

Closely linked to the idea of the ZPD is the concept of scaffolding, introduced earlier in the context of parent-infant interaction. *Scaffolding* means changing the level of support. Over the course of a teaching session, a more-skilled person (a teacher or advanced peer) adjusts the amount of guidance to fit the child's current performance (Daniels, 2017). When the student is learning a new task, the skilled person may use direct instruction. As the student's competence increases, less guidance is given.

Language and Thought

According to Vygotsky, children use speech not only for social communication but also to help them solve tasks. Vygotsky (1962) further believed that young children use language to plan, guide, and monitor their behavior. This use of language for self-regulation is called *private speech*. Piaget viewed private speech as egocentric and immature, but Vygotsky saw it as an important tool of thought during the early-childhood years (Lantolf, 2017).

Vygotsky said that language and thought initially develop independently of each other and then merge. He emphasized that all mental functions have external, or social, origins. Children must use language to communicate with others before they can focus inward on their own thoughts. Children also must communicate externally and use language for a long time before they can make the transition from external to internal speech. This transition period occurs between ages 3 and 7 and involves talking to oneself. After a while, self-talk becomes second nature to children, and they can act without verbalizing. When this occurs, children have internalized their egocentric speech in the form of *inner speech*, which becomes their thoughts.

Vygotsky saw children who use a lot of private speech as more socially competent than those who don't. He argued that private speech represents an early transition toward becoming more socially communicative. For Vygotsky, when young children talk to themselves they are using language to govern their behavior and guide themselves. For example, a child working on a puzzle might say to herself, "Which pieces should I put together first? I'll try those green ones first. Now I need some blue ones. No, that blue one doesn't fit there. I'll try it over here." Researchers have found support for Vygotsky's view that private speech plays a positive role in children's development (Winsler, Carlton, & Barry, 2000).

Teaching Strategies Based on Vygotsky's Theory

Vygotsky's theory has been embraced by many teachers and has been successfully applied to education (Adams, 2015; Daniels, 2017; Holtzman, 2017). Here are some ways in which educators can apply Vygotsky's theory:

1. *Assess the child's ZPD.* Like Piaget, Vygotsky did not believe that formal, standardized tests are the best way to assess children's learning. Rather, Vygotsky argued that assessment should focus on determining the child's zone of proximal development. The skilled helper presents the child with tasks of varying difficulty to determine the best level at which to begin instruction.
2. *Use the child's zone of proximal development in teaching.* Teaching should begin near the zone's upper limit, so that the child can reach the goal with help and move to a higher level of skill and knowledge. Offer just enough assistance. You might ask, "What can I do to help you?" Or simply observe the child's intentions and attempts, providing support only when it is needed.
3. *Use more-skilled peers as teachers.* Remember that it is not just adults who are important in helping children learn. Children also benefit from the support and guidance of more-skilled children.
4. *Monitor and encourage children's use of private speech.* Be aware of the developmental change from talking to oneself externally when solving a problem during the pre-school years to talking to oneself privately in the early elementary school years. In the elementary school years, encourage children to internalize and self-regulate their talk to themselves.