

Lev Semyonovich Vygotsky's Zone of Proximal Development by Clifford Morris

1. Alexander Romanovich Luria once commented that [Lev Semyonovich Vygotsky](#) (also spelled *Vygotsky*) was a genius. After more than half a century in science, Luria stated that he was unable to name another person who even approached Vygotsky's incredible analytical ability and **foresight**. Luria felt that all of his work had been no more than the working out of the psychological theory which Vygotsky had constructed.

2. Writing now (November, 2008) as a retired teacher who has also witnessed the influence of Vygotsky in the works of cognitivists (Howard Earl Gardner and Robert Jeffrey Sternberg, being just two), I continue to see how Vygotsky established an acceptable socio-political foundation for much of the recent psychological investigations. He did all of this by casting in **befitting** research from the Marxist-Leninist thesis that all fundamental human cognitive activities took shape in a matrix of social history and from the products of socio-historical development.

3. In other words, Vygotsky felt that the intellectual ways of knowing the world that a student displayed were not primarily determined by innate factors, that is, inherited intelligence or mental abilities. Instead, Vygotsky 'saw' patterns and levels of thinking as products of the activities practiced in the social institutions of the culture in which the individual was immersed.

Vygotsky's Zone of Proximal Development

4. Amid Vygotsky's best known contributions to developmental and cognitive psychology was his various explanations to the question of how development came about as a outgrowth of learning. Due to space limitations, I will feature here only one of his explanations, namely his concept of the *Zone of Proximal Development* (or, for short, 'ZPD'). Most simply defined for here, Vygotsky referred to the distance between the abilities displayed independently and with social support as the ZPD; his thesis being that this "zone" was created by learning. To cite directly from Vygotsky, this most widely known concept of his theory represented "the distance between the actual level of development as determined by independent problem solving [without guided instruction] and the level of potential development as determined by problem solving under adult guidance or in collaboration with more capable peers". Measurement would thus be achieved by comparing the student's performance on both tasks.

5. The thesis behind this "zone" is that at a certain stage in development, children can solve a certain range of problems only when they are interacting with people and in cooperation with peers. Once the problem solving activities have been **internalized**, the problems initially solved under guidance and in cooperation with others will be tackled independently. The notion here seems to be that one's **latent**, or unexpressed ability could be measured by the extent to which one profits from guided instruction.

6. To frame what I have just stated, within a practical educational example, let us take two (2) students. Assume that both of their chronological ages (CA) are ten (10) years and that both of their mental ages (MA) are eight (8) years. Ask whether one can characterize them as being of the same age mentally. On the face of it, of course, one would respond in the affirmative. But this means that both students can deal with tasks up to the degree of difficulty characterized by what eight (8) year olds can typically do. One could say that the actual developmental level for the two learners is the same.

7. My most recent readings on Vygotsky suggests that he is asking an additional and deeper question here: Can one thereby ascertain that the subsequent course of their mental development and their special school learning will be the same, because both depend on their intellect? Naturally, there are non-intellectual factors that may influence their school learning or their mental development. But for the time being, let us simply consider these non-intellectual factors as being comparable for our two (2) idealized students. Most people would assume that one could make comparable predictions about each of the students. If Vygotsky were alive today, that is, in 2008, I believe that he would argue that this initial view is incorrect.

8. Suppose that I, the examiner, provide guided assistance to each of the two students in order to help them solve some given ill-defined problem. It turns out that, with this guided assistance, the first student can deal with ill-defined problems up to the level of a twelve (12) year old, whereas the second student can only deal with **ill-defined** problems up to the level of a nine (9) year old. Would I still want to conclude that the two students are mentally the same? I believe that Vygotsky would **postulate** a firm **no**, for the first student has shown to be better able to profit from instruction than the second. Hence, it is reasonable to suppose that with regard to **future** as opposed to **past** development (as traditionally measured using normalized, formalized, or standardized IQ-type instrument), the first student is superior to the second and thus has a stronger prognosis.

9. To sum the immediate above three (3) paragraphs, the difference between mental age twelve (12) and mental age eight (8), for the first child, and mental age nine (9) and mental age eight (8), for the second child, is what I believe Vygotsky refers to as the ZPD. That is, the ZPD is the distance between the "actual" developmental level as determined by independent problem solving and the level of "potential" development as determined through problem solving under teacher guidance or in collaboration with more capable (in this case) school aged peers. As a former state-funded public school classroom teacher and school principal, I surely do appreciate Vygotsky's interpretation because there may be many pupils, especially within the underachieving gifted student population, who are not identified because, although they have the potential, they have yet to realize it. This is why, readers, I enjoy reading the writings of Lev Semyonovich Vygotsky!

Educational Implications of the Vygotskyian Zone

10. Lev Semyonovich Vygotsky (supposedly) developed the ZPD concept to consider the problems of the measurement of mental age and the prediction of future development and

learning. Thus, the concept of ZPD has obvious mental testing implications. For example, if we have knowledge of one's ZPD for a particular skill, we can predict how that learner will independently utilize that skill in the near future. Vygotsky's discussion of the relationship between learning and development also has important instructional **ramifications**. In addition to suggesting intellectual functioning, maximally effective instruction occurs within the learner's ZPD. Instruction directed at the level of completed development can, of course, increase the knowledge base, but will have minimal effect upon the student's cognitive ability. Instruction directed beyond the proximal level will tend to be **incomprehensible** to the student and thus will affect neither knowledge or cognitive ability. **The most effective teaching is therefore somewhat, but not too much, in advance of development.**

11. Such instruction involves the novice (student) working with more capable others (teachers or parents) on challenging tasks s/he could not solve independently. The more able participants (or the experts) model appropriate problem solving behaviours, present new approaches to the problem, and encourage **the novice** (or the student) to use her or his embryonic skills by assuming responsibility for some parts of the task. As novices develop the abilities required, they should receive less assistance and solve more of the problem independently. Simultaneously, of course, they will encounter yet more challenging tasks on which they will continue to receive help. Effective teaching learning transactions thus establish successive ZPD's.

Summary and Concluding Comments

12. In summarizing all of the **aforementioned**, it bears repeating that Vygotsky's works has exerted tremendous influence on educational psychology, especially over the past 40 years, as witnessed by numerous books, book chapters and journal articles. An educator-turned-psychologist, Vygotsky's writings clearly reflect his pedagogical concerns. For Vygotsky, the place called 'school' and other informal educational situations represented the best culture laboratories in which to study thinking. He emphasized the social organization of instruction, writing about the unique form of cooperation between the child and the adult as the central element in the educational process. In short, his emphasis on the social context of thinking represented the reorganization of a key social system and associated modes of discourse, with potential consequences for developing new forms of thinking.

13. I will only complete this informal discussion on Lev Semyonovich Vygotsky, the man, by stating one final comment. Vygotsky showed those of us in the educational arena that the development of mentally and physically handicapped children follows the same laws as that of normal children. His research demonstrated the possibility of compensating for intellectual and sensory defects by developing higher psychological functions rather than training elementary ones. He viewed the processes of compensation as the result of an independent exercise of the impaired function, the guided development of the intact aspects of mental activity, and the handicapped child's personality.

Alexander Romanovich Luria was indeed correct when he once commented that Vygotsky was truly a genius!

<http://igs.net/~cmorris/zpd.html>

