

Vygotsky and Piaget: thought and language



Both Vygotsky and Piaget made significant contributions to research into the development of thought and language. Although their models differed in several ways, their effect on teaching methods has been, in some respects, similar. This article will outline their approaches to cognitive development, highlight the main differences between their theories, and illustrate their influence on modern classroom practice.

Vygotsky's theory of cognitive development is based on the social constructivist approach, which proposes that both cognitive and linguistic skills are developed through social interaction. Language is an interface between people, allowing them to construct and negotiate meaning. Importantly, Vygotsky describes language as a *cultural tool*, a means of passing on the accumulated knowledge of a society from generation to generation.

According to Vygotsky, cognitive development is culturally determined, which means that children in some cultures will develop certain cognitive skills to a higher level than in others, depending on the importance of that particular skill to the culture. For example, children who are brought up in a society that values technology will learn to interpret icons on electronic equipment at a comparatively young age. In contrast, children in societies or domains such as the indigenous people of Australia, that value the ability to navigate a landscape by its geographical features, will develop the cognitive skills crucial to this particular ability. In other words, learning is *domain dependent*.

Vygotsky also suggested that cognitive development was dependent on the social interaction of the child with an experienced 'mentor', who would lead it from its actual stage of development to the next. Vygotsky used the term '*zone of proximal development*' to describe a situation in which a child receives support and guidance, known as '*scaffolding*', to master a new skill. Vygotsky considered language to be an essential element in this process.

In contrast to this approach, Piaget's model is based on an idealized child living in a social vacuum. He proposed that all children acquire cognitive skills at predetermined stages and in a specific order,

regardless of the context in which they are learning. Piaget's model of cognitive development, like Vygotsky's, assumes that children will develop mental structures, or *schemata*, by interacting experimentally with their physical environment. To put it simply, Piaget saw the child as a 'scientist', continually testing theories and learning from the results. According to Piaget, when actual knowledge, a current *schema*, is contradicted by new information, a state of 'disequilibrium' is created, and the enquiring mind tries to restore the balance by adapting the *schema* to accommodate the new information. Unlike Vygotsky, however, Piaget's paradigm largely ignores the importance of social interaction on the cognitive development of the child and, consequently, the role of language in this process.

It is important to recognize that both Piaget and Vygotsky have made major contributions to modern teaching methods. For instance, Piaget's focus on the stages of cognitive development, and Vygotsky's concept of *scaffolding* in the *zone of proximal development* have resulted in carefully structured curricula for pre-school and primary education, ensuring that children are given realistic learning goals and adequate support. Just as significantly, Vygotsky's emphasis on the importance of social interaction in language acquisition has had a profound effect on language teaching methods for both children and adults. A final example of the influence of both scientists on teaching approaches is the relatively recent development of peer teaching and collaborative learning methods. Piaget's theory suggests that listening to the opinions of other learners increases instances of *disequilibrium* and, consequently, learning. Vygotsky's model, on the other hand, encourages more advanced learners to teach less experienced learners through social interaction and language.