An Overview of the Life, Central Concepts, Including Classroom Applications of Lev Vygotsky

Kevin C. Costley, Ph.D.
Associate Professor of Early Childhood Education
Arkansas Tech University
Russellville, Arkansas
kcostley@atu.edu

Publication Date: February 17, 2012

Dr. Kevin C. Costley teaches fulltime at Arkansas Tech University; Russellville, Arkansas. His areas of expertise are in curriculum development, diversity, developmental psychology, and assessment, social & historical factors of education, developmentally appropriate practice, assessment, evaluating research. Costley is also an exclusive piano music composer of children's literature.

Introductory Information on Vygotsky

Lev Vygotsky, considered to be one of the greatest psychologists of the twentieth century was born at Orsha, a city in the western region of Russia in 1896. He spent his early years in Gomel and later studied law at Moscow State University and graduated in 1917 (Cherry). While at the university he studied a variety of subjects which included; law, history, philosophy, language, linguistics, aesthetics and literature. Vygotsky returned to Gomel where he taught psychology. While he was at Gomel he wrote and submitted psychology papers to the national congresses and it was these submissions that eventually led him back to Moscow to work at the Institute of Psychology. Vygotsky's first book The Psychology of Art, published in 1925, was the first of several books in the area of psychology. Vygotsky unlike his peer Piaget, who was interested in the biological and structural side of child development, stressed the contribution of culture, social interaction and the historical dimension of mental development (Ivic 2000). Vygotsky died of Tuberculosis at the age of 38. Prior to his death, over a ten year period (1924-34) he developed his ideas on learning and development of children and published six books on the subject. It was not until the early 1960's, when translations of his writings became available to Western psychologist, that Vygotsky's theories were widely studied and implemented in education.

Vygotsky's Theory

Vygotsky believed that adults foster children's learning and development in an intentional and somewhat systematic manner (Ormrod 2008). Because young children learn mainly through interactions with other people in their immediate social world, everything they learn is colored by the expectations and norms of the specific social and

cultural contexts in which they are situated (Goldstein 2008). Vygotsky acknowledged inherited or biological traits but his primary focus was on the role of the environment in fostering cognitive growth (Ormrod 2008). According to Fox, "Vygotsky views human psychological development as historically situated and culturally determined. As human beings we are born already immersed in an evolved society that uses conventional tools and signs. Development proceeds through the internalization of social interactions, with the fundamental social interaction being interaction through language." (Fox 2008)

Vygotsky's Central Concepts & Principles

The following information was obtained from the textbook Human Learning (Ormrod 2008) unless otherwise noted.

- 1. Cognitive processes (functions) unique to all species and human beings.
 - a) <u>Lower mental functions</u>: Many species exhibit these biologically built-in functions, basic ways of learning and responding to the environment.
 Example: Discovering what foods to eat.
 - b) <u>Higher mental functions</u>: Only human beings exhibit these dilate, focused cognitive process that enhance learning, memory, and logical reasoning.
 Society and culture are critical this development.
- 2. Adults convey to children the ways in which their culture interprets and responds to the world through informal conversation and formal schooling.
 - a) Adults share meanings.
 - b) Adults transform or mediate situations children encounter.
 - Meaning is conveyed through language; spoken or written, in mathematic symbols, art, music, literature, etc.

- d) One common method adults pass along culturally appropriate ways of interpreting situations is through informal conversation.
- e) Wisdom of previous generations provides a "lens" through which new generations come to construct culturally appropriate interpretations of their experiences.
- 3. Physical and cognitive tools are culturally passed along to make daily living more effective and efficient.
 - a) Physical tools: scissors, computers, sewing machine, calculator
 - b) Symbols & physical entities: writing systems, maps, spreadsheets
 - c) Strategies and mental calculations are cognitive tools: symbolic and mental in nature which greatly enhances children's thinking abilities.
 - d) Different cultures pass on different cognitive tools, contrary to Piaget's theory there is great diversity among children.
- 4. Thought and language become increasingly interdependent in the first few years of life. Language is a very important cognitive tool.
 - a) In infants and toddlers, until the age of 2, thoughts are separate from language. One happens without the other.
 - b) At about the age of 2 children begin to express thoughts when they speak, they begin to think in terms of words as adults do.
 - c) When thought and language merge "self-talk" or "private speech" occurs, children begin talk to themselves, guiding and directing themselves through difficult tasks for which an adult has previously guided them through. This plays an important role in cognitive development.

- d) Self-talk evolves into inner speech, a form of self-regulation, which occurs when children begin to mentally talk themselves through a task or activity rather than aloud.
- Complex mental processes begin as social activities; as children develop, they
 gradually internalize the processes they use in social context and start to use them
 independently.
 - a) <u>Internalization</u>: The process by which children gradually internalize adult's directions so that they are eventually giving themselves directions.
 - b) High mental function can emerge through interaction with peers not just adults. Example: When children argue they can acquire new points of view about a situation.
- 6. In their own idiosyncratic manner, children appropriate the culture's tools.
 - a) <u>Appropriation</u>: The process of internalizing but also adapting the idea and strategies of one's culture for one's own use. Children transform ideas, strategies, and other cognitive tools for their own purpose.
- 7. Children can accomplish more difficult tasks when they have the assistance of people more advanced and competent than themselves. There are two kinds of ability levels.
 - a) Actual developmental level: The upper limit of tasks that a child can accomplish by his or her self.
 - b) Level of Potential development: The upper limit of tasks that a child can accomplish with the assistances of a more competent individual. Children can do more difficult tasks when working with an adult.

- c) According to Vygotsky, to get a true assessment of a child's cognitive development it is necessary to assess their capabilities when performing alone and when assisted.
- 8. Challenging tasks promote maximum cognitive growth. Ormrod states, "It's the challenges in life, rather than the easy successes, that promote cognitive development."
 - a) Zone of Proximal Development: The range of task that a child cannot yet perform alone but can perform with help and guidance from others.
 - b) ZPD changes over time, as tasks are mastered; more complex ones will present new challenges.
 - c) ZPD sets a limit on what a child is cognitively capable of learning.
 - d) Impossible tasks that a child cannot do, even with assistance, are not beneficial.

Vygotsky Applications to the Classroom

According to William Glasser, a psychologist and author who has worked with schools and students since 1956, he states "If Vygotsky's theory is credible, then we want to use scaffolding to assist students with completing tasks within their Zones of Proximal Development, through which they will acquire the psychological tools they will use to explore their environment and interact with others (Louis 2009)." Scaffolding is a variety of techniques used to help students accomplish challenging tasks in instructional contexts. For example:

- Ask questions to get students thinking about the task in productive ways.
- Keep students motivated to complete a task.

- Give frequent feedback about how students are progressing
- Help students develop a plan for dealing with a new task.

(Ormrod 2008)

Adult help given to a child (whether by a teacher, psychologist, or parent) in working on learning difficulties, can be provided not only to support the process of assimilating a particular academic subject but also to promote other processes essential to developing children as active agents of their own learning (Zaretskii 2009).

References

- Cherry, K. (n.d.). Lev Vygotsky Biography. In *Psychology*. Retrieved June 15, 2010, from About.com website: http://psychology.about.com/od/profilesmz/p/vygotsky.htm
- Fox, E., & Riconscente, M. (2008). Metacognition and Self-Regulation in James, Piaget, and Vygotsky. *Educational Psychology Review*, 20(4), 373-389. doi:10.1007/s10648-008-9079-2.
- Goldstein, L. (2008). Teaching the Standards is Developmentally Appropriate Practice: Strategies for Incorporating the Sociopolitical Dimension of DAP in Early Childhood Teaching. *Early Childhood Education Journal*, *36*(3), 253-260. doi:10.1007/s10643-008-0268-x.
- Ivic, I. (1994). Lev s vygotsky. Prospects: the quarterly review of comparative education, XXIV(3/4), 471-485. Retrieved from http://www.ibe.unesco.org/publications/ThinkersPdf/vygotske.pdf
- Louis, G. (2009). Using Glasser's Choice Theory To Understand Vygotsky. *International Journal of Reality Therapy*, 28(2), 20-23. Retrieved from Academic Search Premier database
- Ormrod, J. E. (2008). Developmental perspectives. In M. Harlan (Ed.), *Human learning* (5th ed., pp. 308-349). Upper Saddle River, New Jersey: Pearson Education. (Original work published 1990).
- Zaretskii, V. (2009). The Zone of Proximal Development: What Vygotsky Did Not Have Time to Write. *Journal of Russian & East European Psychology*, 47(6), 70-93. doi:10.2753/RPO1061-0405470604.