# COGNITIVE LEARNING THEORY IN THE PERSPECTIVE OF ISLAMIC EDUCATION

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Abstract: Cognitive theory is classified as a theory that plays an important role in the development of educational theory, but there are still few educational practitioners who understand the concept of cognitive theory. At the beginning of the 15th century H, Muslim scientists strengthened the spirit to return to Islamic teachings based on the Al-Ouran and Hadith. So it is not impossible if modern learning theories exist in the Qur'an and Hadith, or at least find their equivalent. So that western concepts can be juxtaposed with concepts based on the Qur'an and Hadith . The purpose of this study is to dissect the actual concept of cognitive learning theory in the perspective of Islamic education. The method used is library research, namely library research by collecting literature that talks about cognitive learning theory and Islamic education. The result of the research is that the cognitive theory of Islamic education perspective focuses on the ability to think, should pay attention to the physical and psychological development of students, focus their attention on the process of transmitting knowledge and educators play a very important role in the cognitive growth of students.

Keywords : Cognitive Learning Theory, Islamic Education.

## **INTRODUCTION**

Naturally, humans are born in a state of not having any existential abilities, but potentially, humans are born in a state of carrying basic abilities that are commonplace called fitrah. This nature can then be developed through education. So with education, humans are able to develop all the potential they have. So that in the science of education itself, humans are called *homo educandum*, namely creatures who need education.<sup>1</sup>

Education itself is a conscious effort carried out by guiding, teaching, and training students so that they are able to cause changes in students with the aim that students are able to adapt to their environment. <sup>2</sup>So in self-study there will be a learning process. Learning is vital in education, so without learning, basically education will not exist.<sup>3</sup>

Cognitive theory is classified as a theory that plays an important role in the development of educational theory, but there are still few educational practitioners who understand the concept of cognitive theory. Sometimes they indirectly practice cognitive theory in the learning process, but they do not know that what they practice is the fruit of the thoughts of cognitive figures.<sup>4</sup>

Islam as one of the paradigms in education has a construction based on the universal values of Islam itself. These values are based on the principle of monotheism and the principle of the unity of the source of Islamic teachings. From these principles, the term education is then planted as an Islamic philosophical view of education. This means that education in an Islamic perspective cannot be separated from the principles of Islamic teachings.<sup>5</sup>

However, in the last century, Islam has experienced a setback in various aspects of life, including the development of science when compared to the western world. So that at the beginning of the 15th century H, Muslim scientists strengthened the spirit to return to Islamic teachings based on the Al-Quran and Hadith. So it is not impossible if modern learning theories exist in the Qur'an and Hadith, or at least find their equivalent. So that western concepts can be juxtaposed with concepts based on the Qur'an and Hadith.<sup>6</sup>

Therefore, this study aims to dissect how the concept of cognitive learning theory actually is. The results of the analysis of this study are expected to be able

<sup>&</sup>lt;sup>1</sup> Junaedi, Mahfud, *Paradigma Baru Filsafat Pendidikan Islam*, Jakarta: Prenadamedia Grup. 2012. vii

<sup>&</sup>lt;sup>2</sup> Wisman, Yossita, Teori Belajar Kognitif dan Implementasinya Dalam Proses Pembelajaran, Jurnal Ilmiah Kanderang Tingang, 11.1 (2020), 209.

<sup>&</sup>lt;sup>3</sup> Sarnoto, Ahmad Zain and Direktur Educare Society, 'Belajar Dalam Perspektif Psikologi Dan Islam', 1.2 (2012), 41.

<sup>&</sup>lt;sup>4</sup> Hidayatul Muamanah, 'Pelaksanaan Teori Belajar Bermakna David Ausubel Dalam Pembelajaran Pendidikan Agama Islam', 5.01 <a href="https://doi.org/10.29240/belajea.v5">https://doi.org/10.29240/belajea.v5</a>>.

<sup>&</sup>lt;sup>5</sup> Rangga Sa'adillah SAP, Dewi Winarti, and Daiyatul Khusnah, 'Kajian Filosofis Konsep Epistemologi Dan Aksiologi Pendidikan Islam', *Journal of Islamic Civilization*, 3.1 (2021), 34–47 <a href="https://doi.org/10.33086/JIC.V311.2135">https://doi.org/10.33086/JIC.V311.2135</a>>.

<sup>&</sup>lt;sup>6</sup> Ranu Nada Irfani, 'Konsep Teori Belajar Dalam Islam Perspektif Al-Quran Dan Hadist', 6.1 (2017), 212–23 <a href="https://doi.org/10.29313/tjpi.v6i1.2319">https://doi.org/10.29313/tjpi.v6i1.2319</a>>.

to add insight and provide understanding to educational practitioners related to cognitive learning theory, especially for practitioners of Islamic education.

# FINDING AND DISCUSSION

# **Cognitive Learning Theory**

The flow of cognitive psychology is one of the streams that influences the learning practices applied in schools. The brain is the center of attention that cognitiveistic talks about. Cognitive experts argue that the most important thing in the learning process is how humans process and store information. This is the focus of cognitiveism. This school does not completely reject the behavioristic theory, but tends to develop specifically regarding the existence of mental states that can affect the learning process. Cognitive psychology argues that complex mental processes are involved in learning, namely memory, attention, learning, concept formation and problem solving. This theory talks about how humans process information and form mental representations of other people, objects, and events.<sup>7</sup>

Jean Piaget is a figure who developed cognitive theory, a Swiss psychologist who lived in 1896-1980. His theory contributed to many of the main concepts in developmental psychology and had an influence on the development of the concept of intelligence. This theory talks about the emergence and acquisition of *schemata* (schemas of how a person perceives his environment) in his developmental stage and how when a person gets a new way of presenting information mentally. Cognitive theory holds that humans develop their cognitive abilities through self-based actions on the environment.<sup>8</sup>

The term *cognitive* is rooted from the word *cognition* which means understanding or understanding. In general, cognition means the arrangement, acquisition, and use of knowledge. Then this cognitive term developed and became popular as one of the discussions of human psychology, namely a general concept that includes the concept of recognition relating to any mental behavior related to problems of thinking, understanding, paying attention, giving, thinking, considering, processing information, imagining, estimating, solving. problems and beliefs. According to cognitive flow experts, a person's behavior

<sup>&</sup>lt;sup>7</sup> Husamah dkk, *Belajar dan Pembelajaran*, Malang: UMM PRESS. 2020. 57.

<sup>&</sup>lt;sup>8</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik, Yogyakarta: Ar- Ruzz Media. 2017.

depends on cognition, namely how a person recognizes, thinks about and understands the situation in which the behavior occurs.<sup>9</sup>

Cognitive psychology discourse is a reference of cognitive learning theory, namely cognitive activities in learning. These theorists seek to scientifically analyze how mental processes and memory structure. The focus of the discussion of cognitive psychology is the cognitive structure, namely the knowledge that has been stored by the individual person which includes his long-term memory. According to cognitive psychology, humans are creatures who actively seek and select information for processing. They focus on how to understand the individual's process of searching, organizing, selecting and remembering information by involving the individual's mental learning. The development of the individual's mental structure is in accordance with a person's cognitive development. The higher a person's cognitive development, the higher a person's ability to process information obtained from the surrounding environment.<sup>10</sup>

According to cognitive theory, learning is a change in understanding and perception. Learning is not only about observable behavioral changes. The basic assumption of this theory is that everyone has experience and knowledge within themselves which experience and knowledge are arranged in the form of a cognitive structure. According to this theory, the good of an individual's learning process lies in his ability to adapt new lessons to his cognitive structure.<sup>11</sup>

Including what is emphasized in cognitive theory, namely that the parts of a situation are interconnected, if separated, it will cause a loss of meaning. Dr. C. Asri Budiningsih in his book *Learning and Learning* explains that "cognitive theory views that learning is an internal process that includes memory, emotion, information processing, and psychological aspects". So the learning process occurs when there is a stimulus that is received and adjusts to the cognitive structure that is owned and formed from previous knowledge and experience.<sup>12</sup>

The development of the individual's mental structure is in accordance with his cognitive development. The higher a person's cognitive development, the higher his skills or abilities in processing knowledge and information received from the environment. Therefore, cognitiveistic learning theory is referred to by several terms, namely *cognitive development theory, social cognition theory*, and *information processing theory*.<sup>13</sup>

<sup>9</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran, Depok: PT Raja Grafindo. 2018. 68.

<sup>&</sup>lt;sup>10</sup> Husamah dkk, Belajar dan Pembelajaran. 58..

<sup>&</sup>lt;sup>11</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik,. 79.

<sup>&</sup>lt;sup>12</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 68.

<sup>&</sup>lt;sup>13</sup> Husamah dkk, Belajar dan Pembelajaran. 58.

Learning is an active mental process for remembering, attaining, and using knowledge. According to cognitive theory, learning is perceptual. Then a person's behavior is based on his perception and understanding of the situation with regard to his learning objectives. So learning is a change in perception and understanding. <sup>14</sup>According to cognitive psychology, learning is an effort to understand or understand something and this effort is carried out by students actively, namely by seeking experience, information, solving problems, paying attention to the environment, doing something to achieve certain goals.<sup>15</sup>

The rationale of cognitiveistic learning theory is a rational basis. This theory holds philosophical assumptions, namely *the way in which we learn* (thought is the way to acquire knowledge). According to this flow, learning is the ability of a person to explain or phenomena that occur in the environment. And cognitiveistic theory explains how a person thinks in learning. <sup>16</sup> Therefore, cognitiveism emphasizes the learning process rather than learning outcomes. Because learning does involve a complex thought process.<sup>17</sup>

From the description above, several related keywords can be drawn regarding the cognitiveistic theory of learning, namely: (1) A person's behavior is influenced by the thought processes that occur in the learning process. (2) Learning is a change in perception and understanding, not just a change in observable behavior. (3) Learning is not just a stimulus or response, but also involves the mentality of someone who is learning. (4) Cognitive is more concerned with the learning process than learning outcomes. (5) Learning is the process of organizing cognitive and perceptual aspects to understand something. (6) Cognitivism has a philosophical assumption that thinking is the basis for acquiring knowledge.

There are several figures and their respective views on cognitive learning theory including: Jean Piaget, Jerome Bruner, and David Ausubel. The author will explain how the views of the four figures regarding cognitive learning theory.

1. Piaget's Developmental Theory ( Cognitive Developmental ).

Jean Piaget (1896-1980) was a Swiss biologist and psychologist, he was able to develop a theory of cognitive development. In this theory, Piaget explained his views on how children learn. His theory also contributed much to the main

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<sup>&</sup>lt;sup>14</sup> Thobroni, M, Belajar Dan Pembelajaran Teori Dan Praktik. 80.

<sup>&</sup>lt;sup>15</sup> Siregrar, Eveline, Nara, Hartini, *Teori Belajar dan Pembelajara*, Bogor: Ghalia Indonesia. 2015.

<sup>&</sup>lt;sup>16</sup>Husamah dkk, Belajar dan Pembelajaran. 58.

<sup>&</sup>lt;sup>17</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik. 80.

concepts of developmental psychology and had an influence on the development of the concept of intelligence. <sup>18</sup>Piaget is also touted as a pioneer of the cognitiveistic school. His thinking about the stages of individual development is widely used as a reference for understanding individual cognitive development.<sup>19</sup>

The focus of the discussion of Piaget's theory of cognitive development is how the minds of students naturally develop, starting from children to adults. Piaget found that children's cognitive formation is active. There are four factors that can influence cognitive development: 1) physical environment, 2) maturity, 3) social influence, and 4) self-control process. So information is not just poured into the mind of the individual, but there is interaction between the individual and the environment.<sup>20</sup>

Cognitive development is a genetic process, namely a process that works based on the biological mechanism of the development of the nervous system. The older a person gets, the more his cognitive abilities increase because his nervous system is increasingly complex. So the difference in the age of the child will have an impact on the difference in thinking power or mental strength.<sup>21</sup>

According to Piaget, the learning process occurs through three stages, namely the assimilation, accommodation, and equilibration stages. The explanation is as follows:<sup>22</sup> First *Assimilation* is the process by which new information and existing cognitive structures are combined or integrated. In other words, the assimilation process is the process of integrating new information into an existing schema, so that the schema develops. An example of the assimilation process: a student has studied and understood the principle of multiplication, then he learns division, there will be an integration or unification between the multiplication principle that has been learned and understood with the principle of division for use as new information.<sup>23</sup>

Second, Accommodation process, the process by which cognitive structures are adapted to new situations. In other words, the accommodation process is the process of rearranging or changing mentally as a result of new information. The example of the accommodation process is as follows: after

<sup>&</sup>lt;sup>18</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 69.

<sup>&</sup>lt;sup>19</sup> Husamah dkk, *Belajar dan Pembelajaran*. 66.

<sup>&</sup>lt;sup>20</sup> Hapudin, Muhammad Soleh, *Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif,* Jakarta: KENCANA. 113.

<sup>&</sup>lt;sup>21</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 70.

<sup>&</sup>lt;sup>22</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik. 81.

<sup>&</sup>lt;sup>23</sup> Hapudin, Muhammad Soleh, Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif. 114.

students learn the principle of division, they will work on division problems as an exercise, meaning that students have been able to apply or use the principle of division in new situations.<sup>24</sup>

*Third, The process of equilibration,* the process by which assimilation and accommodation are adjusted on an ongoing basis. In other words, equilibration is a continuous adjustment between assimilation and accommodation. <sup>25</sup>The equilibration process is also a process in which the external environment is adjusted to the cognitive structures that already exist in the learner. This process is very necessary to maintain the mentality of students and be able to grow and continue to develop their mentality.<sup>26</sup>

According to Piaget, the learning process that individuals go through should be adjusted to their cognitive development, namely based on age. According to him, there are four stages of individual cognitive development where these stages are hierarchical which must be passed in order and the individual cannot learn anything outside his cognitive stage. The four stages are as follows,<sup>27</sup> First, Sensory Motor Intelligence/ Sensory Motor Stage (birth - 2 years). The characteristics of this stage are that the child's actions depend on the five senses (sensory) and his actions (motor). At this stage the development of children can be observed, but they still think simply and have not been able to think conceptually. At this stage too, children's understanding depends on their senses and body movements. <sup>28</sup>Some of the abilities that children have at this stage are: a) he sees that he is different from the objects around him, b) lights and sounds are used as stimuli, c) tends to pay attention to something longer, d) assumes that an object is always there even if it is not. reachable by the senses. A common example of this first tapa is when a child's wish is not followed or granted, they will cry without thinking why their wish was not followed or granted.<sup>29</sup>

Second, *Preoperation Thought*/ Pre-Operation (2-7 years) The characteristics of this stage are language skills and mastery of concepts. At this stage, the child is still dependent on special things obtained from the five senses, the child has not been able to find relationships and has not been able

<sup>&</sup>lt;sup>24</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 71.

<sup>&</sup>lt;sup>25</sup> Hapudin, Muhammad Soleh, Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif. 114.

<sup>&</sup>lt;sup>26</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 72.

<sup>&</sup>lt;sup>27</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik. 81.

<sup>&</sup>lt;sup>28</sup> Husamah dkk, Belajar dan Pembelajaran. 66.

<sup>&</sup>lt;sup>29</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 72-73.

to conclude something consistently. At this time, the child has not been able to do inductive and deductive reasoning, is still in the transductive stage, which is concluding one particular thing with another. <sup>30</sup>This stage is divided into two, namely a) pralogical (age 2-4 years), where children are able to use language and develop concepts even though they are still very simple and there are still frequent mistakes in understanding objects. The characteristics of this stage are: a prominent self-counter, able to classify objects singly and prominently, can collect objects based on the correct criteria, and be able to arrange objects in sequence but have not been able to explain the differences. b) intuitive (aged 4-7 years), at this stage the child is able to give a symbolic message about the condition of his heart, especially for those who have a lot of experience. The characteristics of this stage are: children are less aware that they are able to form clusters or categories of objects, are able to know logical relationships to more complex things, are able to apply their ideas, and children begin to be able to get objects correctly. At this pre-operational stage, children are able to represent objects with words and pictures. His thinking is still egocentric, which is difficult to accept the opinions of others. And able to classify objects based on one feature, for example the classification of objects that are red but have different shapes. An example of a child's behavior at this stage is assuming animism, i.e. assuming that all inanimate objects have feelings, for example, fallen leaves are caused by a swaying tree. When they draw, they will tend to draw according to their imagination, for example drawing a beautiful princess like Cinderella according to their imagination.<sup>31</sup>

Third, *Concrete Operation* (7-11 years old) The characteristic of this stage is that the child's ability to think logically begins to develop. Children can conclude something from real situations and use concrete objects. <sup>32</sup>There are several important processes in this stage, which are as follows <sup>33</sup>: 1) Sorting, the ability to sort objects based on size, shape or other characteristics. For example, sorting objects from smallest to largest. 2) Classification, the ability to name or identify an object based on its size, appearance or other characteristics. Examples such as children no longer assume all objects have feelings. 3. *Decentering is* starting to be able to consider several aspects of a problem to find a solution. Examples such as children no longer assume that the short large bottle is less than the long small bottle. 4) *Reversibility*, starting

<sup>&</sup>lt;sup>30</sup> Husamah dkk, Belajar dan Pembelajaran. 66- 67.

<sup>&</sup>lt;sup>31</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 73-74.

<sup>&</sup>lt;sup>32</sup> Husamah dkk, Belajar dan Pembelajaran. 67.

<sup>&</sup>lt;sup>33</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 74-75.

to be able to understand that numbers or objects can change, then return to their original state. For example, the child is able to determine 2 + 2 = 4 and 4 - 2 = 2, which is the number that was added before. 5) Conservation, the ability to understand that the quantity, length or amount is not tied to the arrangement or appearance of the object or objects. For example, children are able to know that drinking water in a small glass when poured into a large glass, the amount is the same. 6) Egocentric nature begins to disappear, the ability to accept other people's points of view. Children become sociocentric and try to understand other people and convey their feelings and arguments to adults and their friends.

Fourth, *Formal Operations* (11-18 years old) The characteristic of this stage is that cognitive skills reach their peak of development. At this stage a person's cognitive activities are able to do abstractions without using real objects, abstraction reasoning abilities increase so that they are able to think deductively. <sup>34</sup>From a biological perspective, this stage appears at puberty. An example of a child's behavior at this stage is when a fruit falls down from the tree, the child no longer says that the fruit fell down because it was shaken by the tree, but the fruit fell down because of the force of gravity. Another example like rain, children no longer say rain is caused because the sky is crying, but says rain occurs geographically.<sup>35</sup>

Active experiences experienced by students will tend to further enhance cognitive abilities, while passive experiences tend to have less impact on the development of cognitive abilities. <sup>36</sup>Then the higher the cognitive ability of a person, the more organized and abstract in thinking. So teachers should understand the stages of child development in order to be able to create an appropriate learning process according to the abilities of students. Piaget stated that the learning that was applied was not in accordance with the abilities and characteristics of the students and did not give such a meaningful meaning.<sup>37</sup>

According to Piaget, there are several factors that can influence a person's cognitive development, namely:<sup>38</sup> 1) Physical, which is where the individual interacts with the outside world which is a source of new knowledge. However, this will run smoothly if the individual's intelligence is

<sup>&</sup>lt;sup>34</sup> Husamah dkk, Belajar dan Pembelajaran. 67.

<sup>&</sup>lt;sup>35</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 75.

<sup>&</sup>lt;sup>36</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan Praktik. 83.

<sup>&</sup>lt;sup>37</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 76.

<sup>&</sup>lt;sup>38</sup> Husamah dkk, Belajar dan Pembelajaran. 68.

able to take advantage of the new experience. 2) Maturity, namely the maturity of the syafar system in individuals has an impact so that children are able to maximize physical experience to gain new benefits or knowledge. Maturity also provides opportunities to develop children's cognitive abilities. 3) Social influence, which includes the social environment, family, and education. 4) Self-regulation (equilibration), namely the process of self-regulation and correction, regulating interactions with the environment and experience.

#### 2. Bruner's Learning Theory (Discovery Learnig)

Jerome. S Bruner was born in New York in 1915. Bruner was one of the figures who disagreed with behavioristic theory. He proved this by pursuing cognitive psychology for more than 45 years. He initiated the theory of discovery (*discovery learning*). In learning this discovery, students take an active role in the learning process in order to solve problems and gain knowledge on their own. This method can give meaningful meaning to the knowledge obtained. <sup>39</sup>Based on the point of view of cognitive psychology, that to improve the quality of educational output, students should be mentally involved in the learning process. This is an effective method.<sup>40</sup>

Piaget's opinion was used as the basic idea by Bruner, namely that children play an active role in learning. This theory is called *discovery learning*, namely how children actively retain and transform information. *Discovery* is what is typical of Bruner's theory from other learning theories, meaning learning by finding one's own concepts. <sup>41</sup>In this case Bruner divides three stages, namely as follows: 1) The information stage is the stage where the individual gains new knowledge or experience, either adding information, refining and deepening information.<sup>42</sup> 2) The transformation stage, namely the stage of understanding, digesting, and analyzing new information and transforming it into a new form, in this case the help of the teacher is needed.<sup>43</sup> 3) The evaluation stage, which is testing the relevance and accuracy of the knowledge that has been transformed in the second stage earlier.<sup>44</sup>

<sup>&</sup>lt;sup>39</sup> Hapudin, Muhammad Soleh, Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif. 116.

<sup>&</sup>lt;sup>40</sup> Parwati Ni Nyoman, *Belajar dan Pembelajaran*. 76.

<sup>&</sup>lt;sup>41</sup> Husamah dkk, *Belajar dan Pembelajaran*. 69.

<sup>&</sup>lt;sup>42</sup> Hapudin, Muhammad Soleh, Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif. 117.

<sup>&</sup>lt;sup>43</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 76.

<sup>&</sup>lt;sup>44</sup> Husamah dkk, Belajar dan Pembelajaran. 70.

In learning theory according to Bruner, there are also four themes of education <sup>45</sup>: 1) State the importance of the structure of knowledge. 2) Readiness of students to learn. 3) Emphasizing the value of intuition in the educational process. 4) Students' motivation in learning and how teachers stimulate this motivation.

According to Bruner, teachers should provide opportunities for students to determine concepts, rules, theories or understandings through examples they encounter in life so that the learning process becomes better and creative. The learning process will also be maximized if the teacher pays attention to the stages of children's cognitive development, which are as follows:<sup>46</sup> 1) Enactive (*enactive*, o – 2 years) In this stage, the child tries to learn or manipulate objects directly. He is able to understand the object but is unable to explain it in words and describe it in his mind. 2) Iconic (*iconic*, 2-4 years) At this stage the child begins to see the world from pictures or visualizations. Children do not manipulate objects directly, but are able to go through the description of objects, but it is still difficult to explain them in words. 3) Symbolic (*symbolic*, 5 - 7 years) At this stage the child manipulates symbols directly and does not use objects or pictures. Children are also at this stage much influenced by language and logic so they have abstract ideas.

According to Bruner, teaching something to children does not need to wait for a certain stage of development. Cognitive development of children can be improved by arranging the material to be studied and adapting it to the stage of its development. So if the material to be taught is regulated well, then the child can learn even though the child's age can be adequate.<sup>47</sup>

# 3. Ausubel Meaningful Learning Theory ( Meaningful Learning )

David Paul Ausubel is a cognitive psychologist who states that the success of student learning depends on the meaningfulness of the teaching materials being studied. For Ausabel, learning must be meaningful in order for learning to have meaning. Meaningful learning here means the process by which new information can be linked or found to be relevant to the child's cognitive structure. In meaningful learning, students are not required to find themselves. Therefore, teachers are required to be able to organize and

<sup>&</sup>lt;sup>45</sup> Parwati Ni Nyoman, Belajar dan Pembelajaran. 77.

<sup>&</sup>lt;sup>46</sup> Husamah dkk, Belajar dan Pembelajaran. 71-72.

<sup>&</sup>lt;sup>47</sup> Parwati Ni Nyoman, *Belajar dan Pembelajaran*. 78.

present what students need to learn, while students themselves are required to understand and master what is conveyed by the teacher.<sup>48</sup>

In essence, according to Ausabel people get knowledge through acceptance, not through discovery. What is taught by the teacher in the form of concepts, ideas, principles accepted by students, but can also be found by students. There are three components so that meaningful learning can be carried out, if one of these components is not present, then meaningful learning cannot be carried out, namely organized subject matter, students are able to understand the material, and students assimilate the material studied to the cognitive structure that has been studied. owned. <sup>49</sup>If one of these components is not present, then learning is called rote learning, not meaningful learning. So the knowledge possessed by students affects whether or not the learning process is meaningful.<sup>50</sup>

#### Islamic Education Concept

In the Qur'an, it is very important for humans to carry out thinking activities. As in Al-Quran Surah Az-Dzariyat verse 21:<sup>51</sup> Then Imam Ibn Katsir in his book Tafsir Ibn Katsir gave an interpretation of this verse with: "Whoever walks on the earth, then he can see signs and lessons, and whoever thinks about himself, then he knows that he was created to worship Allah SWT."

The focus of the interpretation above is on the word " *tafakkara*". The implied message to be conveyed in the interpretation is that to gain knowledge, one should use the gift of his brain to the fullest to think. Then in the book of commentary Ad-Durul Mantsur, nushonnnif explains the verse with the same meaning but slightly different editorial. "Ibn Jarir, Ibn Al-Mudzir, and Ibn Shaykh narrated from Qatadah ra, in the verse (أفلا تبصرون) he said: whoever thinks about his creation, then he knows that the limbs were created to worship Allah SWT. "

From the three interpretations, it is agreed that the brain is a very important element to be used to gain knowledge and understanding.

In Islamic education, there are several terms that are often used to represent it, namely <sup>52</sup>: First, *Tarbiyah*. According to Sheikh Ali, *tarbiyah* comes from the word *rabba* which means to care for, educate, maintain, develop, etc. Then according to Daim *tarbiyah* means caring for or paying attention to how the child grows so that

<sup>&</sup>lt;sup>48</sup> Husamah dkk, *Belajar dan Pembelajaran*. 71-72.

<sup>&</sup>lt;sup>49</sup> Hapudin, Muhammad Soleh, Teori Belajar dan Pembelajaran Menciptakan Pembelajaran Yang Kreatif Dan Efektif. 121.

<sup>&</sup>lt;sup>50</sup> Thobroni, M, Belajar dan Pembelajaran Teori Dan PraktiK. 86.

<sup>51</sup> Irfani.

<sup>&</sup>lt;sup>52</sup> Rosidin, *Ilmu Pendidikan Islam Berbasis Maqashid Syariah dengan Pendekatan Tafsir Tarbawi*, Depok: PTRaja Grafindo Persada. 2019. 24- 28.

it grows perfectly in every element in the child including body, spirit, and mind. <sup>53</sup> According to Rosidin, the representation of *tarbiyah* in education is the educational process that children go through, starting from the education of parents, teachers, and the social environment.<sup>54</sup> Second, *ta'lim*. According to Abd al-Fattah al-Jalal, *ta'lim* is education aimed at infants, children, adolescents, and adults. *Ta'lim* not only covers aspects of cognition, affective and psychomotor aspects are not forgotten. The term *ta'lim* in education is related to the learning process. Among the forms of *ta'lim* in education is the process of transmitting knowledge carried out by educators and students transforming from not knowing to knowing, not understanding to understanding. <sup>55</sup> Meanwhile, according to Abrasyi ta'lim only relates to the realm of cognition. And according to Al-Attas ta'lim talks about the process of transmitting knowledge by educators to students.<sup>56</sup>

Third, *Tazkiyah* means purification. *Tazkiyah* is not only about the human senses but also related to the soul. The Qur'an itself mentions how important the purity of the soul is. In education itself, the form of *tazkiyah* is represented through motivation which is always given by educators to students in order to maintain and increase the enthusiasm of students in learning.<sup>57</sup>

According to Al-Farabi, humans are called rational animals. Humans have the ability to sense and intelligence. So Al-Farabi argues that humans are able to acquire knowledge through the power of thought, imagination, and the power of the senses. Al-Farabi also argues that science is organized and logical so that it can be digested and understood by humans.<sup>58</sup>

In Islamic education, knowledge can not only be acquired or trained through a brain-based learning process, but the heart or intuition. Because in Islam itself there is knowledge that is *kasbi* (the result of human efforts) and is *ladunni* (as a gift from God).<sup>59</sup>

<sup>&</sup>lt;sup>53</sup> Maragustam, Filsafat Pendidkan Islam Menuju Pembentukan Karakter, Yogyakarta: Pasca FITK UIN Sunan Kalijaga. 2018. 18.

<sup>&</sup>lt;sup>54</sup> Rosidin, Ilmu Pendidikan Islam Berbasis Maqashid Syariah dengan Pendekatan Tafsir Tarbawi. 26.

<sup>&</sup>lt;sup>55</sup> Rosidin, Ilmu Pendidikan Islam Berbasis Maqashid Syariah dengan Pendekatan Tafsir Tarbawi. 28.

<sup>&</sup>lt;sup>56</sup> Maragustam, Filsafat Pendidkan Islam Menuju Pembentukan Karakter. 24.

<sup>&</sup>lt;sup>57</sup> Rosidin, Ilmu Pendidikan Islam Berbasis Maqashid Syariah dengan Pendekatan Tafsir Tarbawi. 27.

<sup>&</sup>lt;sup>58</sup> Junaedi, Mahfu, *Paradigma Baru Filsafat Pendidikan Islam*, Jakarta: PRENADAGRUP. 2019. 64.

<sup>&</sup>lt;sup>59</sup> Rosidin, Ilmu Pendidikan Islam Berbasis Maqashid Syariah dengan Pendekatan Tafsir Tarbawi. 12.

According to Ibn Khaldun, a teacher should pay attention to the physical and psychological development of students. This is very important because if the teacher delivers lessons without paying attention to physical and psychological development, it will have an impact on dull thinking as a result of feeling difficult to understand teaching materials and lack of motivation to learn and even distance themselves from learning. <sup>60</sup>This is in line with what was conveyed by Sheikh Nawawi, namely <sup>61</sup>: "That people who put knowledge not in its place, including dzhalim, then it is obligatory for a pious to give advice/teaching in all matters to suit the situation. Just as a doctor treats a sick person according to his illness."

### Islamic Educational Perspective Cognitive Learning Theory

Cognitive theory makes the brain the center of attention. Cognitive experts argue that the most important thing in the learning process is how humans process and store information. This is the focus of cognitiveism. In Al-Quran Surah Ad-Dzariyat verse 21, it also emphasizes how humans are able to use their brains optimally to gain understanding and knowledge. And according to Al-Farabi himself regarding the concept of Islamic education, he also views that the brain in the form of thinking power, sensing power, and imagining power are important aspects to obtain and understand something.

The cognitive theory put forward by Piaget that the learning process carried out by individuals should be adjusted to their cognitive development, namely there are four stages of development. This is also conveyed by Ibn Khaldun, namely to avoid student boredom due to finding it difficult to digest and understand science and even avoid learning, educators should pay attention to the physical and psychological development of students in order to prepare appropriate material for students. This is able to provide understanding for students on the teaching materials from educators and do not feel bored in undergoing the learning process.

The cognitive theory proposed by Ausabel states that learning is not meaningful if students are able to relate new information to the cognitive structure they have. Therefore, teachers are required to be able to organize what students will learn, and students are required to be able to understand and master what is conveyed by the teacher.

In the concept of Islamic education, the term *ta'lim* has the same principle as Ausabel's theory, which is more directed at the transmission of knowledge

<sup>&</sup>lt;sup>60</sup> Iqbal, Abu Muhammad, *Pemikiran Pendidikan Islam Gagasan Besar Para Ilmuwan Muslim*, Yogyakarta: Pustaka Pelajar. 2015 . 554.

<sup>&</sup>lt;sup>61</sup> Maragustam, Filsafat Pendidkan Islam Menuju Pembentukan Karakter. 227.

carried out by educators to students and the transformation process from not knowing to knowing, not understanding to understanding.

Then cognitive theory according to Bruner that in doing discovery learning, the figure and role of the teacher is very necessary in order to be a guide for students so that they are able to find new theories, concepts and principles. In *tazkiyah* itself, the role of the teacher is needed not only as a motivator to maintain the balance of the spirit of the students, but also as a guide to get the right understanding and achieve a clean soul.

In general cognitive theory, following the development of students becomes the main point because the learning process will be maximized when it can be adjusted to the cognitive development of students. This is the concern of *tarbiyah* , namely how the educational process goes according to the development of the child himself.

# CONCLUSION

Cognitive learning theory is a learning theory that puts forward the learning process and pays attention to the cognitive development of students. Cognitive theory is a product of the thoughts of cognitive psychologists who have a major influence on the development of the learning process. In the perspective of Islamic education, this theory is relevant to the principles of Islamic teachings. Although not all cognitive concepts are in line with the concept of Islamic education, some aspects that are relevant to Islamic teachings can help the development of Islamic education. The development is good in preparation for learning, the learning process, to the evaluation of learning outcomes.

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