

How People Learn: Intro to Learning Theories

Darling-Hammond, L., Austin, K., Orcutt, S., & Rosso, J. (2015). *How people learn: introduction to learning theories* [PDF document]. Retrieved from Annenberg Learner website, The Learning Classroom: Theory into Practice online course support materials [http://www.learner.org/courses/learningclassroom/support/01_intro.pdf]

"To a substantial extent, the most effective strategies for learning depend on what kind of learning is desired and toward what ends" (p. 2).

Introduction

Darling-Hammond, Austin, Orcutt, and Rosso begin with a brief history of learning, especially with regard to how learning has been understood by philosophers and theorists from a variety of fields. They next describe contemporary theories of learning, and suggest ways in which theory can be used in practice. The authors frame these recommended teacher practices in terms of "organizing the environment; organizing knowledge, information, and activities; and organizing people" (17).

Contemporary ideas about the learning process include the following concepts.

The Brain Plays a Role:

"Our brains are set up to process information coming in from the outside world, to make sense of these stimuli, and to draw connections... Information is easier to understand and use when it is introduced through learning pathways that are better developed (p. 16)."

Learning is Based on Associations:

"Cognitive scientists have demonstrated how learning is a process of drawing connections between new information and what is already known... Teachers can influence this process by organizing information and helping learners access their prior knowledge and draw connections to new material (16)."

The Learning Environment Makes a Difference:

"People learn by making sense of the environment and stimuli around them. Behaviorists taught us that greater perceptual development and learning occur in environments that are rich with stimuli and provide feedback in response to a learner's efforts. Learning is also enhanced when content is relevant to students' lives, when teachers provide opportunities to build understandings and practice skills, and when students have choices that are interesting to them. In addition, access to teachers and peers who can model, explain, discuss, or critique shapes the learning process (16)."

Learning Occurs in Cultural and Social Contexts:

"Culture influences the experiences people bring to the classroom...How teachers organize the culture of the classroom—how they communicate, define students' roles, and support or discourage collaboration—all influence what is learned (17)."

People Learn in Different Ways

"...Students have a number of intelligences beyond the language and mathematical abilities typically emphasized in schools. Learners also possess spatial, musical, and kinesthetic abilities. In addition, students demonstrate differences in how they prefer to take in and process information (17)."

People Think About their Own Learning, and their Feelings Matter:

"...Both thoughts and emotions shape the learning process. Being able to think about and monitor their own thinking enables learners to direct their own learning. ... Students who are fearful, anxious, depressed, or distracted cannot focus to process information. Positive emotions—feelings of confidence and willingness to exert effort—can help students to think, perform a learning task, and process new knowledge. The ability to recognize and manage their emotions, to solve conflicts, to motivate themselves, and to persevere in the face of difficulty can help students become lifelong learners (17)."

Recommended Teacher Practices

Organizing the Environment (p. 17 - 18)

- Hands-on learning
- Authentic tasks and audiences
- Active learning: "in which students are asked to write and talk about ideas, create models and demonstrations, solve complex problems, and construct projects that require the integration of many ideas" (17)
- Rich materials (e.g. models, manipulatives, learning centers, texts and computers): "for students to work with, manipulate, and use to gather information and create representations of their learning" (18)
- Discussion: "about ideas, concepts, and relationships" (18)

Organizing Knowledge, Information, and Activities (p. 18)

- Accessible and appropriate tasks
- Feedback with opportunities for revision
- Opportunities to plan and organize complex tasks
- Opportunities to use specific learning strategies
- "Advance organizers"
- Modeling and demonstrating expertise
- Scaffolding
- Coaching learners

Organizing People (p. 18)

- Collaboration over appropriate tasks
- Community
- Peer teaching
- Choice in learning activity to meet diverse needs and interests