

For Parents · Free resource

How spaced repetition works – and why SpellCast uses it

A guide for parents

The problem with Friday spelling tests

Most children experience spelling like this: a list of words on Monday, practise them through the week, test on Friday. Score well, forget by Monday.

This isn't a failure of effort. It's a consequence of how human memory works.

Short-term practice produces short-term results. A word learned on Tuesday for a Friday test sits in short-term memory. Without a reason to recall it again, it fades. Within two weeks, most children cannot spell most of the words they aced on Friday.

(Source: Roediger, H.L. & Karpicke, J.D. (2006). Test-Enhanced Learning. Psychological Science, 17(3), 249–255.)

What the research shows

Scientists have studied how memory works for over a century. The finding that matters for spelling is this:

The act of retrieving a memory — trying to recall something — makes that memory stronger.

This is called the **testing effect** or **retrieval practice effect**. When your child tries to spell a word from memory (rather than copying it from a list), two things happen:

The attempt itself strengthens the memory

Getting it wrong and then seeing the correct spelling creates a stronger long-term trace than getting it right first time

In a 2006 study, students who practised by testing themselves remembered 50% more after a week than students who re-read the same material. The testing group spent less time studying.

What spaced repetition adds

Retrieval practice is powerful. Spaced repetition makes it even more so.

Spaced repetition means bringing a word back for practice at increasing time intervals:

A word your child just learned comes back **tomorrow**

Then again in **three days**

Then **a week later**

Then **a month later**

Each successful recall stretches the interval further. Each failure resets the interval — the word comes back sooner.

This matters because forgetting is not all-or-nothing. There is a window — just before you're about to forget something — where practising it produces the strongest memory trace. Spaced repetition schedules practice to hit that window.

(Source: Cepeda, N.J. et al. (2006). Distributed Practice in Verbal Recall Tasks. Psychological Bulletin, 132(3), 354–380.)

How SpellCast uses this

When your child spells a word correctly in SpellCast, the app schedules that word to reappear days or weeks later. When they get it wrong, it comes back sooner — sometimes the next session.

Your child never sees the schedule. To them, it just feels like playing a spelling game. But underneath, SpellCast is making sure every word gets practised at the exact moment it will have the most effect.

This is what a private tutor does — except SpellCast does it for every word, for every child, automatically.

What this means for your child

Normal drop in accuracy is expected. As SpellCast introduces harder words and brings back older ones after longer gaps, your child's overall accuracy may dip. This is not a sign they're struggling — it's a sign the system is working. They are being challenged at exactly the right level.

Short sessions are fine. Ten minutes of retrieval practice three times a week is more effective than one 30-minute session. SpellCast is designed for short, regular use.

You don't need to test them yourself. The app does it. What helps most at home is encouraging them to have another go when they get something wrong — the recovery attempt is where the learning happens.

The simple version

Your child spelled a word wrong. SpellCast remembered. It will ask again in two days. They'll get it right next time. Two weeks from now, they'll spell it correctly without thinking.

That's spaced repetition. That's why it works.

Sources:

Roediger, H.L. & Karpicke, J.D. (2006). Test-Enhanced Learning. Psychological Science, 17(3).

Cepeda, N.J. et al. (2006). Distributed Practice in Verbal Recall Tasks. Psychological Bulletin, 132(3).

Baddeley, A. & Longman, D.J.A. (1978). The Influence of Length and Frequency of Training Sessions on the Rate of Learning to Type. Ergonomics, 21(8).

This guide is published by SpellCast (spellcast.academy). Free to share.