

The Learning Theory Podcast

Episode 4

Vygotsky's Zone of Proximal Development

©2008, Daniel J. Campbell, Ed.D

Original Broadcast Date: 03/02/08

Introduction

Welcome to episode 4 of the Learning Theory Podcast. I'm your host, Dan Campbell, and today I will be discussing one of my favorite theories, Vygotsky's Zone of Proximal Development. In this episode, I will be referring to images which you can view on a media player or mobile device that supports this functionality. If your player does not have this capability, you can view the images in the transcript posted on my web site.

Overview of the Theory

As mentioned in episode-2, Constructivism, in the early 1900's Lev Vygotsky rejected assumptions on cognition and instead focused on the social aspects of learning. One of the key concepts to come from Vygotsky's research was the phenomena Vygotsky called the Zone of Proximal Development, or ZPD. Vygotsky describe the ZPD as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978). More simply explained, Vygotsky's definition of the ZPD describes the gap between what individuals can do by themselves and what they cannot do even when assisted by a More Knowledgeable Other or MKO. This concept is illustrated in Figure 1.

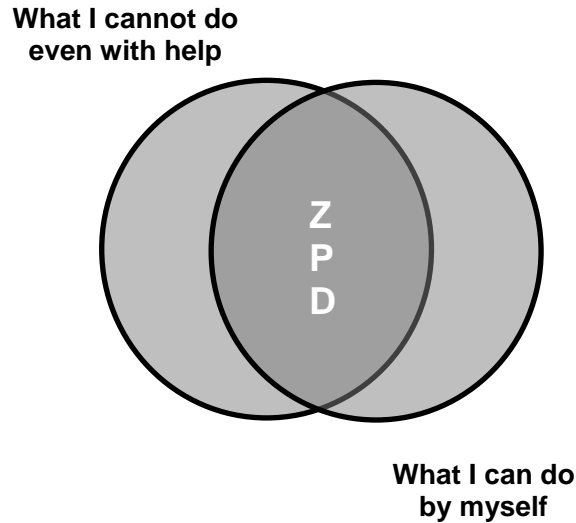


Figure 1 – The Zone of Proximal Development

Outside the ZPD are either tasks that the learner can already do, or tasks that the learner would not be able to do even with help, for example trying to teach the average 10 year old to solve quadratic equations. Teaching is then focused on tasks inside the ZPD which the learner cannot do by him or her self but can reasonably be expected to accomplish with the guidance of an MKO. As the learner accomplishes the task his or her ZPD, or the gap between what she or he can do on their own and what he or she can only accomplish with assistance of an MKO shrinks. This shrinking of the ZPD is illustrated in Figure 2. Notice in this figure that unlike a normal Venn diagram, as we develop the learner and shrink the ZPD, the left side of the diagram shrinks to represent that what the learner cannot do even with assistance is also shrinking while what the learner can do by him or her self is expanding. By sequentially working together on increasingly difficult tasks, the MKO helps the learner to incrementally shrink the learner's ZPD. Many educators refer to this as scaffolding.

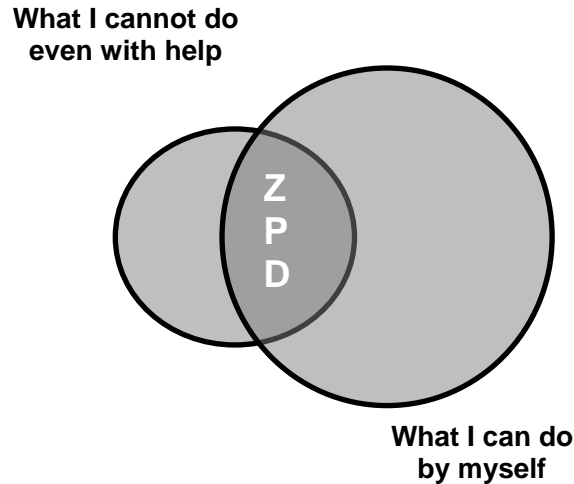


Figure 2 – The ZPD After Teaching Has Occurred

Application

Up to this point I have consciously avoided assigning any specific title, such as teacher, to the MKO. I have done this for two reasons. First, I want to provide an example of how the concept of ZPD would be applied within the context of the climate in which Vygotsky lived when he developed the theory. Second I want to propose an implication of the theory within our modern information based world.

Bruner (Shunk, 2004; citing Bruner, 1984) suggested that the ZPD reflects the Marxist philosophy of collective activity in which the more skilled share knowledge with those less skilled in order to accomplish a common task. Though Vygotsky's research focused on children, Bruner's position is logical considering that most of Vygotsky's research was conducted in Soviet Russia between the early 1920s and mid 1930s. Considering Vygotsky's theory from the Marxist mind set, we can picture the Master - Apprentice relationship as being an example of how the ZPD is applied. A young apprentice machinist of the era for example, would likely have been capable of lubricating the bearings in factory machinery. If the bearings were to seize

however, the apprentice, even with supervision would not be capable of manufacturing a new bearing. That task would likely fall to a journeyman under the guidance of the master machinist. Each member of the trade existed within their own ZPD and the master tradesman's time and energy would be spent on the tradesman whose ZPD makes it possible to learn the task.

Modern Implications

Hierarchical relationships such as the apprentice, journeyman, master structure of the trades; or student, teacher structure of the classroom; still exist in modern times. But as modern technology has made the sharing of information easier, more people are learning from less formalized social networks. Recently a colleague of mine, Claudia Escribano, posted a wonderful piece on her Life Long Learning Lab blog entitled *Overwhelmed 2.0* (Escribano, 2008). In this post she discusses how as an instructional design professional she is quickly becoming overwhelmed with the rapid changes in the technologies available to us. Claudia's solution is to focus her energies on mastering one or two technologies, and rely on her social network when she needs to employ a technology in her ZPD, or perhaps even in her area of I cannot do. What is powerful about Claudia's post is the suggestion of a social network of peers where all members have areas of expertise in which they can be considered the MKO, and of course all members have varying degrees of ZPDs outside their areas of expertise.

Doesn't this sound remarkably similar to the Marxist philosophy of collective activity in which the more skilled share knowledge with those less skilled in order to accomplish a common task? Of course the cold war is over, the Soviet Union is dissolved, China has become a capitalist machine, and Castro has finally thrown in the towel. So to be politically correct, we do not use the term Marxism. Instead we call it Social Constructivism, which after all is largely based on the ideas of Vygotsky.

Wrap up

I hope you have enjoyed this episode as much as I have enjoyed creating it. Having been career military during the cold war, I can tell you that it has been a personal journey to arrive at the point where I can view these concepts the way I do today. It's life-long learning, and it's a beautiful thing. If you would like to provide feedback on this episode, please visit me at www.dancampbell.us. While your there, click on the link to go visit Claudia. There is a lot of great reading there. Thank you for listening! I'll be back in two weeks. Until then, go out and learn something new everyday.

References

- Escibano, C. J. (2008, Feb 14). Overwhelmed 2.0. *The Life Long Learning Lab*, Web 2.0.
[Online] Available: <http://mylifeismylab.wordpress.com/category/web-20/>
- Schunk, D. H. (2004). *Learning theories: An educational perspective (4th ed.)*. Englewood Cliffs, NJ: Prentice-Hall.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press