

Has relying on tech affected the way we learn?

1 Warmer

a. Read and answer the questions below.

1. What everyday activities do you use your phone or computer for?
2. Do you think there should be limits to what technology can be used for? For example, should students be allowed to use artificial intelligence to help them write essays?
3. Do you think one day computers will replace humans in every day jobs?

b. Now discuss your answers.

2 Key words

a. Match the key words to their definitions below.

Check your answers and your understanding of how the words are used by using the same word to complete the example sentence after each definition.

Then read the complete article to see how each of the key words is used in context.

deprive generate impediment repetitive retain unique

1. produce, usually by a computer _____
They used special software to _____ an image of the new design.
2. something that makes it more difficult for someone to do something or for something to happen

The noise in the room was an _____ to their learning.
3. take away something from someone or prevent them from having it _____
Some countries have laws to make sure that companies do not _____ their workers of spending quality time with their families.
4. remember ideas or information _____
I made notes in class but couldn't _____ the information about different management styles.

5. involving repeating the same action over long periods of time _____

Her teaching style was very _____, but it was very effective.

6. not the same as anything or anyone else _____

Every person's fingerprint is _____

bulk out

claim

demonstrate

evade

interval

master

7. avoid accepting or dealing with something that you should do _____

As we expected, he tried to _____ questions about his relationship with his last boss.

8. learn something thoroughly so that you know it or can do it very well _____

It took her years to _____ the language, but now she speaks it fluently.

9. a period of time between two events _____

It is important to move your body at regular _____ and not to sit for too long.

10. show clearly that something is true or that it exists

In our presentation, we are going to _____ how easy it is to use our new PR2-F.

11. add something to something else to make it bigger or more satisfactory

Vicky added a few lines about her work at the university magazine to _____ her CV.

12. say that something is true, even though there is no definite proof _____

The company _____ they don't damage the environment, but I have read terrible things about them in the newspaper.

Has relying on tech made us more stupid?

LEARNING TOO HEAVILY ON ARTIFICIAL INTELLIGENCE CAN ERODE OUR TOLERANCE FOR THE REPETITIVE ACTIONS THAT HELP US ACTUALLY LEARN

BY DAVE LEE

- 1 I was driving home from Palo Alto to San Francisco, a journey I'd done dozens upon dozens of times before. Only this time, I faced a problem: a phone without power; a journey without GPS. I missed my exit and became hopelessly lost in streets less than a mile from my home. How embarrassing: I claim to love this city, and yet in that moment I felt I barely knew it. Suddenly deprived of my tech, I was unable to find my way, because I had never needed to actually learn it.
- 2 I'm not arguing against the use of GPS. But I bring it up to demonstrate that efficient technology can be an impediment to learning. Only through effort and repetition, without shortcuts, can we truly retain useful knowledge.
- 3 Much has been written about GPT-3, one of the world's most advanced artificial intelligence systems. It can do things that would have been considered science fiction just a few years ago, such as generate realistic-sounding articles, or translate between languages it has never seen before. It does so by learning from a vast amount of text, and then making predictions based on that data.
- 4 (It also wrote that last paragraph, using just the prompt "much has been written about GPT-3". I'd like to think I would never stoop to using that writing cliché, "like science fiction".)
- 5 This kind of AI-generated text is creating waves in academia. It's an inflection point from which we should be careful in how we proceed. A recent Vice article detailed how a community of students was using GPT-3 (and other similar AI text programs) to do the grunt work in writing essays, filling in context and saving time. Because the AI-generated text was "unique", it allowed students to evade anti-plagiarism detection software. "I just use AI to handle the things I don't want to do or find meaningless," said one student.
- 6 Is the student cheating? You could argue convincingly in either direction. It's maybe simpler to ask whether the student is cheating themselves, to which the answer is surely yes. Those things students don't want to do are what underpins retention. Writing, rethinking, retaining, over and over.
- 7 Practice makes perfect. We've all heard of the "10,000 hours rule" – the amount of intensive practice supposedly needed to master something – but we have many ways to make the same point: repetition means remembering. Remembering means learning and mastering.
- 8 Hermann Ebbinghaus, a psychologist who studied the benefits of repetition, illustrated this with his "forgetting curve" – demonstrating how knowledge escapes over time if not consciously remembered – and "spaced learning", repetition over regular intervals. His work has influenced how we learn for more than a century. It's the difference between becoming an expert and merely passing a test. Does a student deserve an "A" grade if the algorithm does the legwork? He or she becomes no more aware of the subject than I was of my direction home.
- 9 Besides, experts in the capabilities of today's AI warn against it in a blunter sense. Nathan Baschez, creator of Lex. Page, a word processing system that can be used to summon GPT-3 to bulk out your sentences, told me it should be used with great caution in "high stakes" environments like journalism or academia.
- 10 "GPT-3 can just make up facts that aren't true and say other things that are nonsense," he said. But it'll only get better. It's always learning. Are we?

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3 Understanding the article

a. Decide if each statement is True (T) or False (F) according to the article. Underline the information that you used to support your answer.

1. The writer of the article didn't know his usual way home when he could not use the GPS on his phone.
2. Technology can help us learn more easily without having to repeat and remember things again and again.
3. GPT-3 is a computer program that can write texts that read like a human wrote them.
4. The writer thinks that it is fine for students to use AI to write their essays.
5. The "10,000 hour rule" is a rule that says we have to do something for 10,000 hours so we don't forget how to do it.
6. We eventually forget the things that we do not have to consciously remember from time to time.
7. Nathan Baschez says that GPT-3 is always accurate.

4 Business language

a. Look for the missing words for the phrases below in the text. The definition and paragraph number has been given for each one.

1. depend on: _____ (*heavily*) on (subtitle)
2. behave in the same bad way as someone else is behaving or do something bad in order to get what you want: _____ to (paragraph 4)
3. cause problems, usually by making suggestions or criticisms: _____ waves (paragraph 5)
4. used for saying that repeating an activity or doing it regularly makes you very good at it: _____ makes _____ (paragraph 7)

b. Rewrite the sentences to contain one of the expressions from task A.

1. Don't lie in the interview – it's bad!
2. I think they depend too much on their website for sales.
3. The vocal customers are causing problems with their terrible online reviews.
4. Just keep on doing it and you'll get better at it!

c. Now use each phrase in a sentence in the context of your choice.

5 Discussion questions

a. Discuss these questions.

1. Do you think we let technology do too much of our thinking for us? Is it making people stupid?
2. Should there be rules about how AI is used for studies and work?
3. How can we help younger people become better learners and put the technology away?
4. Do you think doing repetitive work is useful?

6 Wider business theme – AI and job automation

a. Look at the table below and answer the questions.

SHARE OF TASKS THAT ARE SUSCEPTIBLE TO AUTOMATION

High (70% – 100%)	Production Food service Transportation
Medium (30% – 70%)	Administrative Construction Agriculture Health support Sales
Low (0% – 30%)	Health practitioners / Social service Legal Computer Science Education Engineering Arts / Entertainment Business / Management

(According to REPORT Automation and Artificial Intelligence: How machines are affecting people and places by Mark Muro, Robert Maxim, and Jacob Whiton, 24 January, 2019)

1. Does any of the information in the table surprise you? Why?
2. Is your sector on the list? Do you think it will easily be automated? Why (not)? Which activities could be done by computers?
3. Which activities will always be done by humans?
4. What new skills do people need to learn in order not to lose their jobs to robots?
5. What new opportunities might there be in the future because of new technology?

b. Prepare a short presentation to give to your local government, industries, or organisations to share and explain the results of the report. Do research to support your conclusions. Use the phrases below.

- *According to the report, it is (very/not) likely that ... jobs will be automated.*
- *This is because activities like ... can easily be done by robots/computers.*
- *Other tasks like ... will always be done by humans because ...*
- *It is important to train workers in the ... sector to ...*
- *If we ..., we can be prepared for the future.*