Learning: Theory and Research

Social Constructivism

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> takes place. It comprises cognitive structures that are still in the
> process of maturing, but which can only mature under the guidance
> of or in collaboration with others.

Background

Social constructivism is a variety of cognitive constructivism that emphasizes the collaborative nature of much learning. Social constructivism was developed by post-revolutionary Soviet psychologist Lev Vygotsky. Vygotsky was a cognitivist, but rejected the assumption made by cognitivists such as Piaget and Perry that it was possible to separate learning from its social context. He argued that all cognitive functions originate in, and must therefore be explained as products of social interactions and that learning was not simply the assimilation and accommodation of new knowledge by learners; it was the process by which learners were integrated into a knowledge community. According to Vygotsky (1978, 57),

> Every function in the child's cultural development appears twice:
> first, on the social level and, later on, on the individual level; first,
> between people (interpsychological) and then inside the child
> (intrapsychological). This applies equally to voluntary attention, to
> logical memory, and to the formation of concepts. All the higher
> functions originate as actual relationships between individuals.

Vygotsky's theory of social learning has been expanded upon by numerous later theorists and researchers.

View of Knowledge

Cognitivists such as Piaget and Perry see knowledge as actively constructed by learners in response to interactions with environmental stimuli. Vygotsky emphasized the role of language and culture in cognitive development. According to Vygotsky, language and culture play essential roles both in human intellectual development and in how humans perceive the world. Humans' linguistic abilities enable them to overcome the natural limitations of their perceptual field by imposing culturally defined sense and meaning on the world. Language and culture are the frameworks through which humans experience, communicate, and understand reality. Vygotsky states (1968, 39),

> A special feature of human perception ... is the perception of real

> objects ... I do not see the world simply in color and shape but also
> as a world with sense and meaning. I do not merely see something
> round and black with two hands; I see a clock ...

Language and the conceptual schemes that are transmitted by means of language are essentially social phenomena. As a result, human cognitive structures are, Vygotsky believed, essentially socially constructed. <mark>Knowledge is not simply constructed, it is co-constructed.</mark>

View of Learning

<mark>Vygotsky accepted Piaget's claim that learners respond not to external stimuli but to their interpretation of those stimuli. However, he argued that cognitivists such as Piaget had overlooked the essentially social nature of language. As a result, he claimed they had failed to understand that learning is a collaborative process.</mark> Vygotsky distinguished between two developmental levels (85): The level of **actual** development is the level of development that the learner has already reached, and is the level at which the learner is capable of solving problems independently. The level of **potential** development (the "zone of proximal development") is the level of development that the learner is capable of reaching under the guidance of teachers or in collaboration with peers. The learner is capable of solving problems and understanding material at this level that they are not capable of solving or understanding at their level of actual development; the level of potential development is the level at which learning takes place. It comprises cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.

View of Motivation

Behavioral motivation is essentially extrinsic — a reaction to positive and negative reinforcements. Cognitive motivation is essentially intrinsic — based on the learner's internal drive. <mark>Social constructivists see motivation as both extrinsic and intrinsic.</mark> Because learning is essentially a social phenomenon, learners are partially motivated by rewards provided by the knowledge community. However, because knowledge is actively constructed by the learner, learning also depends to a significant extent on the learner's internal drive to understand and promote the learning process.

Implications for Teaching

Collaborative learning methods require learners to develop teamwork skills and to see individual learning as essentially related to the success of group learning. The optimal size for group learning is four or five people. Since the average section size is ten to fifteen people, collaborative learning methods often require GSIs to break students into smaller groups, although discussion sections are essentially collaborative learning environments. For instance, in group investigations, students may be split into groups that are then required to choose and research a topic from a limited area. They are then held responsible for researching the topic and presenting their findings to the class. More generally, collaborative learning should be seen as a process of peer interaction that is mediated and structured by the teacher. Discussion can be promoted by the presentation of specific concepts, problems, or scenarios; it is guided by means of effectively directed questions, the introduction and clarification of concepts and information, and references to previously learned material. Some more specific techniques are suggested in the Teaching Guide pages on Discussion Sections.

Reference

Vygotsky, Lev (1978). *Mind in Society*. London: Harvard University Press.