

Child development

Further reading on learning theories

Froebel (1782 to 1852)

Froebel's theory is based on the teacher's role as one to assist in the child's discovery. He claimed that effective learning occurs via a child's regular interaction with the world.

He believed that humans are inherently creative beings and that play helps facilitate creative expression. Early years settings should be environments in which children could reach their full creative potential under the protective and interactive guidance of an adult. Froebel's kindergarten engaged children in group learning and provided materials for imaginative use versus practical use. Froebel believed that fostering the imagination and social relationships should precede the expansion of the intellect.

Dewey (1859 to 1952)

Dewey was a founder of the philosophical movement called pragmatism and a key theorist of the progressive movement in education. Like Froebel, Dewey believed that a child's daily experience is critical to learning and that the curriculum should relate to children's lives. This idea moved away from the authoritarianism and rote learning that was in place. He suggested that a child's mind grows via social participation, which is the primary purpose of school. He felt that children do not need activities to learn because they have their own internal tendencies toward action. Lastly, Dewey argued that education should not be solely about preparing for the future. Education focuses on the importance of living in the present.

Montessori (1870 to 1952)

Montessori believed in the importance of the senses in cultivating the independence of the child. She agreed with Dewey that children have a natural aim to learn. In her book, *The Secret of Childhood* she wrote, "When a new being comes into existence, it contains within itself mysterious guiding principles, which will be the source of its work, character, and adaptation to its surroundings." In some ways, her ideas strayed from those of other theorists. She argued that only by developing the intellect can the imagination and social relationships emerge. She emphasised freedom within a structured environment.

Piaget (1896 to 1980)

Piaget's theory of cognitive development focuses on stages of growth and on a child's ability to acquire knowledge gradually. He believed that children develop because of their personal interactions. Piaget described acquiring information through the use of schemas – the basic building block of intelligent behaviour as a way of organising knowledge. Indeed, it is useful to think of schemas as 'units' of knowledge, each relating to one aspect of the world, including objects, actions, and abstract (i.e. theoretical) concepts.

Child development

Vygotsky (1896 to 1934)

Vygotsky had several learning theories including:

- the zone of proximal development (ZPD) – the area of understanding just outside what they know but are capable of learning
- more knowledgeable other (MKO) – the person doing the teaching, a parent/carer or teacher
- scaffolding – a framework provided around which to build understanding, and that is removed as confidence is gained
- social learning theory – the process by which children move from thinking out loud to using inner speech to learn.

Although at the time he had little impact on learning, his work resurfaced in the 1970s and 1980s and much of it has been extrapolated further.

Erikson (1902 to 1994)

Erikson's psychosocial theory of development considers the impact of external factors, parents/carers and society on personality development from childhood to adulthood. According to Erikson's theory, every person must pass through a series of eight interrelated stages over the entire life cycle.

The stages that are most relevant to our age group are:

- Trust vs. Mistrust: Infancy (approx. under 2 years) – virtue is 'hope' with the important relationship being the mother/main carer and the existential question of 'Can I trust the world?'
- Autonomy vs. Shame/Doubt: Toddlerhood (approx. 2–4 years) – virtue is 'will' with the important relationships being with parents/carers and the existential question of 'Is it okay to be me?'
- Initiative vs. Guilt: Early childhood (approx. 5–8 years) – virtue is purpose with the important relationships being with family and the existential question of 'Is it okay for me to do, move and act?'
- Industry vs. Inferiority: Middle childhood (approx. 9–12 years) – virtue is 'competence' with the important relationships being with neighbours and school and the existential question of 'Can I make it in the world of people and things?'.

Rogers (1902 to 1987)

Rogers developed a humanistic approach to learning. Humanism was developed to contrast cognitivism and behaviourism. Both Rogers and Maslow based their work in humanism. The key perspectives of humanism are as follows.

- People have a natural desire to learn in order to achieve self-actualisation (see Maslow's theory above).
- It is not the outcome that is the most important part of education, it is the process of learning itself.
- The children themselves should be in control of their learning and it should be achieved through observing and exploring.
- The teacher should be an encouraging role model, motivating, guiding and supporting children on their own personal journey.

Child development

Rogers' views the teacher as a facilitator to learning rather than just a conveyor of knowledge. The success of the teacher is in their ability to build positive relationships with children.

Bowlby (1907 to 1990)

Bowlby's theory of attachment suggests that children come into the world biologically pre-programmed to form attachments with others, because this will help them to survive. A child has an innate (i.e. inborn) need to attach to one main attachment figure.

Bowlby's suggests that there is a critical period for developing at attachment (2.5 years). If an attachment has not developed during this time period then then it may well not happen at all. Bowlby later proposed a sensitive period of up to 5 years.

Bowlby's maternal deprivation hypothesis suggests that continual disruption of the attachment between infant and primary caregiver could result in long-term cognitive, social and emotional difficulties for that infant.

According to Bowlby, an internal working model is a cognitive framework comprising mental representations for understanding the world, self and others, and is based on the relationship with a primary caregiver. It becomes a prototype for all future social relationships and allows individuals to predict, control and manipulate interactions with others.

Maslow (1908 to 1970)

Maslow wrote a hierarchy of needs that children progress through, i.e. a set of sequential needs from physiological to self-actualisation. As they move up through the levels, they feel more comfortable in their learning environment and have greater confidence to try harder.

It's important to note that any group will have children at different levels, some may not have the lower levels met at home so making sure these children feel safe and secure is of the utmost importance as they will find it very hard to move to the upper levels.

Maslow's theory lends itself more to building child/teacher relationships rather than lesson or curriculum structure. You can have the best resources and most tightly planned lessons in the world but if you don't show enthusiasm, passion and empathy it will be very difficult for your children to feel their needs have been met.

Gagné (1910 to 2002)

Gagné discussed the analysis of learning objectives and how the different classes of objective require specific teaching methods. He called these his five conditions of learning:

- Verbal information
- Intellectual skills
- Cognitive strategies
- Motor skills
- Attitudes.

To achieve his five conditions of learning, Gagné believed that learning would take place when children progress through nine levels of learning and that any teaching session should include a sequence of events through all nine levels. The idea was that the nine levels of learning activate the five conditions of learning and thus, learning will be achieved.

Child development

Used in conjunction with Bloom's taxonomy (see below), Gagné's nine levels of learning provide a framework that practitioners can use to plan lessons and topics. Bloom provides the ability to set objectives that are differentiated and Gagné gives a scaffold to build lessons on.

Bloom (1913 to 1999)

Bloom proposed three domains of learning — cognitive, affective and psycho-motor. He worked in collaboration with David Krathwohl and Anne Harrow throughout the 1950s to the 1970s on the three domains. The one we use most frequently, and many times see as common sense, is Bloom's cognitive theory which revolves around a hierarchical pyramid — Remembering, Understanding, Applying, Analysing, Synthesis and Evaluating. This has been modified over the years to swap the position of Synthesis and Evaluating. Many questioning hierarchies use Bloom's taxonomy.

Bruner (1915 to 2016)

Bruner wrote of the importance of the role of the adult in scaffolding to support the child in developing higher level learning skills through constructivism. He believed that:

- children learn when they have access to a supportive, interested adult or peer
- scaffolding by an adult is important for learning by provoking assistance and support when children are faced with challenging tasks, and withdrawing that support as competence develops
- tasks must be presented to the child in a meaningful way appropriate to their developmental stage
- children learn by the resolution of cognitive conflict.

He proposed the spiral curriculum (a curriculum that returns to the same topics over time).

Bandura (current)

Bandura's social learning theory states that individuals develop who they are through environmental factors, namely the imitation of role models.

Bandura suggested that through observational learning, children model their behaviour by watching others.

This occurs through four stages of learning:

1. The child paying attention to the person they wish to imitate the behaviour of. This is usually someone they look up to and somebody that they are close to.
2. The child retains the behaviour that they have paid attention to. This includes remembering the actions that they have displayed and the responses they have received.
3. The child reproduces this behaviour with the aim to receive the same response as their role model received; this can include acceptance by others.
4. If the child receives the response that they are looking for they will be motivated to reproduce this behaviour again.

Child development

Bandura stressed that observational learning could be used to explain why young children imitate positive and undesirable behaviour.

Social learning theory can be used to explain why young people may succumb to peer pressure and carry out risk-taking behaviour, such as having unprotected sex or drinking alcohol. If a young person feels they do not fit in and are lonely, they may start to imitate the behaviour of individuals who appear to be popular and liked by others in order to be accepted themselves by their peer group.

Social learning theory ignores the influence of biological factors on behaviour and development, such as the role of hormones and genetics.

Gardner (current)

Gardner studied under Erik Ericson and Jerome Bruner. He perceived intelligence as the ability to solve problems or make products that are useful in one or more cultural settings.

Initially, Gardner named seven intelligences — Linguistic, Mathematical, Musical, Bodily-kinaesthetic, Spatial, Interpersonal and Intrapersonal.

He suggested that the intelligences rarely operate independently and complement each other as children learn new skills and solve problems. Gardner has since added an eighth intelligence — Naturalist intelligence.

Whilst Gardner's theory hasn't been hugely accepted in the field of psychology, it has had a strong positive response in education, especially in the United States of America.

Kolb (current)

Kolb proposed a four-stage experiential learning theory, it is built on the premise that learning is the acquisition of abstract concepts which can then be applied to a range of scenarios.

Each stage in the cycle both supports and leads into the next stage. Learning is achieved only if all four stages have been completed; however, a child may travel around the cycle multiple times, further refining their understanding of the topic. No one stage is an effective learning strategy on its own, e.g. if the reflective observation stage is skipped, the child could continue to make the same mistakes.

Laevers (current)

Laevers observed that young children regularly become absorbed in what they are doing and is convinced that 'an involved child is gaining a deep, motivated, intense and long-term learning experience.' He bases his theories on the premise that the most productive learning, whatever our age, occurs when we are so involved with something that we lose ourselves in it. With very young children in their early years, we can measure processes and achievements in learning in other ways rather than looking at outcomes. He designed the Leuven Involvement Scale – a method of measuring children's involvement in an experience/environment. However, this has been used at times to assess children when its primary function was to support practitioners in developing

Child development

provision. This scale has since been developed into the Leuven Well-being scale to measure children's well-being and emotional health.

Siemens and Downes (current)

Siemens and Downes proposed connectivism. This is one of the newest educational learning theories. It focuses on the idea that people learn and grow when they form connections. This can be connections with each other, or connections with their roles and obligations in their life. Hobbies, goals, and people can all be connections that influence learning.

Teachers can utilise connectivism in their classroom to help children make connections to things that excite them, helping them learn. Teachers can use digital media to make good, positive connections to learning. They can help create connections and relationships with their learners and with their peer groups to help learners feel motivated about learning.

However, there is much current debate as to whether this is actually a learning theory or just a methodology in this digital age.

Dweck (current)

Dweck found that children's mindsets — how they perceive their abilities — played a key role in their motivation and achievement, and that if we changed children's mindsets, we could boost their achievement. More precisely, children who believed their intelligence could be developed (a growth mindset) outperformed those who believed their intelligence was fixed (a fixed mindset). And when children learned through a structured programme that they could 'grow their brains' and increase their intellectual abilities, they did better. She also found that having children focus on the process that leads to learning (like hard work or trying new strategies) these could foster a growth mindset and its benefits.

Other theories you may come across include:

- MacLean's brain-based theory
- Ebbinghaus's forgetting curve
- Ryan and Deci's self-determination theory
- McCall's 70:20:10 theory
- Eyal's hook model
- Fogg's model for behaviour change
- Addie's theory of instructional design
- Atkinson and Shiffrin's multistore model of memory
- Craik and Lockhart's levels of processing theory
- Tulving's episodic, semantic and procedural memory theory
- Hebb's arousal theory of motivation
- Baddeley and Hitch's working memory (WM)
- Bandura's social learning theory and social cognitive theory
- Dweck's definitions of two main types of goals: Performance and Mastery.
- Dweck and Leggett's paper 'A Social Cognitive approach to motivation and personality'

Child development

- Sweller's cognitive load theory
- Anderson's adaptive control of thought (ACT) theory
- Lave's situated learning theory
- Covington's self-worth theory
- Zimmerman's self-regulated learning definition.