

Constructivism Principles (taken from <http://userwww.sfsu.edu/~foreman/itec800/finalprojects/eitankaplan/pages/principles.htm> on 8/30/2011)

A constructivist learning setting differs greatly from one based on the traditional model. In the constructivist classroom the teacher becomes a guide for the learner, providing bridging or scaffolding, helping to extend the learner's zone of proximal development. The student is encouraged to develop metacognitive skills such as reflective thinking and problem solving techniques. The independent learner is intrinsically motivated to generate, discover, build and enlarge her/his own framework of knowledge.

1. **It takes time to learn: learning is not instantaneous.** For significant learning we need to revisit ideas, ponder them, try them out, play with them and use them. This cannot happen in 5-10 minutes.
2. **Learning is an active process in which the learner uses sensory input and constructs meaning out of it.** Learners need to do something, because learning involves the learners engaging with the world.
3. **People learn to learn as they learn: learning consists both of constructing meaning and constructing systems of meaning.** Each meaning we construct makes us better able to give meaning to other sensations that can fit a similar pattern.
4. **The crucial action of constructing meaning is mental:** it happens in the mind. We need to provide activities which engage the mind as well as the hands.
5. **Learning involves language:** the language we use influences learning. People talk to themselves as they learn, and language and learning are inextricably intertwined.
6. **Learning is a social activity:** our learning is intimately associated with our connection with other human beings, our teachers, our peers, and our family. Conversations, interaction with others and collaborations are an integral aspect of learning.

7. **Learning is contextual:** we do not learn isolated facts and theories in some abstract ethereal land of the mind separate from rest of our lives. We learn in relationship to what else we know, what we believe, our prejudices and our fears.
8. **One needs knowledge to learn:** it is not possible to assimilate new knowledge without having some structure developed from previous knowledge to build on. The more we know the more we can learn.
9. **Learning is not the passive acceptance of knowledge which exists "out there".** Learning involves the learner engaging with the world and extracting meaning from his/her experiences
10. **Motivation is a key component in learning.** Not only is the case that motivation helps learning, it is essential for learning.