

II. Learning and Instruction

Many of the activities that LIDT professionals engage in are also completed by other professionals, such as web designers, curriculum writers, multimedia developers, and teachers. A powerful difference for LIDT professionals is our understanding of learning and instructional theory, and our efforts to apply these theories to our LIDT practice. For this reason, understanding what psychology and science can teach us about how people learn, and how good instruction is provided, is critical to any effective LIDT professional. The chapters in this section serve only as a basic starting ground to your pursuit of understanding in this area. You will learn about how the mind works and remembers information, and emotional factors in learning such as motivation and self-efficacy. I have included a classic article by Peg Ertmer and Tim Newby on the "Big 3" learning theories of behaviorism, cognitivism, and constructivism and a new chapter on sociocultural learning theories which extend beyond the Big 3. Included are a few chapters on more recent theoretical developments in the areas of informal learning, internet-based learning (connectivism), learning communities, and creative learning. Finally, two chapters are included on instructional theory from Charles Reigeluth, who edited several editions of the book *Instructional-Design Theories and Models* and David Merrill, whose *First Principles of Instruction* summary of basic instructional principles is perhaps the most well known of instructional frameworks in our field.

Additional Reading

An excellent resource to supplement your reading of learning theories in this section is the newly released *How People Learn* book, available for free online.

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Memory
Intelligence
Behaviorism, Cognitivism, Constructivism
Sociocultural Perspectives of Learning
Learning Communities
Communities of Innovation
Motivation Theories and Instructional Design
Motivation Theories on Learning

Informal Learning
Overview of Problem-Based Learning
Connectivism
An Instructional Theory for the Post-Industrial Age
Using the First Principles of Instruction to Make Instruction Effective, Efficient, and Engaging



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