

APPLYING PIAGET'S THEORY OF CHILD DEVELOPMENT TO COMPREHENSION SKILLS FOR YEAR 1 STUDENTS

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Introduction

Today educationalist, psychologists, educators and researchers agree upon the important role of learning in a child's life. Learning can be defined as an on-going process which starts at birth and ends with life (Zhou and Brown, 2015). Researchers have been trying for decades to understand the fundamental basics of learning and how it contributes in the development of human learning. Throughout history different learning theories has attempted to explain the basis of human behaviors and how it is learned (Orey, 2010). First there were behavioral approaches which have tried to explain the process of learning as stimulus response, observable behaviors (Whiteley, 1961). The key theorists of behaviorism were Ivan Pavlov (who define the phenomena of classical conditioning), John Watson (who was the founder of behaviorism school of thought and define behavior as stimulus response theory), Edward Thorndike (who define laws of learning and explore the phenomena of operant conditioning) and B.F. Skinner (who expanded the work of Thorndike and explain the phenomena of shaping) (Skinner, 1985; Case and Bereiter, 1984; Braddon-Mitchell, 2019). Behavioral learning theories signify any change in behavior as learning and dismiss the internal factors which affect behaviors (Smith, 2020).

Then in 1950s cognitive elements of learning were in focus which assert upon the importance of mind's role in the learning process (Deigh, 1994). Jerome Bruner, Jean piaget, David Merrill, Robert Gagne and Roger Schank was consider the major cognitive theorist who greatly contribute in highlighting the fundamental phenomena of learning with the help of cognition (Descombes, 2010; Atkinson, 2011). Cognitivism emphasize on understanding the phenomena of learning, acquisition and knowledge (Watson and Coulter, 2008). It explains that learning activity and capacity of an individual change overtime as the individual gives through different phases of life (Descombes, 2010).

Then this approach took a turn towards constructivism where they passive view of teaching and emphasized that previous experience provides a new understanding in constructing new information and concepts (Fosnot, 2013). Constructivism involve the work of Jerome burner, Lev Vygotsky, and John Dewey who agreed that the child create knowledge rather than passively receive it and previous knowledge plays a crucial in the learning process (Steffe and Gale, 1995). After the constructive approaches, humanistic approaches has defined the process of learning as a part of experientialism and rejected the didactic approaches towards learning (Davies, 2008). Humanistic approaches majorly rely on the work of Abraham Maslow and Carl Rogers and emphasize that an individual must learn on his own and teacher

can help in engaging the student in learning process but they cannot control the learning outcome (Sartre, 2021).

Learning theories and educational sector

In reflecting her experience with the application of learning theory the author highlighted that learning theories are being actively used in classroom setting (Ashworth *et al.*, 2004) as it helps to provide the successful strategies of dealing with different situation and make the learning experience more productive (Huitt and Hummel, 2003). Nowadays, educationalists focusing on bringing blend learning approaches which enable the teacher to understand the student learning from multiple perspectives with the help of learning theories. For example the concept of reward and punishment is all about acquisition and developing understanding of the rules and regulations followed within the society. Student has been able to grasp and learn this reward and punishment concept through trial and error (which is a part of operant conditioning). By using behavioral approaches like reward and punishment teachers set up the classroom regulations where the child learn to respect, share and cooperate with other students.

Another interesting aspect of learning theories is that they focus on acquisition process and help in understanding how any information is stored (Hean *et al.*, 2009). This is very beneficial for the teachers to understand the students as it not only helps them in improving student performance but also enable the teacher to improve the teaching strategies as well (Orey, 2010). Teachers are also using different cognitive strategies in the classroom to help not only students with higher intellect but also helping the students with lower abilities (Wang, 2007). Moreover, the usage of learning theories in classrooms is proving very significant in educational setting.

Piaget's theory of child development and comprehension skills

The researcher has chosen piaget's theory of child development to understand the phenomena of comprehension skills and this assignment will help in highlighting how piaget theory help during classroom setting with the blend of my own experiences. Jean Piaget was a Swiss psychologist who is famous for his work on cognitive development of the children (Piaget, 2000). His work focused upon the intellectual development of the child throughout the course of his or her childhood (Wadsworth, 1996). Piaget believed continuous transformation and suggested that a child's development is a process of continuous transformation where development take place and the child development level differ from one another (Piaget, 1976). This gradual development help in developing a steady pace for each stage and serve as a foundation to move toward the next stage (Piaget, 1952). Piaget emphasized that everyone go through these stages and no one can skip any stage of development (Piaget, 1962).

Piaget's cognitive theory of development highlights four primary stages of cognitive development, the sensorimotor stage, preoperational stage, concrete operational stage and formal stage (Piaget, 1976). The sensorimotor stage (birth-2 years) which includes sensory curiosity, coordination of motor responses, become familiar with language use and object permanence is learned. The next stage is preoperational stage (2-7 years), the highlight of this stage is symbolic thinking, egocentrism, imagination and conservation skills are developed. Third stage is concrete operational (7-11 years old) which include logic applied, conservation of ideas, numbers and objective and rational interpretations of events. The last stage is formal operational (12 years till adulthood) which encompass abstract thinking, hypothetical ideas, social, ethical, moral and political issues are explored (Piaget, 1962; 1976; 2000). Piaget's theory implies that operative knowledge is important in change and transformation. His

approach was constructive as he focused on the individual development and hand on learning (Herron, 1978).

Furthermore, Piaget emphasized that individual must adapt within the environment. He also indicated that the process of assimilation and accommodation makes the process of adaption easier (Piaget, 1973). In explaining the adaptation process Piaget referred to assimilation as a process of transforming environment and accommodation as the process of cognitive structures. The transforming environment and cognitive structures then help the individual to comprehend what is going around them (Piaget *et al.*, 2013). For example, to improve the comprehension skills for year 1 students, the teacher use the big talk activity where the children have to think about some adjectives for the appearance and personality of the characters in the story. In year 1 for comprehending we have a power point having pictures/visuals for the children to understand the story better. According to Piaget's theory the children in my class are in pre-operational stage of development thus, they have becoming familiar with symbolic thinking and language use. By using the process of assimilation student try to comprehend the environmental changes related to the character. After telling them the story the children think about the characters. Here, the process of accommodation helps them in understanding the cognitive structure of the story. The teacher usually gives them 'adjectives word mat' to help them use the relevant adjectives while describing the characters. The children are also encouraged to use the conjunction 'because' to reason why they chose a specific adjective for their character. This also justifies their comprehension of the story but at the same time it enables the child to develop a balance between his comprehension skills and understanding of the environment. Piaget named the balance of assimilation and accommodation as equilibrium.

Moreover, it was highlighted that the child feels comfortable in the state of equilibrium thus they have confidence and perform the task well but while performing the task they are not acquiring new knowledge. However, the child did not come across a new concept or phenomena which he has not mastered nor have any prior knowledge where he feels curious to learn. This state is also known as disequilibrium and Piaget believed that this disequilibrium must be used by the teacher to motivate the student (Sanghvi, 2020). Using this in classroom helps the teacher in developing better understanding of student thinking and they devise strategies within the cognitive level of their students (such as modeling, assignments or motivational sets). For example another activity which the teacher used in class to improve the comprehension skills was Diary entry being Jack. In this activity she discussed with the children that you have to write a diary to discuss your feelings during a given day. The children are going to write a diary pretending we are Jack and write about the events that happen in the story. Before this activity students have mastered the previous activity where the teacher has use big talk and the students were very comfortable in completing it. Then, when she introduced the diary entry activity it was like a state of disequilibrium for them and they were curious to learn about how they are going to write about the character. The main goal of Piaget's theory was to help the child to construct knowledge (Piaget, 2000) and with this activity the child might able to comprehend that the characteristics of an individual can change and some of them can be the same.

Piaget suggested that teacher should include the child in the conversation as eliciting the conversation can help in improving the comprehension skills (Sanghvi, 2020; Taher, 2021). It is helpful even with children of lower abilities they can comprehend and incorporate available resources in problem solving (Atkinson, 2011; Kazi and Galanaki, 2019). For example the teacher use conversation and cut up sentences as it help me in improving child's comprehension. For lower ability children 'cut up sentences are used where the children un-jumble the words to form meaningful sentences and read it to comprehend before writing it in

their books. Story word mats are also always provided to aid them in comprehending words with visuals and aiding in recount writing. Using problem solving at this level by engaging the child in conversation can help the child to explore novel ways to solve the assigned task. Later on Piaget theory was criticized by Weiten (1992) where he highlighted that Piaget's theory underestimate the cognitive development of children. He argued that in the preoperational stage the child could be less egocentric and the child have the ability to differentiate and view situation from different perspective (Weiten, 1992). Another crucial point of Piaget theory was the cultural influence. Crossland (2015) argued that Piaget's theory was based on the children who grow up in western culture and their thinking pattern was different and Piaget ignored this influential element in his theory. Apart from some crucial elements Piaget's theory is still far more respected and inspired the people to research on this area of education.

piaget theory

Conclusion

With the advancement of knowledge, schools have to face different issues as it fails to incorporate and teach the knowledge appropriately (Simatwa, 2010). Many schools are struggling with meaningless and isolated learning as the school curriculum does not incorporate the techniques and strategies for knowledge construction (Ghazi *et al.*, 2014). Using learning theories can help in overcoming this problem as it provide an outlet to blend different learning strategies by focusing on the cognitive level of the child (Atkinson, 2011). This focused approach enables the teacher to choose the right strategy for the right student and empower them to help the child to improve their academic performance (Taher, 2021). Piaget's theory is one of the approaches which can be successfully utilized in classroom to make the learning more meaningful and effective. By understanding the nature of adaption process teacher motivate the child to learn by providing them the ideal environment for learning (Kazi and Galanaki, 2019; Houdé, 2019). Furthermore, the understanding of different stages of development can also help the teachers in devising the lesson plans which will encourage the curiosity of the children and motivate them to learn new things and concepts (Huitt and Hummel, 2003). This will also facilitate the children to explore their surrounding and to construct the knowledge with operative functioning (Wang, 2007). Piaget's theory has changed the repertoire of traditional class room learning towards more constructive approaches of learning (Babakr *et al.*, 2019; Xu, 2019). By far using Piaget's approach of learning has not only help the teacher in making comprehension easier for the children but it can also be used in teaching other concepts like mathematics, speech problems and the utmost benefit of this strategy is the successful use in the early years of education (Payne and Isaacs, 2020).

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