

# How children learn

#### by Linda Pound

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# Introduction

This book is an attempt to explain educational and psychological theories about how children learn. It provides food for thought for reflective practitioners, encouraging you to pause and reconsider why you do what you do. Theories can be rooted in research and experimentation or they may be philosophical and hypothetical. Whatever their basis, the importance of observation is a common strand in the work of many theorists who were interested in finding out how children learn.

Some were academics who became interested in children – others were experienced in working with children and developed theories to help them understand their experience. What is interesting is how often ideas which were based purely on observation are now supported by developmental theory.

We have singled out some of the key figures involved with theories about learning, particularly in the early years of education. In some cases these are linked to wider movements. Sigmund Freud, for example, is probably the best known psychoanalyst. However, other figures with psychoanalytical backgrounds who have perhaps had greater influence in education have also been included.

It is not clear why some names are remembered and others are not. Sigmund Freud is probably the best known psychoanalyst in this country, but in the United States Erikson and Fromm are more influential, perhaps because Freud fled from the Nazis to England, while Erikson and Fromm went to America. Howard Gardner (1) says that 'great psychologists put forward complex and intricate theories, but they are often remembered best for a striking demonstration. The founding behaviourist, Ivan Pavlov, showed that dogs can be conditioned to salivate at the sound of a bell. The founding psychoanalyst, Sigmund Freud, demonstrated that unconscious wishes - for example sexual satisfaction - are reflected in ordinary dreams or slips of the tongue. And Jean Piaget (1896-1980), the most important student of intellectual development, showed that young children are not able to conserve quantities, such as liquids.' This is something to think about as you read.



## Introduction

## About this book

- To create a sense of the way in which ideas have developed and evolved, the theorists are taken in chronological order.
  Where a section focuses on an individual this is according to their date of birth. This does not work in every case – Piaget and Vygotsky, for example, were contemporaries but Vygotsky's work was not widely known until some time after his death.
- Each section follows a similar format, beginning with some historical background and biographical details to place the person in context. Their theory is explained and the titles of any books or articles they have written are listed. There is also an attempt to link the theory with practice, and a 'Comment' encourages you to analyse any findings and perhaps apply them to your own experience .
- You will find many strands and connections as you read as some theorists were influenced by the work of others. Margaret Donaldson, for example, spent time with Piaget and Bruner. Pestalozzi was influenced by Jean-Jacques Rousseau and in turn influenced Robert Owen and Froebel. Links with other theorists are highlighted.
- Finally, some sections look at approaches rather than people that have been influential in the early years, such as High/Scope. Others cover the theory behind aspects such as emotional intelligence and play. We also offer an insight into the New Zealand curriculum, *Te Whariki* and an update on research into how the brain works.

**Note to students:** Every effort has been made to make sure that you have the information you will need to cite sources in your essays and projects.

You will need to rearrange these references in your written work to meet the demands of your tutors. Double check before you hand in work that you have met the requirements of your place of study.

There is guidance in each section to help you track down further information for yourself. The information in this book is by no means the end of the story. There is much more to be read and learned from the remarkable figures outlined here. Many of the books mentioned are no longer in print, so check to see if your library can get a copy.

A word of caution about websites: some contain excellent information, others are worthless. Always think about who has published the information and why. Any website addresses provided were valid at the time of going to press.

#### Reference

(1) Gardner *Intelligence: Multiple Perspectives* (Holt, Rinehart and Winston 1996) (page 97)

Hopefully, this series of introductions will encourage you to delve deeper, helping you to understand and reflect on how you work with young children.



## Lev Vygotsky

## 1896 - 1934

## PROFILE

Lev Vygotsky was a Soviet psychologist whose book, Thought and Language, has become a classic text in university courses on psycholinguistics. He is best known for his emphasis on the way in which children's cultural and social context influences their development. Although he died young and his work was not translated into English until the second half of the twentieth century, he has had a strong influence on the development of current educational theories.

#### **KEY DATES**

1896 Born in Orscha, Belarus

#### 1913- Moscow University

- 1917
- 1924 Research fellow, Moscow Institute of Psychology
- 1925 Writes *The Psychology of Art* (not published until 1965, translated into English in 1971)
- 1926 Writes *The Historical Meaning of the Crisis in Psychology* (published in 1982)
- 1931 Finishes writing *History of* the Development of Higher Mental Functions (published in 1983)
- 1934 Dies

### **His life**

Lev Vygotsky was born in 1896 in Orscha, Belarus. His family were middle-class Jews - his father a bank manager and local philanthropist. As a child, he studied with a private tutor for many years until he was enrolled in a Jewish grammar school which prepared pupils for entrance to university.

As a teenager, Vygotsky was an intellectual with a wide range of interests, especially in philosophy and history, including Jewish culture. He graduated from school with honours. At his parents' insistence he applied to the Medical School of Moscow University. Only three per cent of the university's intake were Jewish and places were allocated through a draw. Vygotsky gained a place and was at the university from 1913 to 1917. He switched from medicine to law during his first term.

At the same time, he enrolled at the private Shaniavsky University where he studied history, literature and philosophy. He became interested in a wide range of subjects, including the theatre and was an aspiring literary critic. After graduating, Vygotsky went to Gomel, where his parents lived, and took a job teaching literature in the provincial school. It was there that his health began to deteriorate. He was 23.

The school did not suit his ambitions but he soon found a job at a local teachers' training college where he lectured in psychology and became involved in the education of children with physical disabilities.

In 1924, at the second Psychoneural Congress in Leningrad, Vygotsky gave a talk on the relationship between conditioned reflexes and the conscious behaviour of humans. His work so impressed his audience that, at the age of 28, Vygotsky was invited to become a research fellow at the Moscow Institute of Psychology.



During his time in Moscow, Vygotsky wrote about 100 books and papers. He read and reflected on the work of Freud and Piaget. He travelled in Europe during the 1920s and was influenced by a range of writers, including Charlotte Buhler who studied the development of language in babies and children.

Vygotsky was also involved in applied research. His experimental studies in educational psychology were developed in his work with mentally and physically disabled children and more generally in the field of psychopathology.

## His writing

Vygotsky was a prolific writer. Much of his work has not been translated into English but some books have been published in a range of translations and editions. His best known or most influential are:

*Thought and Language* (published in 1962 by MIT Press) *Mind in Society* (published in 1978 by Harvard University Press, edited by M Cole *et al*)

## **His theory**

#### Language and thinking

Vygotsky emphasised the significant role that language plays in the development of abstract thought. He stressed the importance of the labelling process in the formulation of concepts. He believed that children's language was social in origin because it arose in interaction between the child and others. In other words, the child's language both results from and is part of social interaction.

He saw the experience of talking with adults about familiar everyday experiences as crucial, not only for building up knowledge of language but also for an awareness of particular ways of thinking and interpreting their own experiences. The very naming of particular attributes, he thought, helped concepts to form. This contrasts with Piaget's view that the use of relevant language follows the development of a concept.

Vygotsky believed that talking is necessary to clarify important points but also that talking with others helps us to learn more about communication. Children solve practical tasks with the help of speech, as well as with their eyes and hands. The idea that children observe conversation and that it is the unity of perception, speech and action which leads them to make sense of situations was important in Vygotsky's thinking. Children do not simply react to the words that are used but interpret the context, facial expression, and body language to understand meaning. Young children also talk to themselves. They use language as a tool for regulating or guiding their actions. An example of this might be the toddler declaring 'up step' as they climb a flight of stairs or a four-year-old creating a story as they draw or paint. Language usually becomes internalised by the age of seven, except where tasks are difficult – adults often talk to themselves through a difficult task or read instructions out loud.

#### The zone of proximal development

Vygotsky also developed a theory called the 'zone of proximal development' which he described as the gap between what a child can do alone and what they can do with the help of someone more skilled or experienced, who could be an adult or another child.

He argued that the capacity to learn through instruction was a fundamental feature of human intelligence. Where adults help a child to learn, they are fostering the development of knowledge and ability. Piaget believed that learning was dependent on the child's readiness to learn. For Vygotsky, the key factors were not only the child's existing knowledge or understanding but also their ability to learn with help. Two children may have similar levels of competence but different levels of success because of their differing abilities to benefit from the help or instruction given them by adults. For this reason, he objected to measuring children's abilities through intelligence tests, believing that what could be observed about how the child went about a task could reveal as much as the score of any test.

Vygotsky rated children's interaction between themselves as important. In his view, interaction benefits a child when they are helped by another child who knows more about the task. The more knowledgeable child benefits too, as the process of making their ideas more explicit renders the grasp of what they know clearer and more objective.

#### The social context for learning

For Vygotsky social and cognitive development work together. While Piaget believed that knowledge comes from personal experience, Vygotsky emphasised the importance of families, communities and other children.

Vygotsky saw language as one of a range of cultural tools or tools for thinking which we learn from others and use with others in thinking and learning. Other such tools are numbers, signs, notations, plans and diagrams. He also thought that play and imagination were important to development and learning.

## Lev Vygotsky

## Putting the theory into practice

The notion of the zone of proximal development emphasises the importance of what has been called 'scaffolding'. This relies on careful observation of what children can do and planning a curriculum which challenges their current capability.

Like Piaget, Vygotsky emphasised the way in which knowledge and understanding are constructed by the learner from their experiences. This is known as constructivist theory. Unlike Piaget, however, who saw experience as personal, Vygotsky emphasised the social components of experience. His theory underlined the contribution to learning made by others, and is known as a social constructivist view. It has been associated with an apprenticeship approach where the learner learns from someone more experienced or competent. Key ideas in a classroom then become conversation, play and opportunities to follow interests and ideas.

## **His influence**

Vygotsky's concept of differing zones of proximal development led to important new techniques for diagnosing children's learning needs and the development of teaching techniques to meet them.

The idea of matching tasks to children's current competence to scaffold their learning comes directly from his work. His theories changed the way educators think about children's interactions with others, and led to peer tutoring approaches and to apprenticeship views of learning. Schemes encouraging children to read at home with their parents rely on a view that children are apprentice readers.

Vygotsky's ideas balance those of Piaget and helped others build on and develop new theories from those of Piaget. The work of Bruner, for example, owes much to Vygotsky. American psychologist Barbara Rogoff (1) has developed theories based on Vygotsky's emphasis on culture and society.

#### Comment

Because Vygotsky died so young, criticisms of his work have not been as detailed or as analytical as those of Piaget's work. His work was not widely known outside Russia for many years after his death.

In emphasising the nurture side of learning (the impact of others and the scaffolding they offer to learning), it could be argued that there is not enough emphasis on children's role in their own development – the nature of learning, the role played by the developmental process and the child's own personality.

The second criticism concerns Vygotsky's methodologies. Much of his work was not based on empirical evidence but were untested ideas or hypotheses.

#### References

See for example:

Rogoff, B *Apprenticeship in Thinking* (Oxford University Press 1990) and *The Cultural Nature of Human Development* (Oxford University Press 2003)

#### Where to find out more

Theories of Childhood: an Introduction to Dewey, Montessori, Erikson, Piaget and Vygotsky C G Mooney (Redleaf Press 2000)

