Situated Learning

General

Situated learning or situated cognition is a learning theory developed in the late 1980s by Jean Lave and Etienne Wenger and soon expanded by John Seely Brown and his colleagues. Situated learning theory is based on the assumption that knowledge should be presented in authentic context that involves its application. Both authors argue that learning should not be viewed as transmission of abstract and contextualized knowledge between individuals, but a social process within certain conditions which include activity, context and culture.

• “The theory of situated cognition... claims that every human thought is adapted to the environment, that is, situated, because what people perceive, how they conceive of their activity, and what they physically do develop together.”

What is situated learning?

The claims of situated learning theory can roughly be divided in following categories:

• Learning - Learning, according to Lave, occurs only if learner is put into an authentic real-world situation or context and into interaction with other people and cannot be separated from other human activities. There is also no capacity that should be filled with knowledge. Learning does not occur as the objective, but rather as the byproduct of the situation. The failure to learn or diagnoses of learning disabilities are phenomena resulting from formal educational systems which mostly ignore mentioned prerequisites of learning.

• Knowledge - In contrast to formal education system which addresses knowledge as objective, decontextualized, apolitical and asocial, situated learning theory sees knowledge as social and context dependent.

• Learning transfer - Since learning is tightly related to the context, it cannot be transferred to new contexts unless they are nearly same.

• Context - Lave's assumptions about learning were derived from her studies of people's performance in mathematics, where mathematics was chosen just for simplicity of test design and results measuring. In one experiment, performance on arithmetical tasks was measured during everyday shopping in the supermarket and on arithmetical test that questioned same skills. The results on test were worse then same tasks performed in supermarket even though test contained just the arithmetical tasks that were observed during shopping in the supermarket. Although basically it was basic mathematics in both cases, on test people performed according to what they learned in school and in supermarket according to their own methods. Her experimental conclusion was that when people acquired out-of-context skills in the classroom, they generally were unable to apply them in real-life situations for which they were predicted. The real-world context is necessary for a skill to be learned and should be provided in a so-called community of practice. Still, people manage to develop their own, often very effective, ways of doing things.

• Learning abstract concepts - learning abstract concepts is decontextualized and therefore of little use.

• Social environments - Social interaction is also an important component of situated learning
learners become a part of a “community of practice” which presents certain beliefs and behaviors to be acquired. Moving from the periphery of the community to its center represents becoming an expert in some field. Learning needs to occur in complex social environments.

What is the practical meaning of situated learning?

Since situational learning theory is not necessarily oriented on formal institutional sites of learning, it is also not necessarily orientated on improving the practice of educationalists and practices performed on those sites. Still, a model of how situated learning theory should affect instructional design was suggested in 1989 by Brown, Collins and Dugid. This model is called cognitive apprenticeship.

Criticisms

Some of the criticisms to situated learning theory state that:

- it is untrue that concepts learned in classroom cannot be applied in other contexts (like math).
- The fact that learning and performance was sometimes (but not always) context dependent is known for a long time now. Experiments have shown that for example divers remember worse what they have learned in other context (water/land and vice-versa), or the inability to apply mathematics knowledge outside the classroom, but others have failed to find context specificity of learning, for example in transfer of reading from one context to another.
- there is plenty of research proving transfer of learning,
- practical examples have shown that training in abstraction can be of use,
- research in psychology supports the idea that training is often more effective when basic skills are learned before combining them together for a complex performance.

Keywords and most important names

- situated learning theory, real-world situation, context
- Jean Lave, Etienne Wenger, John Seely Brown, Allan Collins, Paul Duguid

Bibliography


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Notice this approach is quite the opposite from cognitivist approach to learning, where knowledge and learning are isolated from other human activities and there is a mental capacity to be filled with knowledge.


