

Learning

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Learning is broadly defined as the acquisition or modification of behavior or knowledge through experience. While learning is perhaps most apparent within the context of students in school, learning begins from birth (perhaps even in the womb) and continues throughout the lifespan. Without the ability to learn from our experiences, we would not be able to function in society. Although there are many types of learning, this entry focuses on three common types. First, associative learning, or the ability to learn about the relationship between two objects or behaviors, is exhibited by human beings every day. Second, formal learning (learning that occurs with an instructor) is prominent in our school systems. Third, informal learning, any learning that occurs outside of formal instruction, is perhaps one of the most common types of learning for infants, young children, and adults who are not in school. This entry provides a brief discussion of these three different types of learning.

Associative learning occurs when a person links two objects or a behavior and an object. This type of learning is one of the most widespread, and sometimes long-lasting. Associative learning even has been observed in a variety of animal species, including monkeys, dogs, and dolphins. Two forms of associative learning are classical conditioning and operant conditioning. Classical conditioning was discovered by Ivan Pavlov, who observed that over time his dogs could learn the association between a ringing bell and dinner (meat powder). These dogs would demonstrate this knowledge by salivating after the bell was rung, even when food was not

present, because the bell was presented with food previously. Human beings demonstrate this type of learning every day. For example, for those of us with a fear of spiders, when we unexpectedly find a large one in the sink, we may in the future begin to fear our sink. By contrast, operant conditioning uses either reinforcements (e.g., money, treats) or punishments (e.g., scolding) to teach an individual to either increase or decrease a particular behavior. In child development, for example, stickers and treats can be used to encourage young children to behave in a certain way in a particular situation. Bribes with adults can sometimes have similar effects.

Formal learning refers to any educational opportunity that occurs with an instructor, such as school. However, formal learning is not limited to only learning in schools. Parents, siblings, peers, and mentors are some of the many instructors that learners can encounter. Although formal learning is often led by the instructor, learners also can play a role because they can influence the instructor, especially if the instructor is responsive to the signals provided by the learner. For example, the instructor can tailor the teaching material to the capabilities of the learner. Early work by Lev Vygotsky on the Zone of Proximal Development (ZPD) suggests that an adult or capable peer can advance children's ability by helping them reach their goal step by step.

Informal learning refers to any learning that occurs outside of formal instruction, such as learning someone's accent. Informal learning can involve social partners such as friends, siblings or parents. Unlike formal learning, when learning is informal, the social partner does not explicitly instruct the learner. Language learning, mimicry, and play are a few of the most common types of informal learning for infants and young children. A great deal of language, especially earlier in the lifespan, is learned through simply talking or reading to small children. Another important type of informal learning is play. Through play, children learn appropriate

social interactions, cultural values and norms, and communication skills. Although play often involves groups of children, children also can engage in solitary play, such as pretend play (e.g., dress up), puzzles, and constructive play (building with Legos or blocks). New research has begun to reveal the benefits of guided play, which combines formal and informal modes of learning through adult-supported playful interactions and conversations. Guided play has been shown to aid children's cognitive development, particularly for language learning, reading, and social skills.

In summary, we learn a great deal over the course of our lifetime, using a variety of methods to acquire information. Many types of learning, including the three in this entry, are important for human interactions and survival. These types of learning each have their benefits and downsides, such as how long it takes to learn something or how much it costs to learn something. In the end, the diverse approaches allow the learner to acquire a variety of information at all ages.

Further Reading

Moll, L. C. (Ed.). (1992). *Vygotsky and education: Instructional implications and applications of sociohistorical psychology*. Cambridge University Press.

Hall, G. (1991). *Perceptual and associative learning*. Clarendon Press/Oxford University Press.