ASSESSING VYGOTSKY'S MODEL FOR STUDENTS LEARNING

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ABSTRACT

Socio-cultural theory, as proposed by Vygotsky, sheds light on our understanding of effective instruction in the Zone of Proximal Development and Scaffolding concepts. Teachers can assist learners by transmitting knowledge and skills to them in the learning environment applying ZPD and Scaffolding metaphors. Social interaction of teachers, and learners, or more knowledgeable others are vital in the mentioned above theory. Scaffolding is useful as the learner will become more independent and exercise control in learning. However, the theory can be ineffective when teaching large classes. Teachers may not find it easy to scaffold with many learners.

Keywords: Zone of Proximal Development, Scaffolding

INTRODUCTION

Vygotsy's concepts of Scaffolding and the Zone of Proximal development provide a useful realistic view of how students learn in one on one and small group settings. However, in large classes it is unrealistic to expect that teachers can implement the practice of Scaffolding and the Zone of Proximal Development successfully. The Zone of Proximal Development as defined by Vygotsky (1978) is "the distance between the actual developmental levels as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or collaboration with more capable others" (p. 86). The child can be thought of entering into relations with the situation, not directly but through the assistance of the other capable person. The theory explains students' successes when we look at tutorial context that is created by an adult who has a major role in the learning process.

This author believes that students cannot succeed alone. As they learn, they need help interacting with more knowledgeable others. Through these interactions with adults or experienced peers, students will learn how to tackle and solve different kinds of problems. The "internalization" theory of Vygotsky proposed that children first start by being engaged in the activities under adult support, and with time they continue to perform the activitiesalone. Therefore, their behavior will be viewed as first "regulated" socially by the instructions of adults, then finally becomes "regulated" on their mental plane.

The student's cognitive abilities will then be formed and can succeed in learning through social interactions. Teaching large classes can make these approaches ineffective as the teacher may not have time to scaffold with many students. The experience of teaching hundreds of undergraduate students taking Introduction to Educational Psychology course at the University of Botswana showed that it may not be easy to apply the scaffolding approach with so many students. Bliss et al. (1996) asserted that in regard to large classes it is not easy for teachers to know all students well even to provide the "sensitive and accurate assistance that challenges but does not upset learners"(p.40).

In some cultural practices where teachers are authoritative, they abuse learners verbally, use corporal punishment and display unfairness in classroom settings. Therefore, students may be uncomfortable and have fear as the teachers try to support and guide them as they learn.

According to Vygotsky, cognitive changes will occur from the knowledge that is "transformed" among people to the knowledge within an individual. Vygotsky (1978) writes "Every function in the child's cultural development appears twice: first on the social plane and later on the individual level; first between two people (interpsychological) and then inside the child (intrapsychological)" (p.57).

Three of Vygotsky's concepts that concern tutoring provided by an adult are used as examples that could aid students' success in learning. The Zone of Proximal Development, scaffolding, and instruction will be discussed in this paper as well as how these concepts may improve the teacher's instructions when applying them in the learning environment. The process by which more knowledgeable adults or experienced peers provide learning guidance leads to transmission of knowledge, where higher mental functions develop in the social environment of learning.

"Vygotsky advanced a view of the person socially constructed through interactions with others" (Martin 2006, p. 599). This author shares this idea with Vygotsky, that students as people are "constructed" by interacting with other people. Without interacting with more knowledgeable others they may not succeed in their learning settings. Vygotsky's theory is a socio- cultural approach. It perceives knowledge as socially constructed with the social cultural context. The most important of these are the family, school and other settings for play, work and study (Martin, 2006). His theory might explain the students' success through the concepts of scaffolding and the Zone of Proximal Development.

Human beings, unlike animals, solve problems by using their language skills to create new strategies, or benefit from each other's ideas. Language operates, it assists humans to breakdown the "stimulus- response cycle" and then they can manage their environment. When students understand the teacher's instructions and communications they can engage in tasks that are in their first language, and they can be successful in learning. The symbols in language are viewed as mediating between stimuli and response. Meadows (1995) commented "…much social interaction, and especially so much teaching involves language." (p. 23).

The theory of Vygotsky explains students' success in learning by the scaffolding approach. The term scaffolding was first proposed by Wood et.al (1976) as an explanation of tutoring where an adult or "expert" assists somebody who is less of an expert. Bliss et.al (1996) similarly commented "intervention of a tutor in problem solving is crucial because it…involves a kind of "scaffolding" process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted effort (p. 90). Like Vygotsky, Meadows (1995) refers to scaffolding as transmission of social skills and knowledge from the more advanced member of the community to the children. She explains that children develop sophisticated cognitive competence through teachers' guidance, repeatedly leading them to the relevant behavior.

Vygotsky also used the scaffolding concept to explain students' successes in the learning environment. Bruner 1986 (cited in Bliss et. al 1996)) commented that according to Vygotsky, the adult scaffolds in such a way that it is possible for the child to. "…internalize knowledge and convert it (the scaffold) into a tool for conscious control…. (the adult serving as) a vicarious form of consciousness and until such a time as the learner is able to master his own action through his own consciousness and control" (p.123).

The theory explains student successes in situations where adults interact and provide support to the learners. This is because students cannot perform tasks alone and are assisted by experts, so that they can be successful in the learning environment. The students' success is

not automatic, as it will occur only when adults are capable of assessing the student's current developmental level and "estimate the length" of the Zone of Proximal Development. If the student on the other hand is expected to take advantage of the help others provide, he/she will need the ability to benefit from the "give and take" activities and conversations with others" Bruner (1983) cited in Hobsbaum et.al (1996).

Though students are expected to take advantage of the help provided by tutors, learning has to do with motivation especially intrinsic motivation within an individual. Vygotsky did not provide an explanation of how tutors deal with learners who are not motivated as teachers scaffold them in learning.

The other thing about scaffolding is that, after providing much assistance initially, the adult then reduces assistance from directly guiding the learner to suggestion and encouragement. This gives the learner an opportunity to work without interference. The "optimum" assistance is adapted to the learner's successes, failures and 'tempo' (Brunner 1983 Wertsch, 1979).The developmental tasks that the students are exposed to move from the self-regulation of others to self- regulation (Horbsaum 1996).

INSTRUCTION

Instruction is discussed as a tool that is important in the students' learning. Teachers ought to have goals that are meaningful to enhance the mental processes of students. According to Brynes (2008), Vygotsky's research found that, children had difficulty understanding "true" concepts before they reach early adolescence. And before that they also have the capability of lower level "pseudo concepts" which are called spontaneous concepts. The spontaneous concepts can guide the teacher in his/her instruction because it shows that a child can use labels for concepts in the right way. The scientific concepts imply that children who display mature understanding in various tasks have understood "true" concepts, called scientific concepts. That is where teachers have to provide effective instruction to assist the cognitive development of learners. Not all teachers are committed to their work by offering satisfactory facilitation in learning.

The research of Bliss et.al (2006) on models of scaffolding, with mathematics, science, design and technology reported that, when teachers were talking with pupils during teaching, the teachers were not certain about the goals of their lessons and scaffolding approach was absent in most lessons. Tharp & Gallimore (1991) cited in Bliss et.al (1996) argued that, "while it is natural for adults to assist children in everyday life interactions, this is much less common in classrooms" (p.40). This shows that though teachers may be trained, they usually do not apply effective instruction that could enhance the learner's cognitive development in the classroom.

In regard to instruction, Vygotsky advocated for teaching that is within in the child's Zone of Proximal Development. The teaching materials should not be below or above the child's mastery level, otherwise there will be no knowledge growth. It is limiting the child to use his/her cognitive development to explore more knowledge when confronted with activities in learning. Teachers ought to believe that as children, learn they can manage difficult and complex tasks because that is what school is all about (Bliss et.al, 1996).

CONCLUSION

In conclusion it is possible to say, the success of students in the school context depends on the Zone of Proximal Development, effective instruction and scaffolding. Students, as the recipients of scaffolding, do not learn tasks only, but they also acquire learning that will

enable them to scaffold for themselves throughout new learning. Vygotsky's theory can help teachers to provide more effective forms of instruction, when their instruction consists of assisting learners through the Zone of Proximal Development. Teachers can assist students to be successful in their learning because they will be transmitting their social skills and knowledge as advanced members of the community to students. However, it may not be easy to apply Vygotsky's theory to large classes for students to benefit from scaffolding metaphor.

The Zone of Proximal Development, scaffolding and instruction, can contribute to effective teaching and learning. It is the role of the teacher to facilitate instructions and feedback. Interacting with students should be well developed; however this may not be effective in other learning environments and different cultures.

Vygotsky used the scaffolding term that was first used by Wood and others in which the adult has more control than the learner in the learning environment. May be that is the reason why he did not provide much information about children's contributions to their cognitive development. Elbers et.al. (1992) suggested that, Wood, Brunner & Ross, 1996. Rogoff, Ellis & Gardner (1994) concentrated on ways in which adults direct and have control on children's behavior, but the contribution of children during interaction and how they solve problems "is left in the dark".

REFERENCES

[1] Bliss, J., Askew M. &Macrae S, (1996). Effective teaching and learning: scaffolding revisited. *Oxford review of Education, 22*(1), 37-61.

[2] Brynes, J. P. (2008). *Cognitive development and learning*: *instructional contexts.* London: Pearson Educational Inc.

[3] Elbers. Ed., Maier, R., Hoekstra, T., & Hoogsteder, M. (1992). Internalization and adult-child interaction. *Learning and Instruction, 2*(2), 101-118.

[4] Hobsbaum, A., Peters, S & Sylvia, K. (1996). Scaffolding in Reading Recovery, *Oxford Review of Education, 22*(1), 17-34.

[5] Martin, J. (2006). Social cultural perspectives in educational psychology. In P. A. Alexander & P. H. Winne (Eds). *Handbook of Educational Psychology* (p. 599). London: Lawrence Erlbaum.

[6] Meadows, S. (1995). *Cognitive development*: In Bryant, P. E. & Colman, A. M. (Eds) *Developmental psychology*. London: Longman Group Ltd.

[7] Vygotsky, L. S. (1978). *Mind in society*: *developing higher psychological process.* London: Harvard University Press.