

Why most studying is wasted - and what actually works

Anglický text s pracovním listem · Úroveň: Středně pokročilý (B1-B2) · 4 otázky · Klíč na samostatné straně



interaktivní verze

Jméno: _____ Třída: _____ Datum: _____ Skóre: _____ / 4

Text

If you have ever spent hours highlighting a textbook the night before an exam, you have probably forgotten most of it by lunchtime the next day. Research dating back to Hermann Ebbinghaus in 1885 suggests we lose roughly two thirds of new information within twenty-four hours unless we actively bring it back to mind. Modern cognitive scientists have shown that the most popular study habits - rereading and highlighting - do almost nothing to slow this loss.

The single most reliable fix has a dull name: retrieval practice, sometimes called active recall. Instead of reading a chapter for the fifth time, you close the book and force yourself to recall what was on the page - ideally in writing or aloud. In a 2008 Science paper, Jeffrey Karpicke and Henry Roediger showed that students who tested themselves remembered far more a week later than students who simply restudied the material.

Retrieval is even more powerful when you spread it out over time, a phenomenon known as the spacing effect. If you need the information for an exam in a month, the research of Nicholas Cepeda and colleagues suggests reviewing it every week or so rather than cramming for six hours the night before. Apps like Anki are built on exactly this principle: they schedule each flashcard right before you would have forgotten it, which is why a few minutes a day quietly beats a weekend marathon.

None of this works if your phone is buzzing every two minutes. Sophie Leroy's research on what she calls attention residue shows that when you move on before a task is finished, part of your mind stays stuck on it, so you arrive at the new task already half-distracted. Techniques such as the Pomodoro - twenty-five minutes of focused work followed by a short break - are popular because they protect a small block of time from this constant fragmentation.

Finally, the most underrated study tool is the one most students sacrifice first: sleep. Neuroscientist Matthew Walker has spent two decades arguing that slow-wave sleep is when the brain replays the day's experiences and moves them into long-term storage. Skip a night before the exam and you are not just tired - you have skipped the very stage at which your brain was supposed to file what you spent all week learning.

Slovíčka z článku

Anglicky	Výslovnost	Česky
to highlight	/ˈhaɪlaɪt/	zvýrazňovat
retrieval	/rɪˈtri:vəl/	vybavení (z paměti)
to recall	/rɪˈkɔ:l/	vybavit si
cramming	/ˈkræmɪŋ/	nárazové biflování
to schedule	/ˈfedju:l/	napláňovat, rozvrhnout

Anglicky	Výslovnost	Česky
spacing effect	/ˈspeɪsɪŋ ɪˌfekt/	efekt rozloženého učení (v čase)
flashcard	/ˈflæʃkɑːd/	studijní kartička
attention residue	/əˈtenʃn ˈrezɪdjuː/	zbytková pozornost
underrated	/ˌʌndəˈreɪtɪd/	podceňovaný
slow-wave sleep	/ˌsləʊ weɪv ˈsliːp/	hluboký spánek (NREM)
to sacrifice	/ˈsækrɪfaɪs/	obětovat, vzdát se
to skip	/skɪp/	vynechat, přeskóčit

Otázky k textu (zakroužkujte správnou odpověď)

1. What did the 2008 study by Karpicke and Roediger show?

- A) Highlighting turned out to be the best method
- B) Rereading the material works better than testing
- C) Testing yourself beat restudying the material
- D) Testing causes stress and actually hurts memory

2. How does the spacing effect improve learning?

- A) Reviewing about once a week beats one long session
- B) Six hours of study in one evening works best of all
- C) It removes the need for any retrieval practice
- D) It only ever works with flashcard apps like Anki

3. What is “attention residue”?

- A) The tiredness that you feel after a study session
- B) Notes that somebody left in a textbook margin
- C) The information you forget during a short break
- D) Part of your mind staying on the previous task

4. Why is sleep important for studying, according to Matthew Walker?

- A) Sleep lets you wake up earlier and fit in more revision
- B) The brain files the day's experiences during deep sleep
- C) Dreaming repeats the exam questions you will be asked
- D) Sleep only starts to matter in the week after the exam

Klíč - řešení s vysvětlením

1. C) Testing yourself beat restudying the material

Druhý odstavec: studenti, kteří se sami zkoušeli (retrieval practice), si o týden později pamatovali výrazně víc než ti, kteří si látku jen znovu pročítali.

2. A) Reviewing about once a week beats one long session

Třetí odstavec: u zkoušky za měsíc je podle výzkumu Nicholase Cepedy lepší opakovat zhruba jednou týdně než biflovat šest hodin večer předtím.

3. D) Part of your mind staying on the previous task

Čtvrtý odstavec: podle výzkumu Sophie Leroyové zůstává po nedokončeném úkolu část mysli u toho předchozího – k nové práci tak přicházíte už napůl rozptýlení.

4. B) The brain files the day's experiences during deep sleep

Pátý odstavec: v hlubokém (slow-wave) spánku mozek přehrává zážitky dne a ukládá je do dlouhodobé paměti – vynechaná noc znamená vynechané „ukládání“.