Cognitive Development Theory by Vygotsky

In contrast to other cognitive perspectives, Vygotsky accorded a central role to culture and social interaction in the development of complex thinking. In addition, he advocated the study of children's unfolding development of cognitive processes, and pioneered a research method to accomplish this purpose.

Essential to cognitive development is the social interaction between the learner and a knowledgeable adult. Development of the higher cognitive functions depends on situations in which the adult commands the learner's attention, focuses his or her perception, or guides the learner's conceptual thinking. Formally stated, any higher cognitive function, such as self-regulated attention, categorical perception, or conceptual thinking, was first external in the form of a social relationship between two people. Then, through the learner's activity, it becomes internalized as an intracognitive function.

Vygotsky's emphasis on the dynamics of development is reflected in his critique of psychological research for studying already developed or fossilized behaviors. Instead, research methods should capture the processes of development. Vygotsky's double-stimulation method placed learners in problem-solving situations that were above their natural capacities. Available nearby were aids, such as colored cards or pictures. Vygotsky and his co-workers studied the ways learners of different ages struggled or successfully used these aids, documenting changes in learner activity and accompanying changes in cognitive functioning.

Vygotsky's view that learning leads development and the immaturity of students' conscious awareness and mastery of their thinking at school age set the stage for the concept referred to as the zone of proximal development (ZPD). Defined as including higher cognitive functions that are about to mature or develop, the ZPD is determined by the cognitive tasks the learner can complete in collaboration with an adult or an advanced peer. Simply stated, the cognitive operations that the student can complete with the assistance of another today, he or she can accomplish alone tomorrow.¹

According to Lev Vygotsky, collaboration promotes cognitive growth because students model for each other more advanced ways of thinking than any would demonstrate individually.²

For Vygotsky, the metaphor that best describes the primary source of development is that children are "little apprentices" who receive the help and support that they need from their teachers in learning situations. Thus, for Vygotsky, the development of cognition comes more from outside the individual than from inside.³

³ Text taken from: http://thebrain.mcgill.ca/flash/i/i_09/i_09_p/i_09_p_dev/i_09_p_dev.html

¹ Text taken from: http://www.answers.com/topic/lev-vygotsky

² Text taken from http://college.cengage.com/education/resources/res_project/students/c2007/tc/coop.html