



LEARN BETTER

ULRICH BOSER

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An infographic summary by Oliver Caviglioli | @olivercaviglioli | teachinghow2s.com

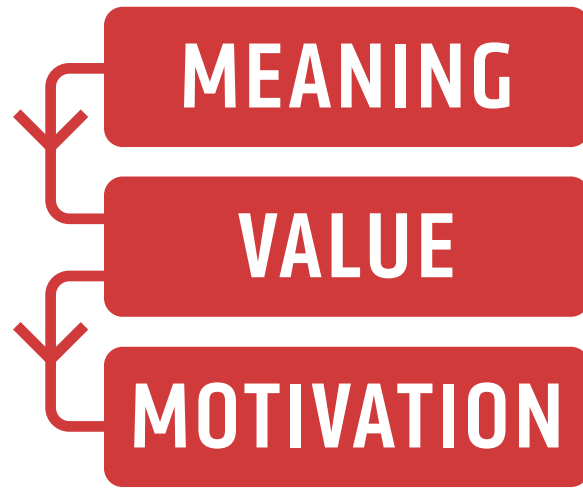
VALUE | TARGET | DEVELOP | EXTEND | RELATE | RETHINK

VALUE

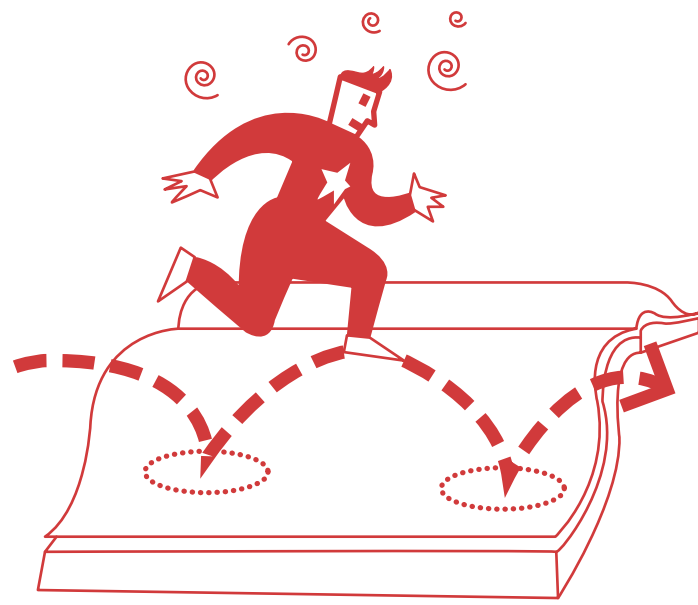


Value is the ultimate drive to learn. We're motivated to gain expertise because of the power of meaning.

If you think about information meaningfully, you are much more likely to remember that information.



PUSH STUDENTS TO LEARN THROUGH COGNITIVE EFFORT



WE LEARN MOST EFFECTIVELY WHEN EXPERTISE IS BROKEN DOWN INTO DISCRETE CHUNKS

TARGET



Hundreds of studies have shown that people with clear goals outperform people with vague aspirations.

To gain knowledge we need to have a dedicated way to acquire that knowledge.

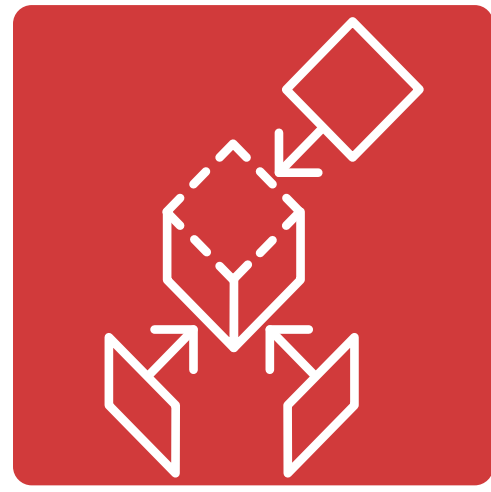
We understand through the prism of what we know.

Experts organise their understanding very differently from amateurs.

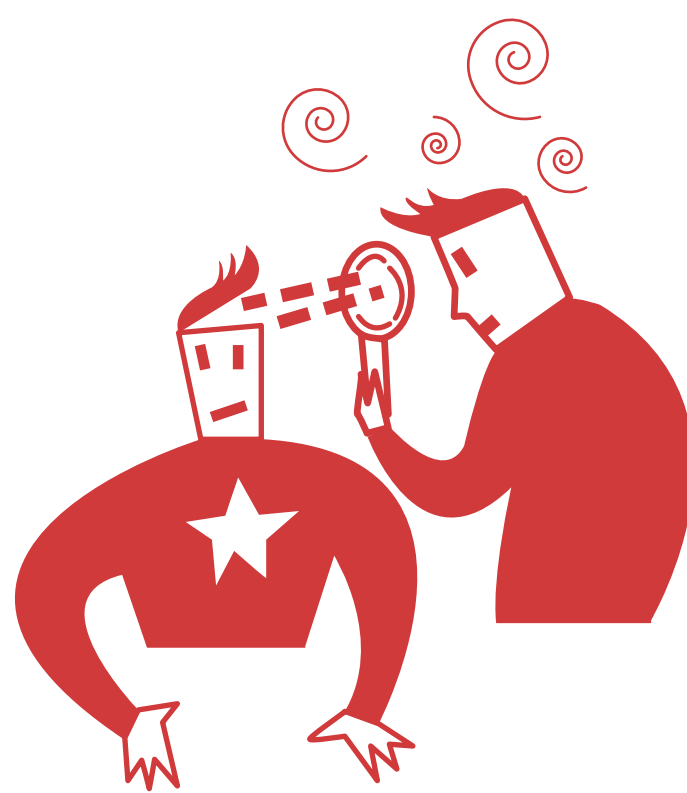
Working memory is often where learning happens.



DEVELOP



INCREASED OBSERVATION OF OUR PERFORMANCE MAKE US BETTER AT JUST ABOUT EVERYTHING

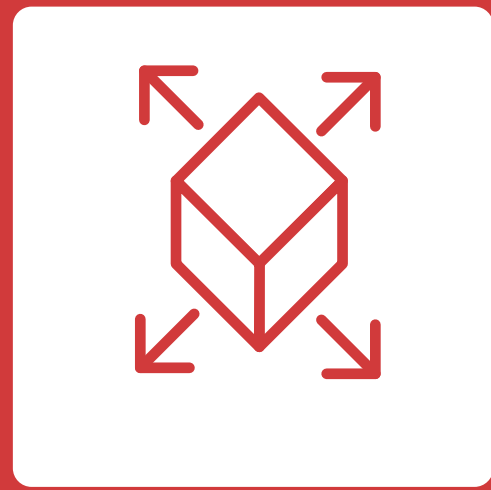


Feedback works best when it offers someone a new form of reasoning, when it changes how someone thinks about a topic.

There's simply no such thing as effortless learning.

Retrieval practice, then, helps ensure that we know what's in a memory box.

EXTEND



We want to go beyond the basics and apply what we know. We want to...create more meaningful forms of understanding.

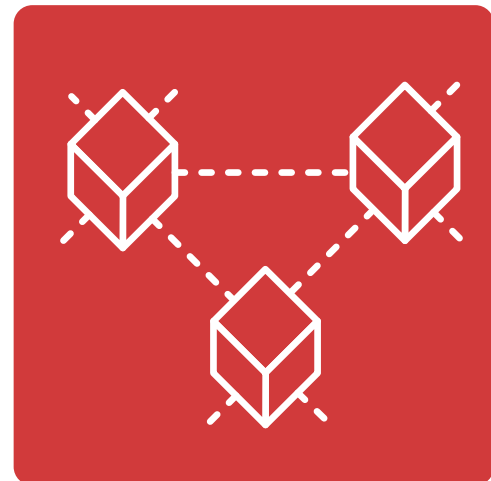
People simply work harder if they know that they're going to teach someone else.

A lot what you're doing in self-explanation is trying to make connections.

To gain expertise you need to do 'interpretive work'.



RELATE



This is the phase where we see how it all fits together.

To spot deep connections, we need a lot of examples.

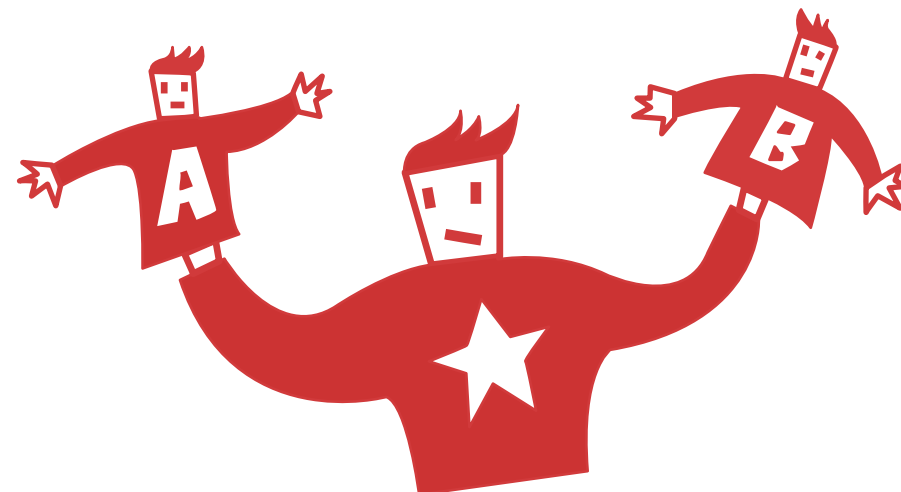
Graphic organisers help people to put the pieces together.



Analogies help us understand categories.

By mixing up practice, by interweaving different examples, people have a better sense of the underlying relationships.

By seeing similarities and differences, people get a keener sense of the deep features of a fact or concept.



RETHINK



Learning often leaves as soon as it arrives. When it comes to memories, the brain is like a sieve.



Overconfidence goes a long way to preventing effective learning. When people are overconfident they don't study. They don't practice.