Theories in cognitive development

Psychology, Psychotherapy

These studies have made Important contributions not only n the area of developmentpsychologybut Its vital application on educational psychology as well. Jean Piglet, renowned Swiss psychologist, noted that the developmental process consisted of a cycle. The child's intellectual organization and insight will mature in to several stages of cognitive development: The first stage of Piglet's cognitive developmental stages Is the seniority stage. This Is usually experienced at birth to two years old.

The memory Is confined to Immediate experiences, and It Is at this period where the child builds his or her first cognitive framework (Queen, 2002). The second stage Piglet's work is the operational stage and usually occurs between the ages 2 to 7 years old. There is greater use and assimilation of mental images. The images are not well organized. The child begins to understand and apply greater vocabulary and simple syntax. One of the important learning events at this stage Is " object permanence" and symbolic representation.

Also, the Infant begins to develop an Intuitive way of thinking -? which is defined as the operational thought (Queen, 2002). The third stage defined by Piglet is the concrete operational period. This is usually manifested at around the ages of 7-11 years old. The child begins to develop a more logical way of thinking. The child can observe relationships or associations and can classify people, objects and events. This allows the child to solve problems more effectively, and is able to appreciate reversibility.

However, the child could only solve problems that are observable and real. Their language at this time Is purposeful and efficient (Queen, 2002). The

fourth and final stage In Placers cognitive development is called the formal operations period which is experienced around the gees of 1 1 years to adulthood. It is at this stage where the child develops an abstract and deductive reasoning process. A child could create a hypothesis and methodically use different strategies to find the cause of the problem, evaluate, re-evaluate, and even refine solutions to the problem.

At this point, Intelligence coincides with adult human levels. Although there would be no more new cognitive framework developing after this stage, however, the ability of the mental process and deductive reasoning may still advance as the person matures. Piglet also noted that the exact age of onset of each of the stages are different for each person, but the order of sequence of the stages do not changed. It is also possible for the child to mix the characteristics of the four stages (Queen, 2002).

Another Important theory that has contributed In cognitive development was by Weights (1978) discussed the use of signs to introduce a link between a stimuli and a response. For instance, tying a knot on a string would serve as a reminder for something. By this, Weights was able to restructure the thought and behavior process where cognitive development was formed by a " culturally-based recess" (Kooky, 1978; Geek and Urban, 1994). Weights implies that colonization is essential in influencing a child's cognitive growth.

The social framework involves the interpersonal relationship between the child and the child'sfamilyandculture: The maturation of the child's language skills, both verbal and written, will all be based on his cultural influences. Weights was also able to point out that cognitive growth is defined by the "

zone of proximal development" - this is the distance between the level of development shown by the child's ability to problem-solve on his win and the level of potential development shown by the child's ability to problem- solve with assistance by other people. Augusto, 1978; Geek and Urban, 1994) This would eventually lead to the moment where the child would be able to problem-solve on his own by searching for his own resources and utilizing them to lead to his own resolutions. With the knowledge of the basic nature and stages of cognitive development discussed by Piglet and Weights, educators in particular, were able to grasp a deeper understanding on how children develop and learn. Piglet discussed cognitive placement in a biological point of view: the mental capabilities of a child are restricted to a certain level at a particular age.

For example, a toddler may only know the value of coins he possesses by the number of coins he has not by how much it is worth. (Wood, 1998). Like Piglet, Hoosegows theory also says that a more mature cognitive function could result to a more complex yet logical and abstract use of language: the older the child gets, the more developed his mental functioning are and this is shown by having a better grasp and use of language skills. This is where the similarities of the two theories end.

Unlike Piglet's biological perspective, Weights focused on a historical-cultural perspective. Hoosegows main objectives were " to understand the nature, evolution, and transmission of human culture" (Wood, 1998). Hoosegows main argument on cognitive development is the impact or the importance of " colonization" on the child's cognitive growth. The social interaction serves

as a stimulus for the child's cognitive growth. A child will learn, understand, and apply the cultural language and the cultural norms of the society if he is regularly exposed to such (Wood, 1998).

Piglet's view on social interaction is Just as important, but rather than having social interaction as a stimulus for cognitive growth, Piglet sees social interaction as more of a means to introduce a cognitive conflict for the child: when a child is exposed to a view that is different from his logical process, the child has to attempt to seek an equilibrium between the child's view and to understand the new view, this conflict is usually seen at the concrete operations.

When the formal operation sets in, the child would get a better grasp and would be able to accept and reach a faster logical equilibrium for the new social view. Piglet's developmental stages begin with the individual then to the society; while Hoosegows developmental approach is opposite - it starts with society, then to the individual (Oregon, 1999). At -par with-age tools in the student's curriculum.

For example, aware of Piglet's concrete operational stage: the child's ability to learn would be greatly effective if the technique was hands-on enabling the child to have direct experience (Queen, 2002). In Hoosegows theories, formal learning must be mixed with social interactions or active discussions of the students and the teachers where there is guidance or assisted-discovery to lead the child to eventually do the task on his own.

Both theories have greatly stressed the value in the approach or method of learning rather than the results of what have been learned; and the essentials of actively involving the student in learning. However, Hoosegows guided-learning approach far differs from Piglet', since the latter's theory views that the student is more of a " solitary explorer" (McMullen, 2006). By creating class activities that would best-fit the child's level of cognitive maturity, the child is encouraged to find solutions on his own McMullen, 2006).