

- For teachers and learners deciding how to spend revision time

RETRIEVAL PRACTICE

Why does testing yourself beat rereading, even though it feels harder?

Evidence from US university learners recalling short passages under lab conditions, translated for the everyday classroom choice between quizzing and rereading.

Testing yourself on new material straight after learning it feels harder and produces worse recall minutes later. But in a classic memory study, the self-testers remembered 61% of a passage a week on, against 40% for learners who had just reread it four times, even though they had read it far fewer times.

● ● ● Evidence: Secure

UK school-age classroom trials with longer follow-up would test whether the delayed retrieval advantage endures beyond one week and timed lab passages.



WHAT HAPPENED

Self-testing loses at first. A week later, it wins big.

University learners who read a short passage once and then tested themselves on it three times, writing down everything they could remember with no notes and no feedback, recalled less five minutes later than learners who reread the same passage four times (71% vs. 83%). A week later, the pattern flipped: the self-testers remembered 61% of the passage, against 40% for the rereaders, even though they had read it far fewer times on average (3.4 times against 14.2).

■ Reread four times ■ Tested from memory three times

Right after learning (5 minutes)



A week later



Proportion of a short factual passage recalled, from a study of 180 university learners (Roediger & Karpicke, 2006, Experiment 2). A third group who studied three times then tested once scored in between at both points (78% at 5 minutes, 56% a week later).

The moves the self-testers used

1

Write it, don't just reread it

Closed the book and tried to recall the whole passage from memory, in writing, rather than scanning it again.

2

No feedback, and it still worked

Practice tests had no correction or answer key. The effortful attempt itself did the work.

3

Fewer looks at the material, more attempts to recall it

Self-testers read the passage 3.4 times on average. Rereaders read it 14.2 times, and remembered less a week later.

Across your subjects and classes

This is a memory-lab study of university learners recalling short factual passages, not a UK classroom trial. What follows are sensible ways the same have-a-go-before-you-check principle could translate to your subject, worth trying, not proven for your specific class.

Subject	How the practice could translate
English	After one read of a poem or extract, learners close the book and write everything they remember before rereading it, rather than rereading it several times over.
Maths	After one worked example, learners attempt a similar problem from memory before checking the method again, rather than re-copying the example.
Science	After one look at a diagram or process, learners sketch and label it from memory before checking it against the original.
History / humanities	After one read of a sequence of events, learners retell it in their own words before looking again, rather than rereading the timeline.
MFL	After seeing new vocabulary once, learners try to recall and write the words before looking at the list again.

Adapt it to the class in front of you

Quiet or reluctant

Keep the self-test private, on paper or a mini whiteboard turned face down, so no one sees a wrong first attempt.

Top set, high-attaining

Don't let them skip the effortful step because they "already know it". In the study, the most confident rereaders remembered the least.

Boisterous, talks over others

A short, timed "write everything you remember" task channels energy into a concrete task with a clear end point.

Foundation, EAL or SEND

The study gave no correction on early attempts and it still worked. A simple "have a go, then we'll check together" removes the pressure of a right first answer.

A strong, well-replicated reversal

Firm

This rates the evidence's firmness, not our endorsement of the technique. Two controlled experiments in the same paper show the same reversal, with large, precisely reported effect sizes, and the pattern is one of the most extensively replicated in memory research.

- The study used US university learners recalling short factual passages under timed lab conditions, not UK school-age learners doing normal classwork, so the exact size of the effect in a real classroom may differ.
- The comparison is specifically self-testing (free recall, no feedback) against rereading. It doesn't show that any "harder" task automatically helps memory, only this particular kind of retrieval effort.
- Retention was measured only up to one week later, so this doesn't show whether the advantage lasts a whole term or a whole year.

What that means for you: treat "have a go from memory before you check" as a strong, well-evidenced classroom habit, not a licence to make every task needlessly hard. The point is effortful retrieval, not difficulty for its own sake.

TRY IT THIS WEEK

Your first small step

THIS WEEK

Next time learners finish reading or learning something new, before you go over it together, give them two minutes to write down everything they remember, no notes, then let them check.

Try it and watch: notice whether learners groan at first (the study's confident rereaders did too), and whether what they write down from memory sticks better than what they just reread. That's your own evidence, not ours. In the study behind this, the self-testers felt least sure they'd remember the material, but a week later they were the ones who remembered the most.

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