

When Classroom Tech Looks Like Learning but Isn't

A new psychology report warns that clicks, rewards and even better AI-assisted essays may not prove students are learning.



A laptop with a colorful education app sits beside a notebook and pencil on a classroom desk.

A new report from the American Psychological Association says schools and families should be more careful about judging education **technology** by how busy or successful it makes students look on a screen. According to reporting by Phys.org, the APA report argues that **engagement** with educational technology is not the same thing as learning, and that **generative** AI tools create a special challenge because they can improve a student's immediate performance without necessarily building the student's own knowledge or skills.

That distinction matters because many digital tools are designed to capture attention. An app can reward quick clicks, show **animations**, ask for frequent responses or keep a student interacting for a long time. Those signs can be useful, but the APA report warns that they do not prove that a student has learned something in a lasting way. The stronger test, the report says, is whether students can apply what they learned outside the app or screen.

The report covers technologies used by children and teenagers ages 5 to 18, including educational apps, games, intelligent tutoring systems, digital learning platforms and generative AI. Generative AI means software that can create new text, images

or other content in response to a prompt, such as a chatbot that drafts an essay or explains a math problem. The report was written by a multidisciplinary panel, meaning a group with experts from several fields, including **cognitive** psychology, educational psychology, learning science and education technology.

The central tension is not whether technology belongs in school at all. The APA report says educational technology can help students learn, but it argues that schools need better ways to tell the difference between tools that support real understanding and tools that mainly produce visible activity. A student who is absorbed in a game-like lesson may be focused, but may not remember or **transfer** the skill later. Transfer means using knowledge in a new setting, such as applying a grammar lesson from an app when writing an original paragraph in class.

AI makes the issue sharper. Nicole Barnes, the APA's executive lead psychologist for education, put the problem this way: "AI can help a student produce a better essay, but the improved final product does not necessarily mean the student has become a better writer." That is the trade-off many schools now face. AI can give students examples,

feedback and quick help. It can also hide whether the student understands the topic, can organize an argument or can revise sentences without the tool doing most of the work.

The report does not recommend simply trying to keep young people away from AI. Instead, it says students should be taught to evaluate AI-generated responses actively. That means questioning a chatbot's assumptions, looking for gaps in its **reasoning**, comparing its answers with other sources and asking how an answer might change in a different situation. In that view, AI should not be treated as an answer machine. It should be treated as a tool that has to be tested and challenged.

The report also pushes back against marketing claims that move faster than research. It says companies that develop education technology and the schools or districts that choose it should carry the

main responsibility for showing that a product works. **Evidence**-based tools are tools supported by credible research, not just testimonials, high usage numbers or impressive-looking **dashboards**. The APA says schools should expect independent evidence before investing in products that promise to improve learning.

That creates another hard choice. Schools want tools that can help teachers, personalize practice and give students more ways to learn. But if schools rely too heavily on easy measurements, they may reward the wrong things: time on task instead of understanding, clicking instead of thinking, or a polished final product instead of a stronger learner. The report's message is not anti-technology. It is a warning that the most important learning may be the part a screen cannot easily measure.

Written from reporting by Phys.org.

THINK IT THROUGH

1. If an app keeps students highly engaged but there is weak evidence that its lessons transfer beyond the screen, should a school use it? Defend a position and explain what evidence would change your mind.

A strong answer: A strong answer should weigh motivation and access against limited proof of durable learning, and should name what kind of assessment or independent evidence would matter.

2. Should schools treat generative AI more like a calculator, a tutor, or a source that must be fact-checked? Explain which comparison is most useful and where it breaks down.

A strong answer: A strong answer should compare the benefits and risks of AI, especially the difference between getting a better product and developing the underlying skill.

3. Who should have the greatest responsibility for proving that an education technology tool actually improves learning: companies, schools, teachers, families, or students? Why?

A strong answer: A strong answer should address power, expertise, incentives and access to evidence, rather than placing responsibility only on the end user.

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T F M Y O N C O H O H T E G N L S O
A V R A N I N E L I B G I N F R C I
R T R A N S F E R E N E T C A E O S
G I U E I I I N R A O G N Y N A N A
N N S K O A M D E N R G B B N S S E
K A E S A A T A O G V B E S M O E N
N F N A H I R S T G G G A A A N I T
R C E Z O R I V R I O T V E O I N N
F O D E N O A N G H O E I W A N F T
R G F A S E I T E C H N O L O G Y G
F Y S E N E N R N N R G S T A T R N
E E V I D E N C E A N A A S N N G U
V D A S H B O A R D S G O O T N M G
S R A F E E D B A C K E S T B E Y T
I S V G I E R A T T A M E H T G S Y
C E E H N C E S I M E E D G T A E R
C C O G N I T I V E A N E E G T U R
E A L T D N O C E I B T A T B S A T

ANIMATIONS

COGNITIVE

DASHBOARDS

ENGAGEMENT

EVIDENCE

FEEDBACK

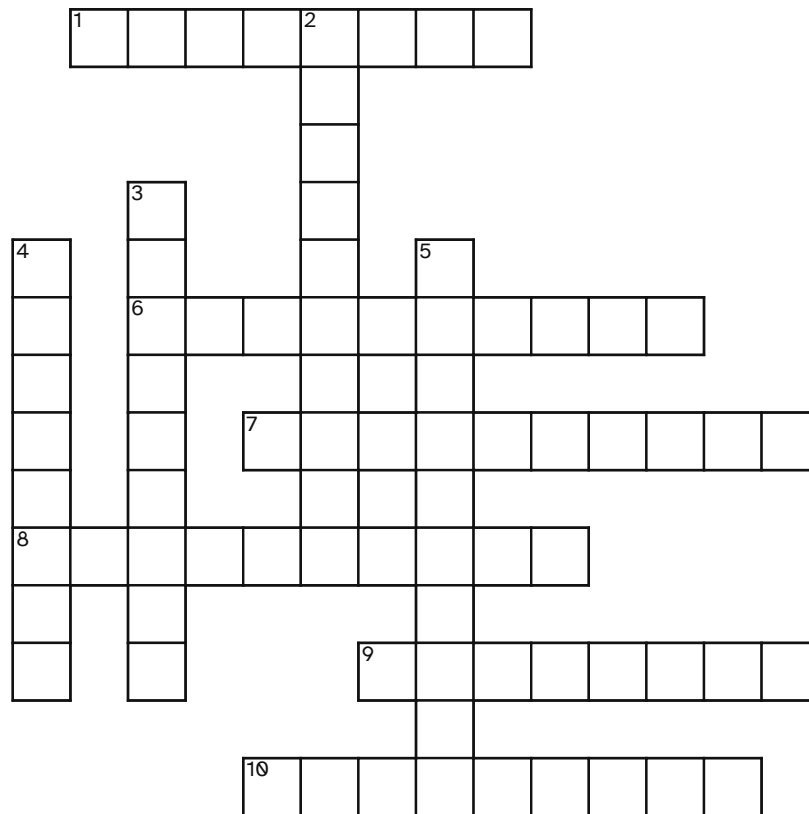
GENERATIVE

REASONING

TECHNOLOGY

TRANSFER

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ACROSS

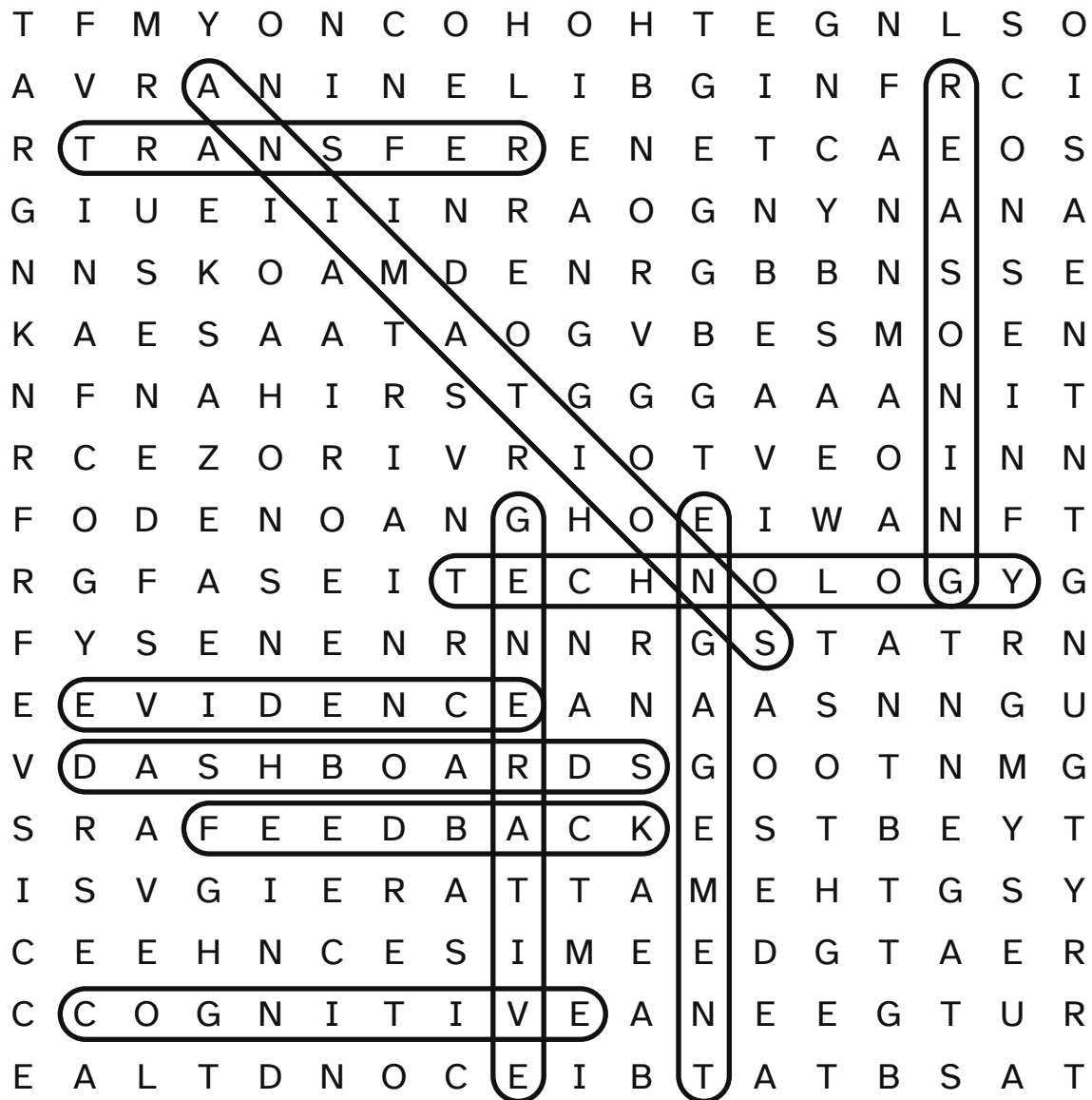
- 1 Facts or studies that support a claim
- 6 Able to create new material from a prompt
- 7 Tools, systems, and devices used to solve problems or complete tasks
- 8 Moving visuals used to explain ideas or hold interest
- 9 Applying learning from one situation successfully in another
- 10 Using facts and ideas to reach a conclusion

DOWN

- 2 Student's level of focus and participation during a lesson
- 3 Related to thinking, memory, learning, and understanding
- 4 Information that helps improve work or fix mistakes
- 5 Screens that summarize data, progress, or performance

When Classroom Tech Looks Like Learning but Isn't

— answer key



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— answer key



- DOWN

- 7/8

Where this came from

This article was written for 3andB from the reporting below. It is not a reprint — the wording is ours and the facts are theirs.

Phys.org

“With education technology, engagement is not the same as learning”

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<https://phys.org/news/2026-09-technology-engagement.html>

WHAT IS IN THIS PACKET

The article with a note on each question, a word search, a crossword, and the answer key to both.

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