Many students don't know how to study. Here's how parents can help

Among the creative and maddening reasons kids come up with for not studying, one familiar reason might be worth addressing: they don't know how.

Researchers and experienced educators have found that often students don't have good study habits and skills, or that they rely on strategies that don't work, frequently at the urging of teachers and parents.

"It is somewhat shocking how many students just don't know how to do it, which frustrates them and can turn them off to enjoying learning," says Henry Roediger, a professor of psychology and brain science at Washington University in St. Louis and co-author of the book *Make It Stick*. "It's something that needs to be taught in third or fourth grade and reinforced throughout their school years."
Busy teachers, however, may not be likely to add those lessons, so it often falls to parents. Nate Kornell, another researcher on the topic and a psychology professor at Williams College in Williamstown, Massachusetts, says helping your child study can be a good opportunity to learn about their coursework, progress and abilities - and a way to get to know them better.

"It's like magic when a kid understands how to study and values learning on a deeper level. And parents can really be involved in that," he says.

Roediger, Kornell and other researchers have found that some popular approaches to studying - such as rereading, highlighting or summarizing material - are not very effective, especially long term, while other techniques, including spacing out study and self-testing, are. They've also found that when students learn study skills, their performance increases significantly - as does their attitude about a subject.

Here are suggestions from experts on how to teach children to study more effectively.

Set it up

The ideas here are familiar. Establish a regular time and routine for homework - a pattern that can be started early in elementary school, with scheduled reading time or structured games, says Christine Martin, an early childhood educator and author of the book "You've Got This! Keys to Effective Parenting for the Early Years."

And despite competition for attention and time from technology and activities, parents should be firm about rules, including about minimizing distractions and choosing appropriate settings for study. Some research has shown, however, that students learn better if they mix up where they study, so see what works best for your child.

Parents should think carefully about their role. Don't help too much, and resist the urge to nag, which can make students dread studying. Martin suggests establishing the rules and schedule with student input, offer help when needed and monitor the results by having students show them their work, or by checking grades or asking for teacher feedback. Experts suggest multiplying your child's grade level by 10 to determine how many minutes they should spend studying each day.

Space it out

John Dunlosky is a psychologist at Kent State University in Ohio who has done research on learning techniques. In one study with other researchers, he ranked 10 popular approaches using various criteria and he found that spaced practice - or studying a subject then taking a break and studying it again - was one of the most effective.

This suggests that a student who studies a topic for an hour on three days over the course of a week will know the information better than a student who spends three hours on it in one night. That may be because forgetting some things between sessions causes you to relearn them more efficiently and deeply, Kornell says.

Mix it up

Coaches and music teachers have long known that their students benefit from practicing a mix of skills in one session - scales and rhythmic work, for instance, or hitting fastballs and curves, then catching grounders.

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Roediger says the same can be true for academic work. When a study session involves a mix of topics or approaches, it helps students "discriminate among the types of problems and select the right method for each," he says. Spending blocks of time studying one subject or type of problem in a vacuum, experts say, doesn't let children see the relationship between topics, or teach them to distinguish between problems and solutions.

Bring it back

Researchers seem enthusiastic about retrieval - being quizzed about material you have studied, either by yourself or others - as the most effective studying technique.

"We think of this for simple kinds of learning, like spelling tests or learning multiplication tables, but it actually works all the way to medical school," Roediger says. "And it gets you results short-term and long-term." He says it helps you "know what you know" and reinforces it, while pointing to things you don't and embedding them.

A related technique of self-explanation, where students talk to themselves about their progress through the learning process, also has shown promise, Dunlosky says.

Some educators recommend that students eliminate material they know while studying so they are reviewing less material and can focus on topics they are struggling with. But experts say a desire to make quick progress may prompt them to eliminate material they think they know but actually don't fully understand.

"We may very well know that George Washington is the first president and be able to commit some things like that to memory and not have to restudy them. But generally we are a bad judge of what we really have retained," he says.

Make it deeper

Kornell talked about an experience with his daughter, who as a young teenager had planned to memorize terms to study for an upcoming test about plant reproduction. He encouraged her instead to learn the material well enough to teach it to him. Doing that paid off on the test, he says, and enhanced her long-term understanding and interest in the subject, because teaching material is more engaging than simply being tested.

He says that, because of kids' busy schedules and the U.S. education system's focus on testing, students too often just gather facts for quick recall rather than engaging in deeper learning about a subject, and that's a mistake.

"It's like climbing a mountain," he says. "It's hard, but there is such a payoff. It's magical when they know these skills and it works."