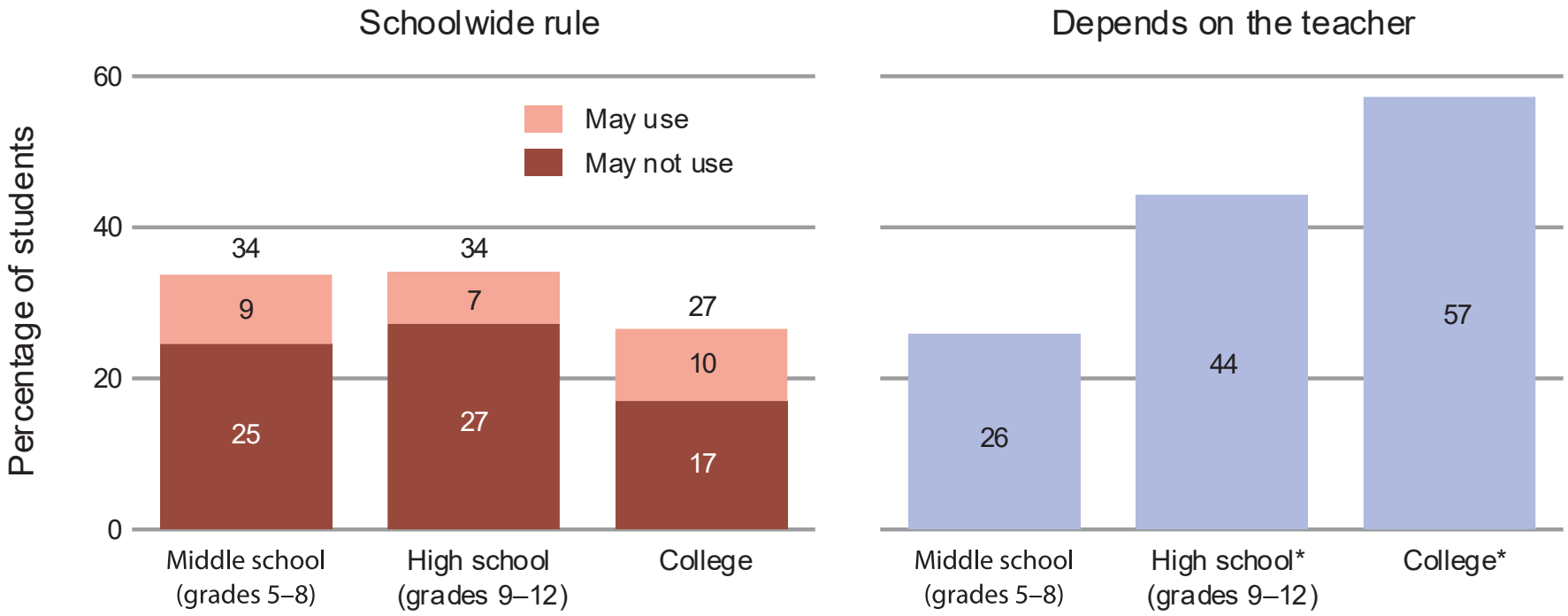
# Students hear different rules from different teachers

**1 in 3**

middle school, high school, and college students say their school has a schoolwide rule about AI help for homework[1]

## Grade level matters

The older the student, the more likely the rule "depends on the teacher."[1]




[1] RAND American Youth Panel, Dec 2025, n = 1,214 (184 middle school, 738 high school, 292 college). RR-A4742-1, Figure 7. See also RR-A4180-1 on district guidance.

# What the research says about AI impacts on teen learning and mental health

# Based on RCTs of students: AI tends to hurt learning when it replaces a student's first attempt

| | How AI was used | What happened |
|---|---|---|
| **AI substitutes** for the student's own first attempt | Unrestricted GPT-4 during practice | Practice scores up 48%; exam scores without AI down 17% |
| | Unrestricted GPT during the lesson | Chatbot users mostly asked for solutions; answered more Qs during online lesson; didn't perform better than no-AI students |
| | Course AI assistant that mostly gave answers (college) | Final grades down 0.37 SD in matched courses; less completion of online coursework |
| **AI supplements** an attempt already made | AI tutor gave hints, not answers | Practice up 127%; exam scores unchanged (harm removed, no gain) |
| | Students taught to use AI as a tutor | Exam scores up 0.21 SD; just offering the tool had no effect |
| | Think alone first, then use AI (university lab) | Did better on a later task done alone than free-ChatGPT or no-AI groups |

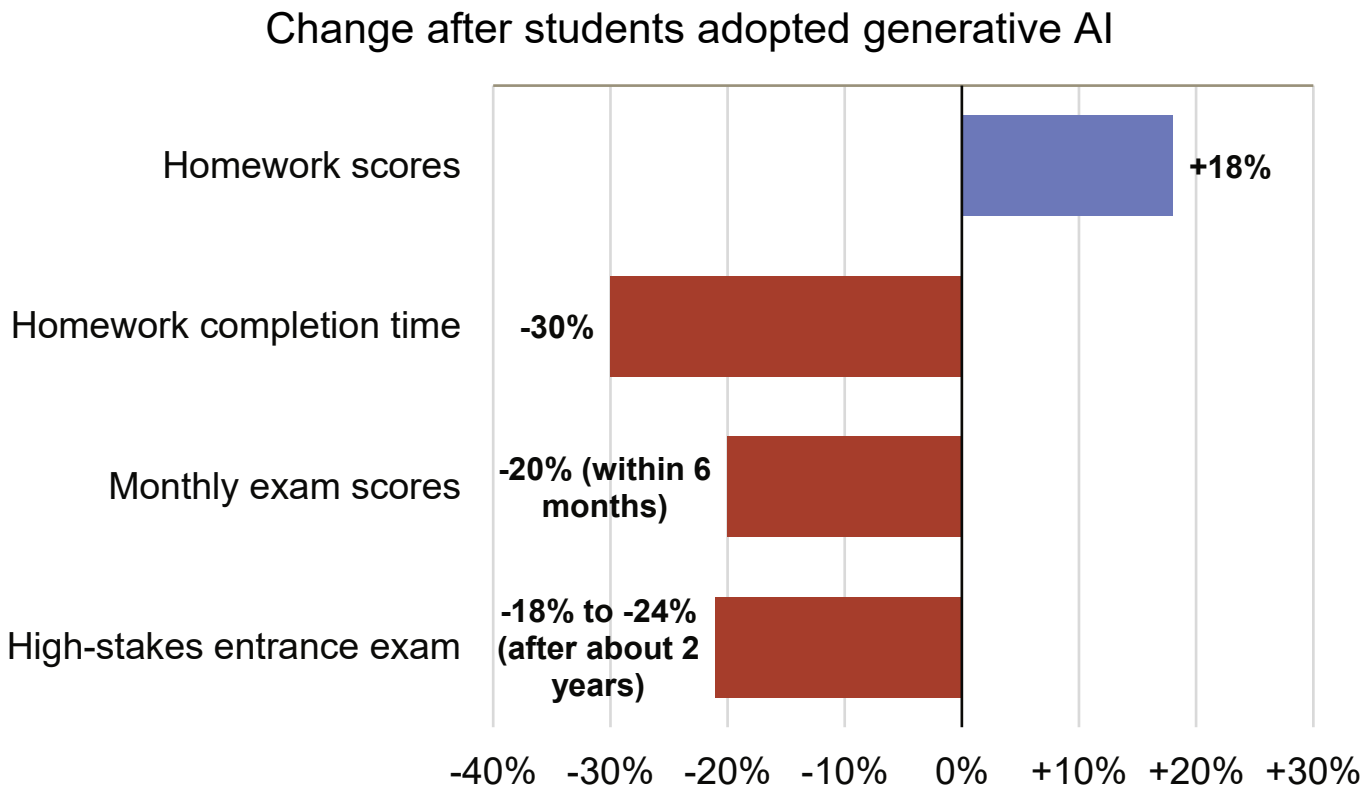
Randomized trials of students only. None tests whether gains last. The Maryland and Chile studies are working papers (not peer reviewed). Strömberg, Lei and Wu (next slides) is a large non-randomized study that points the same way. Sources: Bastani 2025; Lehmann 2024; Liu 2026; Gallegos 2026; Wong and Qiu 2026.

# More RCTs of AI tutors show modest positive effects in the short run

| | How AI was used | What happened |
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| **Modest gains** in each of these trials | AI coaches human tutors in real time (900 tutors, 1,800 K-12 students)[1] | +4 points more students mastered the topic; +9 points for students of the lowest-rated tutors |
| | AI drafts messages; a human tutor approves each (165 UK students)[2] | 66% vs. 61% solved novel follow-on problems (AI-tutored vs. human-tutored students) |
| | AI tutor that gives hints, in daily math help (18 Tennessee middle schools, 2 years)[3] | +0.06–0.08 SD per school year on the district math test; the typical student used the tutor on 1 in 3 practice days |
| **No gain** on an outside math test | AI tutor vs. human tutors vs. standard online practice (1,179 students, 10 UK schools)[4] | Matched human tutors on in-platform questions, but no difference on an outside math test after 10 weeks |

Short-term results; none of these trials tested whether gains last. Sources: [1] Wang et al. 2024 (preprint) [2] LearnLM Team 2025 (preprint) [3] Oreopoulos and Low 2026 (NBER working paper; not peer reviewed) [4] LearnLM and Eedi 2026 (Oct 29, 2026 report by Google and Eedi; not peer reviewed).

# In China, AI raised homework scores 18% but lowered monthly exam scores about 20%




- Study of 26,811 students in grades 7–12 over 30 months, comparing students as they adopted generative AI at different times.
- About 80% of AI users showed a **"homework outsourcing"** pattern: very short completion time with high scores.
- Students who kept a **normal completion time while using AI lost little**.

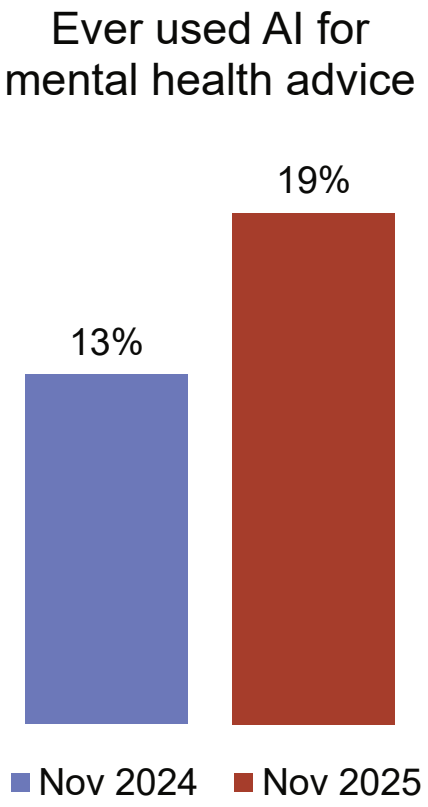
Source: Strömberg, Lei and Wu (2026), CEPR Discussion Paper 21577. Working paper, not yet peer reviewed. Entrance exams taken June 2025; the 18–24% applies to students who adopted AI two or more years earlier; the average for all takers was about 5–7%.

# What we know about AI chatbots and young people's mental health

**Key Takeaway**

Millions of students are already using AI chatbots to address their mental health needs, but there are virtually no regulatory requirements for safety and quality standards.

- Almost **1 in 5** young people (ages 12-21) report using AI chatbots for mental health advice, up from 1 in 8 the year before
- Close to **two-thirds** (63%) of young people who use AI chatbots for mental health advice have told no one about this
- Mental health advice ranges from discussing difficulties in personal relationships to school-related stress to weight loss and body image issues
- School counselors, teachers and parents should be aware that AI chatbots are **already part of the mental health ecosystem** and talk to young people about do's and don'ts




Sources: McBain RK, et al. JAMA Pediatr. 2026;180(8):884-890 • McBain RK, et al. JAMA Netw Open. 2025;8(11):e2542281 • McBain RK, et al. JAMA Netw Open. 2026;9(8):e2630635

# What the Board can do

# Classroom practices that keep students doing the thinking

## Rules

- **Be explicit about when AI is allowed** and when it is not, by assignment and purpose.
- Have students make a **first attempt without AI**, then use AI, if at all, to respond to it. A "flipped" model does this: new content at home, AI-free practice in class with teacher present.
- **Ensure AI-free exams to assess students' knowledge and skills.**

## Tools

- **Use education-specific AI tools** designed to ask questions and give hints, not answers. Only 7 of the 20 AI products Instruction Partners reviewed had independent evidence of impact.
- **Turn off Gemini** on student accounts on school-issued devices.

## Monitoring

- **Teacher should remain active during AI use.** Instruction Partners' 2026 classroom observation study found no product supported strong learning without an active teacher role.
- **Ask students.** Our survey shows they already worry about critical thinking; schools should elicit their ideas on productive use.

Sources: RR-A4742-1 recommendations (flipped model; cognitive offloading vs. augmentation); Instruction Partners, AI in Action Learning Tour (qualitative field study of 32 classrooms in 7 states, not an outcome study).

# Parents and students need to know the rules of the road

## At home

### Where students learn about AI depends on family

Higher-income parents use AI more and are more likely to talk with their teens about it.

### Give parents talking points

Include parents who do not use AI themselves, in the languages families speak.

### Tell parents & students the schools' rules for AI use.

## At school

### Teach AI literacy to every student

What chatbots do, when they are wrong, and how to use them without outsourcing thinking.

### Teach students about the harm of cognitive offloading & do's and don'ts of AI for mental health


RAND

# Backup slides

Shown only if asked

# Based on RCTs of students: AI tends to hurt learning when it replaces a student's first attempt

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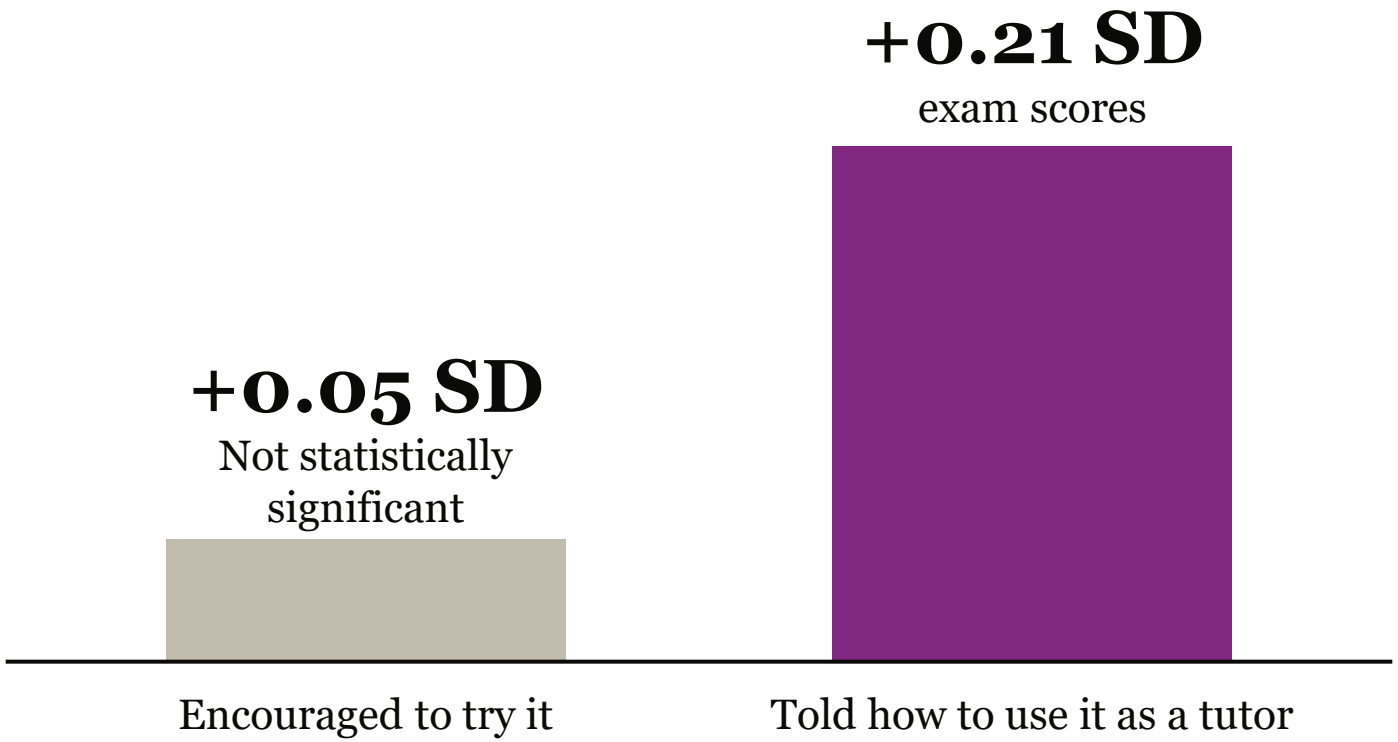
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# Telling students how to use AI productively mattered




Same AI tool and the same access for every student.

Only the instructions changed.

Source: Gallegos 2026, college econometrics course in Chile (about 290 students); IZA working paper, not peer reviewed. Two separate randomized experiments in the same course: encouragement emails before the midterm, tutor-style prompts before the final. SD = standard deviation of exam scores.

# Backup: the MIT study, and what the evidence cannot yet tell us

## The MIT Media Lab EEG study

Kosmyna et al.: 54 adults wrote essays with an AI chatbot, a search engine, or no tools.

Heaviest AI reliance was linked to weaker neural engagement and poorer recall of one's own essays.

Small, single-site, and not peer reviewed: a hint about mechanism only.

## What we do not yet know

- Long-term effects of AI on learning.
- Effects on younger children.
- Whether guard-railed general chatbots work.
- Whether the gains in tutoring studies last.

Source: Kosmyna et al. 2025, MIT Media Lab. Not peer reviewed.