Vygotsky’s Theory of Cognitive Development

<p>| Slide 1 | The importance of one’s society and culture on cognitive development has been validated by a variety of researchers. This video provides an overview of one of the most prominent among them, Lev Vygotsky. My name is Bill Huitt and I am Professor Emeritus at Valdosta State University and Adjunct Professor at Capella University. The presentation is narrated by Geoff Huitt who is helping me produce these videos. |
| Slide 2 | Lev Vygotsky was born in 1896 in Belarus although he completed most of his scholarly work in Russia where he died in 1934 from tuberculosis which he caught while caring for relatives who had the disease. |
| Slide 3 | He labeled his theory as a sociohistorical theory of cognitive development. |
| Slide 4 | By that he meant there was a reciprocal influence. |
| Slide 5 | Between one’s society and culture and the individual’s cognitive development. While he acknowledged that human beings were biologically predisposed to think and behave in certain ways, Vygotsky thought that these initial patterns were developed within a specific society and culture that made it possible to adapt their unique demands. |
| Slide 6 | There were three primary influencers as Vygotsky developed his theory. |
| Slide 7 | The first was Wilhelm (Vill-helm) Wundt (Vundt) and his experimental approach to the study of human learning. |
| Slide 8 | The second was Ivan Pavlov and his work in the experimental study of behavior and conditioning. |
| Slide 9 | The third was Karl Marx and his study of the influence of social conditions on economic conditions and individual behavior. |
| Slide 10 | A basic principle of Vygotsky’s theory is that social interaction provides the framework for all learning and development. |
| Slide 11 | The most important feature of this interaction includes the signs and symbols that make society and culture possible. |
| Slide 12 | One of the most important of these relates to the use of language. |
| Slide 13 | A second principle is that learning occurs in an ever-changing window of actualizing potential that Vygotsky labeled as the “zone of proximal development” or ZPD. |</p>
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<th>Slide 14</th>
<th>By this Vygotsky meant that there are some concepts and skills that are important for the person to learn in order to adapt to the demands of the society which the individual has already mastered. While it might be important for the individual to practice these, it is not the focus of instruction.</th>
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<td>Additionally, Vygotsky proposed that there are some concepts and skills that are important but which the individual cannot learn at the present time because of a lack of readiness. Vygotsky's focus on readiness was the prerequisites that could be taught.</td>
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<td>The Zone of Proximal Development or ZPD, which is between what the learner has mastered and for which readiness is not acquired, should be the focus of instruction.</td>
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<td>A third principle proposed by Vygotsky was that the proper way to understand how human beings come to know is through observation in an environment where the individual is engaged in learning. He put little emphasis on measuring the products of learning or development through the use of exams or other assessment. Rather, he focused on investigating how individual learners developed important concepts and skills.</td>
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<td>Vygotsky was interested in two categories of mental functions.</td>
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<td>He acknowledged that individuals are born with some mental functions that they initially use to interact with the environment. He called these 'lower or elementary mental functions.'</td>
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In contrast, Vygotsky was primarily interested in the development of ‘higher mental functions’ which he said were:

- Socially-acquired rather than inherited.
- Socially-mediated rather than developed internally.
- Voluntarily controlled rather than involuntarily displayed.
- And, finally, were integrated into a network of mental functions rather than simply existing independently.

Again, Vygotsky believed that language was the primary mechanism through which these higher mental functions were created through the use of cultural tools and symbols.

Another important feature of Vygotsky’s theory is termed scaffolding although he did not use that term in his writings.

Rather it was first used by Jerome Bruner and his associates in 1976.
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<td><strong>The process of scaffolding is used with the Zone of Proximal Development as the educator or more knowledgeable person guides the learner to demonstrate mastery of a concept or skill.</strong></td>
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<td>First, an adult or perhaps an older learner who has already acquired the skill will demonstrate or model the concept or skill to the learner. The teacher then guides the learner in an initial attempt to demonstrate what has been taught.</td>
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<td>The teacher then gradually withdraws the assistance until the learner is able to independently demonstrate mastery.</td>
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<td>The term ‘guided instruction’ is often used as a label for this instructional method.</td>
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<td>This process of instruction is why the learner is often considered as an apprentice in the Vygotsky system. The knowledge or skill is already known and is acquired by the learner through social interaction.</td>
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<td>In summary, a Vygotskian approach to instruction suggests that teachers:</td>
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<td>Identify the Zone of Proximal Development for each learner through a process of observing the learning behavior for that individual.</td>
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<td>Provide some initial demonstration or guidance for the concept or skill to be learned, using language to describe the process.</td>
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<td>Create an opportunity for the learner to initially demonstrate the knowledge or skill with the teacher providing corrective feedback.</td>
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<td>Selectively withdraw guidance as the learner demonstrates increased competence in demonstrating the knowledge or skill, continuing to use language throughout the process.</td>
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<td>And, finally, acknowledge the learner’s demonstration of mastery and have the learner reflect on that mastery experience.</td>
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<td>Slide 39</td>
<td>Vygotsky was a contemporary of Jean Piaget and they knew of each other’s work. Their theories are often compared as they differed in whether biology or the environment was the most important influence on cognitive development.</td>
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<td>Slide 40</td>
<td>There are a number of similarities between Vygotsky’s and Piaget’s theories of cognitive development.</td>
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First, both Vygotsky and Piaget used a dialectical approach proposed by Hegel that stated development was an interactive process between two somewhat opposing processes.

For Piaget, this was exemplified in the two processes of assimilation and accommodation. The individual first attempts to adapt to reality using cognitive structures that have previously been created through assimilation. When that is insufficient the individual will create new cognitive structures through accommodation. It is the constant interaction between these two processes that makes adaptation possible.

For Vygotsky, the dialectical process was exemplified in the individual first interacting with the external environment and then incorporating those internally, primarily through language and cultural signs or symbols.

Another similarity between Piaget and Vygotsky is that they both focused on the actions taken by the individual to adapt to the demands of the environment.

Vygotsky had several fundamental differences with Piaget as to the interaction of learning and development.

For Piaget, biological development precedes learning whereas for Vygotsky learning precedes development.
Moreover, while Piaget described cognitive development as discontinuous, resulting in qualitative differences in thinking that could be classified in stages, Vygotsky maintained that learning was a continuous process of first copying external thought and action and then internalizing that through a constructive process.

A third difference is that Piaget’s approach led him to view the learner as an autonomous agent whose basic focus was on inquiry while Vygotsky viewed the learner as an embedded agent whose basic focus was on fitting into the accepted practices of one’s society and culture.

Vygotsky was also a contemporary of the American educator and philosopher John Dewey, but there is no evidence they knew of each other. Dewey and Vygotsky agreed on the importance of acculturating children and youth into a specific society and culture.

Jerome Bruner is another researcher who is often grouped with Piaget, Vygotsky, and Dewey. He agreed with Piaget’s hypothesis of stages of cognitive development but agreed with Vygotsky that guided exploration would impact learning. Together the research and theories of these four scholars provided the foundation for what became known as the constructivist approach to teaching and learning.

Piaget and Bruner are associated with the cognitive constructivist theories while Vygotsky and Dewey are associated with the social constructivist theories.
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