

A Theory of Human Learning

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How do individuals learn? How does behavior develop?

Learning theorists have carved a path beginning with early epistemological inquiry toward the nature of knowledge, to the rationalism of Plato and Aristotle, through Descartes to Hobbes, Locke, Hume, Kant and Mill and many others up to the present time.

Hergenhahn & Olson (2005) divide learning theory into five areas; functional, associational, cognitive, neuropsychological, and evolutionary. Within the five broad areas of learning theory, behaviorism, beginning with Thorndike and continuing with Skinner and Hull, became the focus of learning theory and the interface of learning and behavior change continues to have a marked influence on current themes in learning theory where learning is approached as an outcome.

Educators are very interested in the development of effective and efficient methods of understanding human development and imparting knowledge to students in a best fit fashion according to their developmental stage and readiness for learning. Within the field of education, numerous measures and assessment tools have been devised to qualify and quantify changes in behavior which indicate that learning has taken place. In my opinion, we have arrived at a seminal point in time regarding our ability to measure narrow cognitive processes which are linked to specific learning abilities and we are now able to construct specific methods of intervention when learning fails, for instance treatment for dyslexia.

My own interest in a specific theory of learning and the application of learning theory to education revolves around the nature of an individual's acquisition of knowledge and comprehension which places me into the realm of the cognitive theorists and in particular the theory of learning and cognitive development developed by Jean Piaget (Hergenhahn & Olson, 2005, pp.293-309).

Piaget began by examining human intelligence in the footsteps of Binet and developed a theory of learning through a process of developmental stages. Piaget was less concerned with overt behavior and very interested in changes in the ways in which children and adults understand and conceptualize the world around them during various periods of development. The focus for Piaget was acquiring knowledge or acquiring new abilities through the use of experience and readiness to acquire, master and apply new ways of doing things.

The nature and depth of learning, according to Piaget, is likely to be different during each developmental stage and was seen as primarily within individual, as opposed to the behaviorist view of learning as something external to the individual. For Piaget, learning is very a complex, internal process and involves relating parts to each other and to the real world, as well as interpreting and understanding reality in a different way. Learning also involves comprehending the world by reinterpreting knowledge from within the individual developmental stage.

The development of behavior appears to be seen as a byproduct which is intrinsic to learning. Certainly, behavior can be both adaptive and maladaptive toward negotiating through the world with a sense of balance and integration of skills and knowledge.

How does Piaget's theory impact my present work as a school psychologist, my view of the students I work with, and the interventions I use?

Piaget's theory of learning as a component of human development has been the single most useful paradigm from which to start when facing the daily issues of a practicing school psychologist. While my own attempts at intervention(s) are rather empirical and designed on a case by case basis, comprehension of a student's broad and narrow cognitive processes within the present stage of development provides an excellent framework to build upon, particularly when learning and/or behavior appear to be problematic or maladaptive. Conversely, Piaget's theory is helpful when examining and developing individual educational plans for high ability learners in need of supplementation and challenges beyond their present developmental stage.

Of course, the resolution of problems of learning resulting from the incongruence between developmental stage and developmental ability, in both directions, has been the forte and domain of the practice of school psychology since its beginning. Piaget's impact on my view of students often informs my decisional process on where to begin an intervention for a learning or behavior problems, with what intensity and frequency to initiate the intervention, as well as the way in which the effectiveness of the intervention is measured.

One example is a referral for a developmental evaluation of a pre-school student who is having problems retaining previously introduced letter and number concepts, as well as maladaptive social interaction with peers involving physical aggression. From the Piaget perspective, the developmental evaluation and subsequent intervention(s) would focus upon not only the referral question, but the discovery of holistic and subjective factors within the life and family system of the child's present level of development and how that had been impacting the present maladaptive learning and behavior skills.

This can be contrasted with another example of a referral involving an examination of development of a second language student who was already diagnosed with a learning disability and was a newly arrived immigrant from Mexico who enrolled in 9th grade. This student was faced with multiple problems with the negotiation of learning a new language, cultural issues, social situations and possible grief issues over leaving his native country. Evaluating, interpreting and implementing treatment for his complex myriad of problems is eased somewhat by the developmental stage of learning approach Piaget offers. This in fact leads to the next question.

How does my philosophy fit with multicultural issues and how are cultural differences viewed in this framework. Is the theory susceptible to bias?

There are an abundance of multicultural issues within the practice of School Psychology and sensitivity to the recognition of how multicultural issues impact the reliability, validity and interpretation of assessment data, along with the design and implementation of intervention programs is paramount.

Examining the theory and answering a number of questions about a theoretical fit within a multicultural context leads me to conclude that Piaget's theory appears to lack cultural bias and is a good model to use when a referral has high cultural considerations.

According to Piaget, stages of development and learning within the stages of development follow the pattern from sensorimotor, preoperational thinking, concrete operations, to formal operations. The impact of physical and social (cultural) variables are different for multicultural students such as the one described above. But, development appears universal within the basic framework of the theory. For instance a Latino child will go through the same four stages described by Piaget, albeit with different cultural stimuli.

Reference

Hergenhahn, B.R... & Olson, M.H. (2005). *An introduction to theories of learning* (7th ed.). New Jersey: Pearson Prentice Hall.