Building secure recall and understanding

Tom Sherrington and Sara Stafford

What's the idea?

Teachers need to design learning so that students have a chance to check what they have learned, reinforcing their memory and understanding through retrieval practice.

What does it mean?

It is essential for students to check what they have learned by retrieving the information in various forms over time. This helps them link new knowledge to information they already know and develop secure sets of knowledge (or schema). The more secure and extensive a schema becomes, the more the student grows in confidence and the further they can explore the topic.

Remembering is a generative process – we only know we know things by actually generating a conscious version of our knowledge. Retrieving our knowledge helps us to evaluate what we know and strengthens the connections in our schema, making it easier to recall again later.

What are the implications for teachers?

Unless students generate information from memory without support, they and their teachers can't be sure they've learned or understood it properly. It's all too easy to complete tasks that move information around without needing to generate any recall. This creates an illusion of learning that isn't necessarily real, so it's vital that students are able to self-check, exploring their schemata by recalling information independently in various forms. Arthur Shimamura (2018) suggests a simple regime: think it, say it, teach it. Each of these forces students to draw on their long-term memory.

Teachers should plan activities that include these generative processes, and use them often. There are lots of methods, including low-stakes tests, self-quizzing, mental rehearsal, explaining to someone else, asking 'how' and 'why' to probe understanding more deeply, or performing a skill unaided. It is really anything that makes students demonstrate whether they can do something, or if they know something, and whether they can explain it.

Top tips:

Get your students to check their understanding by removing all support materials and then practising a skill or explaining a concept to themselves or to a partner. Use Shimamura's 'think it, say it, teach it'.

WANT TO KNOW MORE?

» Shimamura A (2018) MARGE: A Whole-Brain Learning Approach for Students and Teachers. Available at: https://shimamurapubs.files.wordpress.com/2018/09/marge_shimamura.pdf (accessed 8 February 2019).

» Sumeracki M and Weinstein Y (2018) Understanding How We Learn: A Visual Guide. Abingdon: Routledge.