COGNITIVE CONSTRUCTIVISM OF EARLY CHILDHOOD BASED ON JEAN PIAGET'S THINKING

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Info Artikel

Abstract

Didalam dunia pendidikan Jean Piaget merupakan seorang tokoh konstruktivisme, psikologi dan epistimologi, karena sebagai tokoh epistemologi Piaget meninjau cara berpikir anak hingga menemukan tentang individu dalam memperoleh pengetahuan. Potensi yang dimiliki oleh peserta didik memerlukan adanya upaya untuk memaksimalkan sehingga ketentuan yang telah ditetapkanpun akan sesuai dengan proses pembelajaran. Pendidik tidak dapat memindahkan pengetahuan yang terdapat dalam pikiran pendidik begitupun peserta didik tidak dapat menerima pengetahuan yang diberikan, atau dengan istilah lain transfer ilmu, yang berarti peserta didik harus kuat secara mental didalam membangun pengetahuan berdasarkan kematangan kognitif yang dimiliki. Memaksa dalam metode mengajar adalah hal yang sangat tidak baik, karena tanpa dipaksapun peserta didik akan membentuk pengetahuan yang telah diperoleh dan dipelajari, pentingnya partisipasi aktif dalam proses belajar. Pada teori konstruktivisme Piaget menemukan dua cara anak dalam memperoleh pengetahuan yaitu akomodasi dan asimilasi. Metode adalah salah satu cara untuk mencapai yang diinginkan oleh pendidik, yaitu dengan suasana kelas yang nyaman sehingga memunculkan motivasi anak semangat dalam belajar.

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INTRODUCTION

Constructivism is a theory related to social, philosophy, education and sociology. In the world of education constructivism emerged as a theory of learning and knowledge. That knowledge is obtained when individuals carry out the process of forming knowledge and as a learning theory that processes that occur within individuals can form meaning. Children acquire knowledge is the result of the arrangement of prior knowledge that has been previously possessed as well as newly acquired knowledge. Children can acquire knowledge in 2 ways, first assimilation is the integration of concepts which is a refinement or addition to the initial concepts they have.

The second accommodation is the formation of a new concept in children because in the initial concept there is a discrepancy with the newly acquired experience. The term equilibrium proposed by Jean Piaget, which means balance, is the process of balancing accommodation with assimilation. The process of accommodation and assimilation is the initial schema structure owned by the child. Schema is an initial knowledge structure that is in a person's mind. As the child's experience increases and the child's intellectual development increases, this scheme can change.

In the description above there are several things to do with the mentality of the Indonesian nation which has experienced a setback caused by barbaric behaviors in the form of immoral acts, these conditions are certainly not in line with the implementation of National Education contained in Law no. 20 of 2003. Of course, in critical pedagogy there are also several problems, namely teaching-based education is a killing of children's potential. The shackled educational practice, the existing educational practice of students becomes a passive object, given by the teacher the child only receives information, notes and memorizes. During the learning process between educators and students there is no communication activity so that there is no reciprocal relationship and there is no democracy to criticize each other. Therefore, children consider their teacher as a teacher and the mentality of a noble child in the future will not be good because they are used to being fed, spoiled, there is no courage to convey the knowledge they have, because they are not accustomed to being an active object from an early age. Cognitive constructivism can be implemented in the learning process of early childhood education, so that children become active learners, acquire new knowledge through experience so that it can be implemented in their daily lives, and are able to reconstruct the knowledge that has been obtained, so that children's mentality for the future will be good. if it has been instilled early.

At this time there are many studies on "Child Development Judging from Constructivism Theory" Sunanik (2014) Education can be said to be a planned effort by students or even by others to control a condition and situation in order to achieve a goal. The problem is, from the point of view that has been described above, education is not only limited to the classroom or school, the methods or curriculum used in school institutions are still traditional. Education can also be said as a lifelong learning process whose implementation is planned and directed. While the learning process is a process in which a person's environment is deliberately managed for a behavior in special situations and conditions or can produce a response in certain situations. In general, constructivism theory is known as the basic theory in learning, this constructivism theory states that children's development can gain new understanding that is built through social, physical and

mental interactions of children. That way the child can understand how to know the world, the child can also plan experiences to deepen and strengthen the knowledge he has acquired. Through experience, children acquire knowledge that is formed actively, not passively, which is just imitating. Development is the result of assimilation, accommodation and equilibration that can provide new and better reasoning. When children learn actively in their surroundings.

RESEARCH METHOD

The research method used is a qualitative method through a descriptive analytical approach. The subjects of this study were children aged 4-6 years in TK Kuningan District, the data collection technique used observation of children.

FINDINGS AND DISCUSSION

Constructivism
Constructivism (constructivism) is a theoretical approach in a learning process in which people actively build knowledge and reality is determined by the experiences experienced by individuals. Constructivism learning is centered on building individual understanding in a creative, productive, innovative and active manner, based on the knowledge possessed and experience that has meaning. As well as the foundation of thinking, the approach aims to motivate students to understand the meaning of the subject matter and implement it in everyday life. In the description above, it can be stated that knowledge does not only contain facts and concepts that can be remembered and taken for granted, but individuals need to reconstruct knowledge that gives meaning through real or real experience.

Students must get used to being able to solve problems, get something meaningful for themselves, raging with ideas, and be able to develop and build the ideas

contained in themselves, namely with students needing to reconstruct the knowledge possessed in individuals.

Constructivism Learning
Constructivism is a philosophy of knowledge that argues that knowledge is the result of the construction (formation) of people who are learning. A view that focuses on what is obtained, namely knowledge or construction (formation) by someone who is learning by starting a cognitive conflict which is the end of the learning process, knowledge is obtained from experience interacting with the surrounding environment. The development of knowledge is the result of the human mind through the construction of thinking, therefore an educator does not only transfer knowledge, so that students are no longer considered passive learners with an empty brain because they bring knowledge gained from an experience that has meaning. Knowledge that can be used to reconstruct is new knowledge that has been combined with previous knowledge, and the new knowledge can be owned by them. In constructivism theory, in the individual's mind, students build their knowledge actively in the learning process. Students who are passive will not be able to build knowledge in their minds even though they are given information by educators, because children only get information from one direction and as passive learners. of his knowledge.

Constructivism learning has several characteristics, namely: students must be active, critical, creative, can share with friends, support each other, fun, not boring, can motivate the spirit of learning, must be able to make students feel comfortable, integrated learning, use various sources and a cooperative attitude.

Constructivism's View of Learning
Nurhadi (in Wahyuni and Baharudin) argues that constructivism is the essence of learning as a human activity in creating

or building knowledge by giving meaning to knowledge according to experience. Children actively continuously build their knowledge, mix and accommodate new information. Constructivism in other terms is a theory of cognitive development centered on the active role of the individual in building knowledge and understanding of students about their real life. In general, constructivism is a science that cannot be transferred or transferred in one direction and cannot be simply transferred. An educator can be said to be knowledgeable if his knowledge can give meaning to people who seek knowledge. It has to do with the knowledge gained with previous experience. Therefore, students can gain meaning or processes that make a person feel the changes that occur in him.

Constructivism learning concept
Jean Piaget suggested that

in the human brain there is a structure of knowledge, although the experience experienced is the same as other people, but still each individual will be different in giving meaning. The structure of knowledge contained in the human brain will be associated with each new experience. There are several processes experienced when individuals learn, the first is the organizational process which is the process of combining newly acquired information with knowledge that already exists in the individual's mind, the second is the adaptation process, which has two activities, namely assimilation, integrating or combining the knowledge acquired by the individual and accommodation changes the arrangement of pre-existing knowledge with new knowledge so that there is a balance. The adaptation process has four basic components, namely, the first schemata, namely humans lead in improving their thoughts and behavior. The mind must have an arrangement in the form of a design which is a scheme that plays a role in adapting to the environment and managing that

environment. Second, assimilation is the process of absorbing new and intellectual experiences, which is when individuals integrate understanding into pre-existing schemata. Assimilation can develop schemata instead of changing schemata, because the intellectual process of children in adjusting to their environment runs continuously in the growth of life. Third, accommodation is a process of cognitive structure that runs according to new experiences, which results in changing old schemata into new schemata. The child's mentality is not stable if it is still shaken by this schemata change, because accommodation and assimilation run continuously so that the schemata can continue to develop in accordance with the addition of new experiences. And the last is balance (equilibrum) in the process of adjustment to the environment, a person tries to achieve goals and produce a stable mental or schemata. There is harmony and balance between accommodation and assimilation, so that the interaction of children who are growing and developing with the environment can be achieved.

Cognitive

Cognitive is the ability to think, learn or intelligence is the ability to learn new concepts and skills, what happens in the surrounding environment needs to be understood through skills, memory also needs to use skills and solve simple problems or problems. With the above description cognitive is the ability to understand something, which refers to the child to understand something on the ability possessed. According to the Big Indonesian Dictionary, cognitive is something that involves cognition based on knowledge of empirical facts.

Cognitive Development Program

According to Halimah (2016, 144) cognitive development includes: covering abilities, problem solving, learning, and solving problems in everyday life as well as applying experiences in new contexts

of logical thinking which includes various different classifications, initiatives, patterns, plans to apply knowledge, cause and effect, as well as symbolic thinking that

includes the ability to mention, use and recognize the concept of numbers, recognize letters and be able to present various objects and their imagination in the form of pictures.

Jean Piaget and Lev Vygotsky assessed the importance of role playing for aspects of cognitive development. Giving children to interact with objects in the surrounding environment, so children can build and construct their knowledge and understanding of the world. According to Vygotsky, when playing, children need to be accompanied, guided by their peers, parents, teachers and able to learn from them. In the view of Jean Piaget and Lev Vygotsky, play is a context that can stimulate the development of cognitive aspects of children. According to Halimah (2016, 95) cognitive ability refers to a child's ability to concentrate on an activity, complete tasks, and recognize various shapes, colors, classifications, and recognize letters of the alphabet.

According to Ulfah and Suryadi (2013, 8) conducted research in Piaget's notes that intellectual processes and cognitive systems in children are very different when compared to adult children or older children, because they experience changes when passing through late childhood and adolescence. It can be concluded that children who experience social and academic development well will act and behave well at the end of childhood, even when they are adults and old age. In order for children to experience good social development, good social stimulation is needed that is effectively provided by PAUD institutions. Growth and Development of AUD, according to Wiyani (2016, 111-114) development is related to psychological changes in individuals and growth is related to

physical changes in individuals. Developments in AUD are related to psychological changes which include several aspects, namely religious and moral values, social emotional, cognitive and language, while physical growth in AUD has a major influence on physical-motor abilities. AUD cognitive development is related to knowledge which all psychological processes are related to how children learn and think about their environment. The stage of cognitive development according to Piaget that in human life passes through four stages of cognitive development, this stage is associated with different ways of thinking and age. These four stages are formal operational, sensorimotor, concrete operational and pre-operational.

Factors that affect the growth and development of AUD are the first factors of heredity (hereditary factors), namely innate characteristics that are conveyed by biological parents that affect intellectual abilities and personality such as talent and hereditary traits. The two environmental factors are social and physical strength, including the family which is the first and foremost education, then educational institutions are a stimulus facilitated by early childhood educators that have no small influence in optimizing children's development, lastly, society is a collection of groups or individuals who are bound by unity of culture and religion. The three general factors are classified as two factors, namely heredity factors and environmental factors.

Implementation of Learning Model Theory for Early Childhood Based on Constructivism

Various learning models based on constructivism theory: 1. Children are encouraged to be active, learn through experience and learn to solve problems. 2. Planning structured learning on information that has meaning. 3. Individual cognitive development. 4. Learning requires mental and action. 5.

Fun learning. 6. Able to use the potential of children's reasoning and emotions so that children's achievements will not be expected. 7. The concept of learning must have something to do with the real world so that the lessons learned by children can be implemented in everyday life.

Implementation of Early Childhood Education

Play activities for early childhood need to include: 1. Children have many opportunities to develop their potential. 2. Children are encouraged to solve their own problems. 3. Learning in AUD would be better and needs to be adjusted to the level of development. 4. Learning is not transferable. In this case the role of educators is very important in the growth and development of children, of course it needs to be directed to be adapted to the talents of the child and the interests that the child likes.

Constructivism Pedagogy in Indonesian Educational Practice

Learning in educational practice in Indonesia needs to be improved in order to create a generation of quality and achievement. Piaget (Yamin, 2004) which underlies the emergence of cognitive strategies, namely the theory of Meta Cognition, namely the skills possessed by students in controlling and regulating thought processes. Meta Cognition has four types of skills, namely, decision-making skills, problem solving, critical thinking and creative thinking.

The Mentality of the Indonesian Nation

The mentality of the Indonesian nation that is experiencing a decline is caused by barbaric behaviors in the form of immoral acts, this condition is certainly not directly proportional to the implementation of National Education as stated in Law no. 20 of 2003 concerning the National Education System in article 3.

The above condition is similar to the view of Koentjaraningrat (1985) which reveals that our nation has bad traits, namely: Mentality that underestimates quality,

likes to cut through, does not believe in one's own abilities, is not pure discipline, and ignores responsibility. In line with Lubis' criticism (1977) the negative characteristics of Indonesians are: Reluctant and reluctant to take responsibility for their actions, still believe in superstition, feudal spirit, hypocrisy, instincts and sensual feelings, and weak character or character that is not strong enough. It is not enough to just contemplate this condition, but there must be a real strategy and effort to build a strong and characterized Indonesian mentality.

Critical Pedagogy

Critical pedagogy with the character of Paulo Freire. Freire is faced with shackled educational practices, the existing educational practices are students as passive learners and educators as knowledgeable subjects, possessing a lot of knowledge so that the learning process is only in one direction, there is no democratic system to criticize, in fact knowledge cannot be transferred. or transferred in this condition the teacher is tasked with providing, conveying knowledge or knowledge and the child is in charge of listening, remembering, memorizing and recording what is conveyed by the teacher, this concept of education according to Freire is called Bank-style education, which is clear that there is no reciprocal communication process and there is no democratic space to criticize each other.

To overcome these problems and give birth to solutions, we need to know the factors that cause these problems in the mentality of the Indonesian nation, one of the contributing factors is the failure to create superior and characterized people of the nation. Because the paradigm that is built in educational institutions and the community that considers education is only oriented towards efforts to give birth to people who are intellectually competent so that the educational process is only a

transfer of knowledge. The real meaning of education is not only developing intellectual aspects but developing all aspects of all aspects of development such as spiritual, emotional and social. Therefore, it is necessary to restore the true meaning, the true meaning of fully humanizing humans, physically and mentally and not oriented to things that are pragmatic, technocratic, materialistic and lack a touch of moral values and nobility. So that the cognitive constructivism theory approach can be implemented in the early childhood learning process, because educational institutions take part in creating superior and characterized individuals. Likewise, the problem with the concept of education according to Freire is that the bank style is in line with Transfer of Knowledge, cognitive constructivism theory can encourage children to become active learners, gain knowledge from experience gained from the surrounding environment, because students must think critically and educators think creatively with such ideas. Freire's education that is oriented towards humanity with a dialogical education (reciprocal relationship) and the oppressed (students) based on an awareness approach, can be implemented from an early age at PAUD school age so that children can become active learners, and are aware of the surrounding environment if gain experience to produce meaning to be absorbed in the brain as part of knowledge, and there is no longer the term suppression of children's potential, because children are encouraged to become active learners, therefore it is important to plant them early in order to achieve goals from the national education system and eliminate the concept of bank-style education which only transfers of knowledge so that it oppresses and even kills the potential of children and the meaningful knowledge that results from experience.

CONCLUSION

Cognitive constructivism is very good to be implemented in the world of education in order to improve educational practices in Indonesia and achieve national education goals, especially in early childhood education, because it is very good and good if planted early. In order to give birth to a generation of superior, dignified, high-achieving and quality nations.

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