

Learning Principles Distilled from the Research Literature

These twelve learning principles have been compiled from recently published books and research articles. All the learning syntheses cited here include the central notion of “learners at the center” (Groff, 2012) as expressed in Lee Shulman’s classic essay, “Taking Learning Seriously” (1999).

To prompt learning, you’ve got to begin with the process of going from inside out. The first influence on new learning is not what teachers do pedagogically but the learning that’s already inside the learner. Any new learning must, in some fashion, connect with what learners already know. Learners construct their sense of the world by applying their old understanding to new experiences and ideas.

Learning Principles

1. Prior knowledge crucially influences what and to what extent new learning happens.
2. Deep and durable learning requires sustained, active, and effortful thinking.
3. Working memory can be overloaded and needs to be carefully managed for optimal learning.
4. Effective feedback in an ongoing way is necessary for moving learning forward and improving performance.
5. Beliefs about belonging, struggle, mistakes, and effort strongly influence student learning.
6. Learners are more motivated when they develop a sense of competency, independence, and connection to others in pursuing meaningful learning goals.
7. Self-directed learning requires students to think regularly about how effectively they are learning (or not) and be able to strategically adjust accordingly.
8. Learners need to understand the misconceptions and myths about what constitutes effective learning strategies and environments.
9. The brain is plastic, intelligence is malleable, expertise is mostly learned, and our brain has some predictable limitations with regard to learning.
10. Cognitive development must be considered when interacting with a learner.
11. We often learn best in social contexts through interaction with others.
12. A learner’s emotional and physical wellbeing can strongly influence their learning in positive and negative ways.

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