

How learning *really* happens.

A great deal of what makes teaching work sits below the surface, in how memory and attention behave. Six findings from cognitive science, and what each one asks of us in the classroom.

01

Working memory tires quickly

We can hold only a handful of new items in mind at once, and not for long. Chunk information, and lean on what students already know so that fresh material has somewhere to land.

02

Retrieval is learning

Pulling knowledge back out of memory strengthens it. A test is not only a measure; the act of recall is itself an act of learning. Build in frequent, low-stakes quizzing.

03

Memory is reconstructive

We do not store memories intact and replay them. Each recall rebuilds the idea, shaped by what the learner already understands. Knowledge makes the connections that understanding then follows.

04

Knowledge underpins thinking

Critical and creative thinking rest on knowing things. You cannot connect dots that are not there. Careful curriculum sequencing matters, because new learning is built on what came before.

05

Achievement drives motivation

Motivation and success feed one another, and often it is success that comes first. Well-structured teaching can manufacture early wins, and small successes accumulate into confidence, interest and persistence.

06

Learning is not performance

What a student can do today is a poor guide to what they have learned for good. Aim for knowledge that endures. A degree of difficulty, chosen well, makes learning more durable and more flexible.

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"Effective teaching is not about painting by numbers; it's a nuanced, expert response informed by deep understanding of how learning truly happens."

Dr Carl Hendrick