Learning, Development, and "New Formations" in Vygotsky's Theory of Child Development

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The expression *zone of proximal development* is one of the most well-recognized ideas from Vygotsky’s scientific work. The present volume contains one of the most important discussions of the concept, in the chapter entitled “Problem of Age.” I am grateful for the opportunity to make a few comments about this concept because internationally there is widespread misunderstanding of the conceptual ideas that Vygotsky tried to communicate with this concept – also in the writing of prominent researchers since the mid-1980s, when the concept started to receive attention around the world. This misunderstanding is unfortunate, especially because the implications of Vygotsky’s conception of zone of proximal development are more exciting, productive and challenging than the popular (mis)understandings of his concept. In this brief comment, I would like to highlight some points that may be useful for understanding the meaning and significance of the concept, and to indicate some subsequent developments in relation to teaching and learning.

It is important to understand – as a general scientific point – that a concept is always understood as part of a system of concepts. That is, to understand the meaning of “zone of proximal development”, it is necessary to understand other concepts like “age period”, “social situation of development”, “neoformation”, “psychological function”, and so forth. In other words, the meaning of each of these terms arises from their interrelationships in the theoretical system. It will not possible to understand the meaning of *zone of proximal development* or *social situation of development*, from knowing the everyday meaning of words like *zone*, *social*, and *situation*. Rather it is necessary to examine how these terms are related to each other in the theoretical system. I have given one attempt to explicate Vygotsky’s theoretical system (see Chaiklin, 2003), so I will not attempt to repeat the details here. Instead, I will try to give a general idea or image of what is involved in this system of ideas, in the hope that it might serve to guide you in your own investigation and interpretation of Vygotsky’s texts.

First, it is important to be aware (or remember) that Vygotsky was trying to develop a psychological theory that was oriented to a whole person. Expressions like “whole person” or “holistic” are often used to highlight psychological theories that cannot be decomposed into isolated elements of psychological functioning (e.g., perception, emotions, thinking). Rather is is necessary to consider the integral (whole) person, acting in meaningful situations, as the source for cultural development (in the sense of psychological capabilities). The concept of *social situation of development*, which is discussed in this volume, is one way to preserve a focus on the significance of a person (rather than psychological functions) acting in a meaningful situation.

It can be difficult to recognise this holistic orientation in Vygotsky’s theory, because it is often presupposed as a background to his texts. One indication of this holistic focus is expressed in Vygotsky’s concept of *personality*. The centrality of *personality* (i.e., whole person) in Vygotsky’s theoretical conceptions can be seen clearly both at the beginning and the end of the *History of the Formation of the Higher [Psychological] Functions*. In the second sentence of this book-length
manuscript, Vygotsky (1931/1997, p. 1) notes the ‘enormous importance of studying the processes in the development of higher [psychological] functions for proper understanding and logical elucidation of all aspects of the child’s personality’, where the ‘history of the cultural development of the child brings us to the history of the development of the personality’ (p. 26). The concluding chapter is an ‘attempt to present a plan or picture of the whole cultural development of the child’ (p. 241), where this synthesis starts by characterising ‘the process of cultural development … as development of the personality and world view of the child’ (p. 242). In other words, the main scientific objective is to understand the development of whole persons, even if specific scientific studies are focussed on specific psychological functions. To be clear, Vygotsky did not develop a comprehensive theoretical account of personality and its development, but it is still helpful to recognise this holistic perspective when interpreting the meaning and significance of his theoretical analyses.

Second, this focus on whole persons is reflected in Vygotsky’s theory of child development, where the concept of zone of proximal development appears. In this theory, Vygotsky presupposes that children’s development can be understood in periods, where each period is defined by the presence or lack of certain psychological capabilities, where these capabilities have profound qualitative consequences for a child’s possibility for action. The main objective of the theory is to give an account of how of the structural changes that reflect movement from one age period to another, where children (as whole persons) develop through their social interactions around the contradictions that arise because of the interaction between material (including cultural) demands and current psychological capabilities. Development from one age period to another is a kind of large-scale change (involving the development, transformation, and reconfiguration of psychological functions) that result from these interactions, and which will yield a qualitative change in a child’s relationship to others (i.e., a new social situation of development). For example, in infancy, a profound contradiction arises – the infant needs help with absolutely everything, yet lacks an adequate means to express these needs. This contradiction characterises the social situation of development for infancy. Note that Vygotsky is analysing development as a consequence of the interaction between the whole child in relation to practical situations (as opposed to a focus solely on the development of particular psychological functions). This focus reflects a consequence of Vygotsky’s holistic perspective. For other age periods, other basic contradictions (which are developed on existing psychological developments) will be critical for identifying the social situation of development for an age period. It is well worth reading the chapter on infancy (even if you are not professionally interested in infants), because it will help you to understand what Vygotsky means theoretically with the concept of social situation of development. (I believe this concept is now on the way to becoming as misunderstood and misinterpreted as the zone of proximal development, precisely because persons are trying to interpret the meaning of the words “social”, “situation” and “development”, using everyday meanings, rather than trying to understand the conceptual role of this expression in Vygotsky’s theoretical system of concepts.)

The concept of zone of proximal development arises as a consequence of the structure of Vygotsky’s theoretical account for children’s development. It has to be understood as part of a theoretical system of concepts, where the main issue is to understand child development. Please note that Vygotsky uses the word “development” in this expression. Why does he refer to “development” and not to “learning”? And why does the zone refer to the “next development”? What is the “next” to which Vygotsky is referring? These questions are meant to highlight that Vygotsky’s theoretical focus was on explaining psychological development, where the function of the concept zone of proximal development was part of that theoretical analysis, focusing on the
movement from one age period to another, and not a focus on learning by itself.

The phrase “next development” in the expression *zone of proximal development* is referring to the next age period to which a child is developing and “zone” is referring to the developing psychological capabilities, which enable this changed relation. Learning (including formal instruction) can have developmental consequences, especially in the transition to and from the so-called “school age”, but this conception of the relation between learning and the zone of proximal development is distinctly different from the typical (mis)understanding of the concept as referring to a process by which learning of particular facts, skills, or concepts are achieved.

The final point that I want to highlight is that the concept of zone of proximal development was an important source of inspiration for the development of a teaching tradition called *developmental teaching*. This tradition is inspired by Vygotsky’s analysis about the relation between formal instruction (learning) and development. As Vygotsky (1934/1987) noted, teaching/learning and development “are two different processes with complex interrelationships. Instruction is only useful when it moves ahead of development.” (p. 212, italics in the translation). The obvious implication of this view is that school instruction should seek to be developmental (which requires having a theory of development).

There are different ways to operationalise this general idea, and in the history of Soviet and Russian psychology, there have been different attempts to provide practical interpretations of this theoretical idea (e.g., Elkonin & Davydov, 1966; Zankov, 1975/1977; Zuckerman, 2014), after Vygotsky’s death in 1934. These developments are much more relevant for persons who are looking at Vygotsky’s works with a practical interest in finding ideas that will be relevant for school instruction. Personally, I have been most inspired by the comprehensive work of Davydov and colleagues (e.g., Davydov, 1986/2008). In the late 1950s, Daniil El’konin in cooperation with Vasili Davyov started to develop a teaching approach for learning to read and for early mathematics (El’konin, 1961). These approaches attempted to focus on the idea that (school) learning should be directed to supporting the development of psychological capabilities that support the next development. El’konin worked as a research assistant for Vygotsky during the period 1932-1934, when Vygotsky was developing his ideas about the relationship between learning and development. In relation to school-age, learning to think with concepts is an important capability, which supports development to the next age period. In this connection, Davyov’s (1972/1990) work on substantive generalisation is important for its introduction of the idea of theoretical thinking, as a way to understanding conceptual thinking in an operational way. This key idea provides a qualitative leap for conceptualising the content of school teaching, and for formulating objectives for learning in school that are connected to supporting development.

Davydov and colleagues have developed teaching materials for the first five grades of primary school, including mother-tongue instruction (e.g., Aidarova,), second-language learning (e.g., Markova, 1979), mathematics, art, and science, with a focus on developing theoretical thinking (in the special theoretical meaning developed by Davydov). These ideas have been developed primarily and extensively in Russia, but they have also inspired work in some other countries, primarily in Northern Europe (e.g., Engeström, Hakkarainen, & Seppo, 1982; Hedegaard, Chaiklin, and Hansen, 1991; Lompscher, 1985), and recently there has been growing interest in Davyov’s mathematics curriculum in the United States (e.g., Dougherty & Simon, 2014). Hedegaard and Chaiklin (2005) have also extended these ideas to more explicitly address the role of the content of instruction in relation to the child’s lifeworld. This short introduction can only point to the existence of these
ideas and materials, and to encourage you to explore the possibilities found in these ideas, which
are directly inspired by the Vygotskian tradition, but have also created and carried out school-based
teaching practices, which will give useful guidance for creating substantive approaches to
concretise the theoretical conception that Vygotsky developed (but was not able to elaborate fully).

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