Learning Theories: The Child Development Theory

Overview

Developed by Jean Piaget in the 1920's, the child development theory or cognitive development theory is a learning theory based on genetic, epistemological beliefs. Created by Piaget himself, genetic epistemology deals with the origin or beginning of knowledge itself. In other words, genetic epistemology examines how valid knowledge is acquired. More specifically, the child development theory is a learning theory rooted in cognitivism, an early subset of the constructivist's school of thought. In short, cognitivism defines the child development theory by examining how and why people learn through the process of cognitive activity (Kuhn et. al, 1971, p. 142). In fact, the child development theory proposes that the nature of children's knowledge and how they come to think and reason is developed at different periods in their lives. In essence, it divides the learning process into three fundamental mechanisms: assimilation, accommodation, and equilibration. Essentially, the child development theory takes what is learned and organizes it into schemas. Notably, schemas are mental associations of something tangible or intangible that are assigned to a specific object or event (Kuhn et. al, 1971, p. 143). In short, this process is known as assimilation. In other words, assimilation is the stage in which new knowledge is processed and added to previous knowledge. During this process, the mind begins assimilating new knowledge that easily corresponds with existing schema as well as adapting insufficient schemas within a process called accommodation. Specifically, accommodation is an adaptation process that occurs because of the previous schemas trouble incorporating new information. In essence, this accommodation leads to equilibration. In the end, equilibration is the equilibrium or balance created between assimilated and accommodated mental structures or schemas and the individual's present, external environment.

Contributors

Born in 1896, Jean Piaget would one day enjoy great fame for his many discoveries. Although his triumphs were many, one of his discoveries stood out above all others. This triumphant discovery was known as the child development or cognitive development theory. In short, at young age, he began to develop his theory and, within the span of 20 years, he turned it into one of the most important scientific and psychological discoveries of our time. In fact, by the age of 21, Piaget had already published 20, scientific papers that gained him prestige and notoriety (Valsiner, 2005, p. 58). Before long, Piaget began working for famous, French psychologist Alfred Binet where he began to study reasoning and intelligence in children. In short, after two years of this practice; Jean Piaget decided to ultimately devote his time to the study of childhood development. During this study, Piaget noticed that younger children answered questions differently than their older counterparts. In essence, this discovery suggested that, although both younger and older children shared the same knowledge on a given subject, younger children typically answered a question in a different manner. In other words, they reasoned differently and used a different thought process to provide an answer. Excited with his findings, Piaget spent the next decade of his life perfecting his theory, and, ultimately, providing modern science with one of the most valuable learning theories in educational history.

Major Principles

According to Piaget, there are two major principles that outline the child development theory. Essentially, both principles, adaptation and organization, are used to aid in the intellectual and biological development of children (Malerstein & Ahern, 1979, p. 107). In other words, Piaget's major principles were designed to emphasize an individual's desire to survive through their adaptive ability in both a physical and mental capacity. In short, each principle identifies key concepts that provide in-depth guidelines for childhood development. First, assimilation and accommodation are both categorized within the realm of adaptation. As mentioned earlier, Piaget believed that individuals possess mental structures that assimilate foreign objects and events, and convert them to fit their previous knowledge or schemas. Additionally, an individual's new schemas also accommodate or integrate with previous schemas taken from their present environments. Next, Piaget's second principle of organization refers to the fundamental characteristic of an individual's thoughts or actions. In other words, the idea of a schema refers to a mental representation of a physical object or a mental event that is used to streamline the complex nature of the mind. In short, Piaget labeled this internal drive to produce organized schemas between an individual's mind and his or her external environments equilibration. Essentially, equilibration is the effort to balance experiences in the biological, physical, and social arena with an individual's external environment (Malerstein & Ahern, 1979, p. 111). In studying this equilibration within children, Piaget identified four major stages of cognitive development. They are: sensorimotor, preoperational, concrete operational and formal operational. Basically, Piaget believed all children pass through these stages during cognitive development. More specifically, he believed that the stages were always sequential, or age appropriate, and were never skipped. In the end, Piaget saw childhood development as an extremely complex process comprising of two major principles: adaptation and organization; three key concepts: assimilation, accommodation, and equilibration; and four primary stages: sensorimotor, preoperational, concrete operational and formal operational. Ultimately, these fundamental elements of learning provided the foundation of Jean Piaget's child development theory.

Application

Essentially, as previously mentioned, an important part of Piaget's child development theory is the adaptation of instruction to the learner's developmental level (Hinde & Perry, 2007, p. 64). Obviously, the approach of instruction needs to reflect the developmental level of the child under instruction. Thus, it is extremely important that the instructor provides a variety of learning experiences that a child can assimilate and accommodate too. One way to accomplish this goal is through discovery learning, a very progressive approach to teaching. In short, discovery learning provides opportunities for learners to explore and experiment with various learning experiences thereby creating new understandings of new knowledge and the present, external environment. In essence, discovery learning could be accomplished by providing visual aids such as models or timelines to the learner, or it could be achieved by providing story problems in math. In fact, by allowing learners at the various stages of cognitive development to work together, the instructor ultimately aids each student in advancing to the next stage of cognitive development.

References

Hinde, E. R., & Perry, N. (2007). Elementary teachers' application of Jean Piaget's theories of cognitive development during social studies curriculum debates in Arizona. *Elementary School Journal, 108,* 1, 63-79.

Kuhn, D., Phillips, J. L., Maier, H. W., Furth, H. G., Elkind, D., & Flavell, J. H. (1971). Review of the origins of intellect: Piaget's theory. *The American Journal of Psychology, 84,* 1, 142-144.

Malerstein, A. J., & Ahern, M. M. (1979). Piaget's stages of cognitive development and adult character structure. *American Journal of Psychotherapy, 33,* 1, 107-18.

Valsiner, J. (2005). Jean Piaget. *Society New Brunswick-, 42,* 2, 57-61.