

Cognitive Development Analysis of C4, C5, C6 in Early Childhood Education Students and Their Implications for Teacher Efforts at Raudhatul Athfal

Nur Setyaningrum¹, Faisal Fadli²

¹Universitas Nahdlatul Ulama Indonesia, Jalan Taman Amir Hamzah, No. 3, Pegangsaan, Menteng, Jakarta Pusat. ²IAIN Kudus, Jl. Conge Ngembalrejo, Ngembal Rejo, Kecamatan Bae, kabupaten Kudus, JawaTengah.

Corresponding author

nur.setyaningrum@unusia.ac.id, faisalfadli55@gmail.com

Abstract: Cognitive development abilities were formulated by Piaget Jeans with a certain variety of categorizations, where a child can perfect his logical thinking at the age of around 12-13 years. However, if we look at the developmental periodization of children's ages, between 0 to 6 years they have an extraordinary ability which is called the golden age. This theory of cognitive development has in fact influenced the thinking of educators that at preschool age children cannot be taught about cognitive abilities to analyze, evaluate, and even create (C4-C6). This research methodology used interview techniques, observation, and direct documentation research. With teamed data analysis through data analysis techniques that include the application of open coding, constant comparison, theoretical sampling, and theoretical sensitivity. Meanwhile, for data originating from observation and documentation, researchers used it as the main data combined with triangulation. This research tried to explore and prove whether the cognitive ability to analyze can actually be applied to preschool children? The research took objects at Raudhatul Athfal (RA) Darul Sa'adah, in Kudus, Central Java. Second, about how teachers apply this developmental theory in learning activities. Is it proven in the learning design or is it indirectly conveyed in verbal language during learning. Through an explorative descriptive research model, this study shows that teachers deliberately do not seek cognitive development in aspects C4 to C6 through learning designs or practices. However, the teacher has a role as a student learning partner and embodies the form of visible potentials. For example, the teacher as a good listener, as a discussion partner, to a good adviser. Even this development stimulus can be seen in the game media presented in the classroom.

Keywords: cognitive development, Islamic institution, childhood education, preschool.

Introduction

In the context of education is a very important investment in facing the challenges of the times and global change. According to the theory of "human capital" education is an investment in resources that have sufficient benefits. Among these benefits can be seen from obtaining better working conditions, efficiency in production, as well as increasing one's welfare and additional income, when compared to graduates below them (Goal 2014; Nafiati 2021: 153). However, this of course cannot be used as a reference that a minimum education will not guarantee performance income. This is because the concept of

education is not only interpreted as a model of formal education, but there is still a realm of formal education and informal education as well. Because of this, in the competition, the government established "Indonesian National Work Competency Standards/ "Standar Kompetensi Kerja Nasional Indonesia"" (SKKNI). The SKKNI includes several aspects. Namely aspects of knowledge/ /cognitive, aspects of skills (skills/psychomotor), and aspects of work attitudes (attitude/affective). However, it should be noted that the concept of successful educational usefulness does not only start from a high level but how the abilities of potential students can be processed as much as possible.

The potential ability of students can be detected through cognitive development which is one of the indicators in the achievement of a lesson. But that does not mean that this cognitive development is the only success in the learning experience and for the future of the child. The reason is, there are still other factors that also have an important role for this cognitive development, from attitude, to their skill abilities. However, the lack of optimality in developing this potential will actually stunt students so that their potential is channeled into the wrong path. Because of this, the role of the teacher and the learning environment in the realm of formal education also becomes quite important. The teacher has a function not only as a teacher but also as a communicator and communicant who is able to be a stimulus for the cognitive development of students.

Cognitive development abilities are formulated by Piaget with a variety of certain categories. Where at the pre-operational stage 1.5-6 years old children are able to understand reality in the environment by using signs and symbols. The formula also states that children at this stage have the ability to think systematically, inconsistently, and illogically. This triggers several research results, for example by Dian Adesta Bujuri's research that at the age of 7 years children are still at levels C1, C2, and C3 (Bujuri 2018). In fact, if we look at the stages of development at the age of 0 to 6 years, this is the age when children are in the golden age.

If we look at the student achievement index for Indonesian education in the OECD survey, Indonesian children are still in the lowest achievement category in Southeast Asia. That is, children at the age of 15 are still in the lowest 10 category. This means that previous education also influences this achievement. Based on that, researchers will try to find the basic points of the causes of these problems, but from the basic roots through a basic analysis of educational learning at the basic level, namely in kindergarten/ "Taman Kanaka-Kanak" (TK). This is because the age at which a child is in kindergarten is the age that is actually the starting point for the development and growth of a child's potential in various aspects. Based on these problems, the purpose of this

research is to find out. First, the cognitive development of RA children for aspects C4, C5, C6. Second, knowing the application of cognitive development theory in the learning space by teachers in RA.

Materials and Methods

Study area

This research study discusses cognitive development in Raudhatul Atfal (RA) children for aspects C4, C5, C6 and how a teacher is able to apply efforts to develop a child's cognitive. The location in Raudhatul Atfal Kudus is one of the institutions that has become a research study. The selection of this institution was not based on uniqueness because it was within the scope of the established Islamic foundation institutions. Apart from that, this institution is also quite well-known because it makes its students, especially pre-school children, who have the ability to memorize several short surahs in the Al-Quran.

This research uses interview techniques, observation, and documentation research through data that comes from teachers and from the institution's website. The approach uses a descriptive explorative approach with cognitive development as an analytical tool. Research on RA Darul Sa'adah, Kudus. Researchers try to reduce each of the basic competencies into indicators that characterize C4, C5, and C6. Then, researchers match these indicators with field facts.

Observations made in the learning environment consist of several activities. (1) Observation during the learning process takes place. (2) Observations on the learning environment both at school and related to other supporting activities. (3) Observation on the data available in schools related to the scope of learning. (4) observations on school culture, as well as routine activities undertaken at school for RA children.

Research Procedure

The procedure in this study tries to identify field experiences about phenomena that usually occur in preschool schools. The researchers tried to compare it through a rough diagnosis with existing theories

of cognitive development. In terms of data sources, this research uses primary data sources and secondary data sources. The primary data source is from the accompanying class teacher directly. While secondary data sources come from documentation.

The interview data collection technique used one teacher as the main source, while other teachers served as supplementary and comparator informants. The interviews were conducted using a semi-structured technique through a pedagogical approach. Researchers compiled several indicators from each existing problem formulation. From the available indicators, the researcher asked questions and linked them to events that had occurred and the informants' direct experience. Some of the indicators used as guidelines in this interview include: For the first problem related to students' cognitive development in aspects C4, C5, and C6 are:

- (1) C4 aspects of cognitive ability indicators related to the ability to "analyze".
- (2) Cognitive ability indicators related to aspects of C5, namely the ability to evaluate.
- (3) Indicators related to the cognitive ability aspect of C6, namely related to the "creating" activity.

The above aspects are detailed in the following sections:

Table 1. Cognitive Aspect C4, c5, C6

Aspect	Indicator
Analyze (C4)	The goal is to use information as a step to clarify, classify, determine the relationship of information, between facts and arguments and conclusions. The sub-categories of analyzing are editing, categorizing, comparing, differentiating, classifying, detailing, detecting, diagnosing an object, relating, studying, and describing an object (Nafiati 2021).
Evaluate (C5)	Make an assessment of an object, objects, and information with a certain criteria. The sub-categories of evaluating include proving, validating, projecting, reviewing, testing, reviewing, checking, and criticizing. (Nafiati 2021).
Create (C6)	Placing and connecting parts in an overall form, composing, formulating from the new to the existing. The sub categories for these are produce, plan, structure, develop, create, build, produce, design, assemble, and manufacture (Nafiati 2021).

Meanwhile for aspects related to the second problem, regarding the ability of teachers to apply their students' cognitive efforts in learning, the indicators are related to aspects of basic competence aspects C1 to C6.

- (1) The C1 indicator aspect relates to the teacher's efforts to make students have the basic competency ability of "remembering".
- (2) The C2 basic competency aspect relates to the teacher's efforts/ability to make students have the basic competency of "understanding".

- (3) The C3 competency aspect relates to the teacher's efforts and efforts to grow students to have the basic competency of "applying/applying"
- (4) The C4 competency aspect relates to the teacher's efforts and efforts to develop students' ability to have the "analyze" competency.
- (5) Aspects of competency C5, related to the teacher's efforts to make efforts so that children are able to grow their "evaluation" abilities.
- (6) Aspects of competence C6, related to the teacher's efforts to make efforts so that children are able to cultivate aspects of the ability to "create".

The researcher tried to explore these indicators from every possible event that occurred during the observation, the interview process to confirm them with secondary data sourced from documentation.

Data analysis

After the researcher collects a variety of available information both documentation, interviews, and observations. Next, the researcher changed it into a descriptive sentence. By analyzing and descriptive data from each of the observations and documentation, the researcher tries to carry out data analysis techniques that include the application of open coding, constant comparison, theoretical sampling, and theoretical sensitivity.

At the coding stage, the researcher tries to categorize and describe the implications and details. For example, researchers collect them in each indicator. So that the incoming data is in the form of interview data, observation, and centralized documentation on each available indicator. At this stage, the researcher begins without preconceptions based on the literature, but instead develops the categories. At this stage, the researcher tries to identify all similar phrases and sentences by line and word (Yu and Smith 2021). Then the researcher continues to compare them in terms of substantive phenomena in the data set. For example, when the researcher codes the "analyze" aspect, what the researcher is looking for is similar phrases, or indicators of the "analyze" stage with field phenomena that have occurred or

are in the process of observing or interviewing and documentation.

Axial coding, researchers look for organized initial concepts, then group them into one cluster. At this stage a tool is needed in the form of the approach that the researcher uses, namely the pedagogical approach and the cognitive intelligence approach. In this stage of analysis, the researcher looks at a phenomenon in one particular indicator and then relates it to casual conditions, context, conditions of influence, action/interaction strategies, and consequences (Yu and Smith 2021). By understanding these various aspects, it will be possible for researchers to understand the situation that occurs in research related to the problem of cognitive development of children of RA Darul Sa'adah and understand how Gutu's efforts to cultivate this cognitive ability.

Selective coding. At this stage the researcher conducts a search from pre-existing data, then identifies the main themes in the problem formulation. (Yu and Smith 2021) The researcher identifies the results of the data on each indicator, for example data on the identification of categories C4, C5, C6, then sorts related problem answers to questions in the formulation. Next memoing. At this stage, the writer records the thoughts and ideas from the research. The researcher wrote down the findings from each of the specified categories. Furthermore, researchers process in the form of research results formulation.

Results and Discussion

Based on the background of the problem and the efforts carried out in the research methodology, two main problem formulations are taken. First, related to the cognitive development of RA children for aspects C4, C5, C6. Second, knowing the application of cognitive development theory in the learning space by teachers in RA. In this study of Bloom's taxonomy there are several changes related to aspects of the level to be achieved. Among them, the old taxonomy talks about aspects C4 about analysis, aspects C5 about synthesis, while aspects C6 about evaluation. While the latest Bloom's Taxonomy, aspect C4 relates to the ability

to "analyze", aspect C5 relates to the ability to "evaluate", and aspect C6 relates to the ability to "create" (Wulan, n.d.)

Bloom's taxonomy revision changes operational keywords derived from nouns into verbs, starting from the lowest level to the highest level. Changes in Bloom's taxonomy The domain of cognitive change consists of two domains: the knowledge dimension and the cognitive dimension. The new cognitive dimension includes remembering, understanding, applying, analyzing, evaluating, to creating. While the dimensions of knowledge change into factual, conceptual, procedural, and metacognition (Nafiati 2021). In addition to the knowledge dimension, the affective dimension in Bloom's taxonomy includes feelings, values, enthusiasm, appreciation, attitudes that are reflected in behavior both inside and outside the classroom, and motivation.

Cognitive Development of RA Children for Aspects C4, C5, and C6

The cognitive development of RA students in aspects C4, C5, and C6 is quite visible from some of their activities. However, the existence of this aspect that triggers the stimulus does not come from a series of methods, approaches or strategies used by the teacher, but comes from other forms of stimulus that are related to the child's ability to demonstrate cognitive competence.

The research results for aspects of C5 related to "analyzing" activities can be seen in table 2. Analyzing is an ability to describe material in parts or components that are more structured and easy to understand. This ability is included in the category of identifying parts, analyzing between parts, and recognizing to the ability to express relationships between these parts. This ability is considered higher than the ability to understand and apply. Because of this ability one must have the expertise to understand both the substance and the organizational structure. The keywords include analysis, separating, differentiating, identifying, describing, associating, choosing, separating, concluding (Khadijah 2016). In Table 2, some of the children's C4, C5, and C6 cognitive abilities are shown.

Table 2. Cognitive Development of RA Children for Aspects C4

C4 Aspect/ analyze, menganalisis	Description
Choose/ select	Children are seen choosing the color they like without having to be the same as the teacher/other friends
Connect	The children associated the story of their family name with the Upin Ipin cartoon they had watched
Confirm	The children confirmed to the teacher that they felt the Arabic script they had to write was too long.
Explore	The children flipped through the rote textbooks and explored the contents but only presented pictures of animals, flowers, circles.
Solve	Children are able to solve assignment problems given by the teacher in the learning room, for example cutting sticks on ornamental trees.
Detailing	Children seem to be able to detail the assignments given. This can be seen from the documented data when the teacher asked questions.
Measure	Children can measure the portion of the soil that is sufficient to be used as a planting medium.
Practice	Children seem to be able to train themselves to plant as exemplified by adults

Note: Some indicators are not visible in the learning process and during observation

Meanwhile, the C5 aspect is related to the ability to evaluate. This ability relates to the ability to check (checking), criticizing (critiquing). For children's cognitive abilities in the C5 domain, it can be seen from several indicators as shown in table 3:

Table 3. Cognitive Development of RA Children for Aspects C5

C5 Aspect/ evaluate	Description
Evaluate	Children are able to judge that the assignment given by the teacher is too heavy by saying "why should we write two lines?"
Choose	Children are able to choose what they want by choosing the color they like.
Maintain	Children are able to defend opinions and things that are theirs by taking things when preparing for learning
Criticize	Children are able to criticize the teacher, for example when the teacher writes in front of the class.
Decide	Children can decide on the choice of shape to use for their work. This can be seen from the results of the video documentation.
Consider	Children are able to weigh and estimate the weight of a plant or not, so they make the decision to lift the plant together. Some lift potted plants with two people or even three people, according to the weight of the pot. This activity is seen in outdoor activities when gardening.
Compare	Children are able to compare the types of plants they will grow and the types of food they are a part of.

Note: Not all indicators appear in student activities

Meanwhile, for the C6 aspect indicators as illustrated in the following table.

Table 3. Cognitive Development of RA Children for Aspects C6

C6 Aspect/ Creating	Description
Construct	Children construct puzzles according to the shape they want.
Imagine	Children are able to build their imagination into the realities of everyday life, for example likening their father to a cartoon shop.
Composing	Children are able to make up stories about their lives with stories that the teacher thinks are strange and magical.
Blending	Children are able to combine colors in pictures with line boundaries on paper that have borders.
Showing	Children are able to show their talents through performances in front of the class.
Prepare	Children are able to prepare their own items on the study table.
Compile	Children can arrange leaves and stalks to form a series of tree models made together with the teacher and other friends.
Forming	Children are able to shape paper to look like leaves or shapes they like to make imitation leaves
Combine	Children can combine leaf skeletons, adhesive tape, and imitation plant stems to form a fully visible faux tree.

Note: Children are able to prepare their own items on the study table.

Teacher Application Efforts to Students in Cognitive Development Theory

Teacher application efforts in the framework of student cognitive development are limited to several things. Among others are.

1. Aspects of CI, about "knowing". The teacher makes maximum efforts in this aspect. Among them is the effort that shows students are trying to have the ability to "read" (reading memorized short letters repeatedly).
2. Aspect C2, a). The teacher tries to model the reading repeatedly. b) The teacher details the verses that the students find difficult to pronounce and then repeats them several times. c) The teacher explains the content of the verse in short letters so that children can easily explain it again.
3. Aspect C3. a) The teacher strives for children to have the ability to apply the material explained. Namely, it can be seen from the activities the children were asked to sort verses, get used to reading verses in short letters, practice reading so that children are proficient.

Meanwhile, the efforts that appear in the cognitive development of students in the aspects of "analyzing", "evaluating", to "creating" are not visible in the activities carried out by the teacher to their students. However, the things that show indications of student activities to analyze, evaluate, to create are visible from several things. The teacher does not necessarily reject student activity in the form of verbal or action, but the teacher tries to accommodate, provide space for discussion, open a comfortable atmosphere, be a good listener, a good commentator and a good evaluator. Although the majority of teacher actions are in the form of responses rather than treatment, it does not mean that teachers limit or even prohibit student activities.

Discussion

A child's cognitive development is greatly influenced by his playing environment, his family, and his education. This cognition is formed slowly from aspects that exist in the environment and

within a person. So it is very necessary in the learning stages of the teacher to convey the material slowly. For example, in Bruner's theory, it is necessary for children to learn about numbers first from real objects around them before children learn about numbers (Khadijah 2016, p. 81). Often the teacher first teaches the shape of the number symbol before understanding the child first about counting the objects around them. For example, in the calculation one plus one equals two. But there are also children who answer one plus one equals eleven because there are two symbols in a row. For this reason, even though it is in the practical stage, the teacher also needs to start from the most basic stages.

There are quite a number of theories that are able to explain how a child's cognitive development and how a teacher can behave towards the situation he faces as the development of a student. Of course there are differences between one teacher and another because in the context of learning what is needed is not only mere application of theory, but also how art is to communicate and art is to teach.

Cognitive development of RA Darul Sa'adah children in Aspects C4, C5, C6

The cognitive development of RA Darul Sa'adah's children in aspects C4, C5, and C6 can be seen in several indicators in each developmental domain. However, not all of these indicators appear. If the researcher tries to draw a relationship between cognitive abilities in aspects C1, C2, and C3, then aspects C4, C5, C6 are aspects that appear without any planning from the learning space. However, this aspect often appears outside the realms of lesson planning to be developed.

Based on the two problem formulations as presented in the learning outcomes and discussion, where the teacher's role in preparing teaching materials is not always manifest in the development of aspects C1 to C6. The teacher only focuses on aspects C1 to C3. However, in aspects C4 to C6, the teacher has a role as illustrated in the following chart. The author describes in chart form.

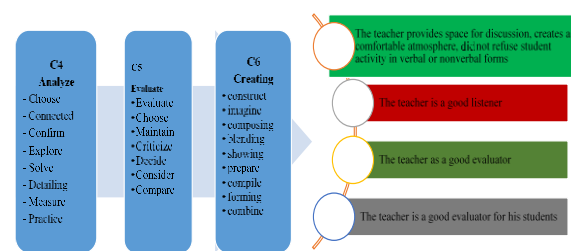


Figure 1. Research results, cognitive development aspects C4, C5, and C5 and the role of the teacher

In fact, even though the knowledge aspect starts from the most basic stage with competence in the form of the realm of "knowing" it does not mean that other aspects of "understanding", "applying", "analyzing", "evaluating", and "making or creating" cannot be realized. For example, when the teacher teaches students about new letters in the verses of the Koran. Teachers can also start with simple critical question stimuli to hone children's critical power. For example by asking "Why is this letter called Al-Kafirun's letter? Why is it called Surah Al-Fil? Are there Al-Fil's words in the letter? How many words Al-Kafirun in the letter? What do you understand about Al-Fil? Have you ever seen elephants around you? Who created elephants? How do elephants give birth to their young? How does a mother elephant breastfeed her child?" These questions seem quite simple, but these various questions can be a stimulus for students to activate their cognitive abilities, integrate previous or surrounding memories with the lesson content presented.

Researchers have identified a wide variety of cognitive competencies and described the remarkable advances in cognitive development over the years in early childhood. At that age, cognitive development implies progressive changes in mental processes that can last from birth to death. These mental processes are related to the activities involved in the mind, about how a person feels, thinks, gets, and understands his own world. While cognitive development is related to information processing, intelligence, reasoning, to the development of language and memory. In Piaget's theory of sensory motor development starting from the preoperational, concrete operational stages, and formal operational stages.

At this stage of cognitive development seen in a biological perspective based on two main principles, namely the operation of intellectual growth and development through adaptation and organization. Meanwhile, in Vygotsky's perspective, children can gain new knowledge from new knowledge that comes from the outside world through language and social interaction. It is believed by Vygotsky that the role of language in cognitive development can be done in two ways, namely communication and regulation (Jena and Paul 2016).

If we relate the theories of Piaget and Vygotsky to the research data, communication becomes a much-needed part of children's cognitive development. Also included in regulations, how environmental patterns and school rules can regulate so that communication patterns between children and teachers and their learning partners can run well. It can be started from indications of the existence of a curriculum that is able to be realized in the achievement indicators which are the objectives of learning. But unfortunately, the indicator models for the achievements of aspects C4, C5 and C6 have not yet been materialized in the intended series of lesson plans. Furthermore, if we look at the basis of the theory, efforts to support students' cognitive development are through communication. True communication can be realized both verbally and nonverbally. Students show their cognitive development abilities through a series of various forms of communication that become their tendency. This can be seen from the activities that were the results of the findings in the aspects of Table 1, Table 2., and Table 3.

One of the factors that can affect cognitive development is anthropometry and environmental status of children at home. Meanwhile, socioeconomic status is not a variable that has a relationship with cognitive factors (Jena and Paul 2016). This means that growth factors, child development and the family environment at home have quite an influence on cognitive development. Because of that, parents need to intervene in guarding and stimulating children's cognitive development, from their physical needs to the need for a supportive family environment.

The results of the study did not discuss the role of parents in providing support to their children. However, this is a concern in itself that what is shown by children in the learning space and their educational environment indicates that the child's educational environment at home also has a relationship with their cognitive development. This is in line with the results of other studies that at the age of 2 to 6 years biological and physical development proceeds quite rapidly and quickly. However, sociologically, children are still bound by their environment, especially their family (Murni 2017). Thus, families should also design the right environment and stimulus for their children. A series of indicators that appear in the research results are more visible in the results of learning activities or even appear in conversational activities between children, between children and their teachers in non-formal activities or even in children's play activities. This means that activities outside of learning hours also need to be encouraged, how can school regulations regulate and develop a balanced learning system.

The cognitive intelligence seen in the research results provides a complete reflection that this cognitive ability should need to be grown. This is considering the era of globalization when children are faced with a variety of information without clear filters. This critical analytical ability is enabled so that they are able to anticipate the realities of life and solve problems creatively and critically.

If we look at the theory of early social development, children have increased intensity in the social field with their playmates. This indicates that if the learning environment is also designed to connect communication and interaction between peers, it is very possible that children's cognitive development will also have the potential to increase. The results of the study show that children talk a lot and like to talk both with their peers and with their teachers. Such interactions make children aware of a variety of information that they don't get in the family environment, but in the families of other students.

In addition to some of the things above, in understanding the context of social interaction relationships of students that relate to their

cognitive development is play activity. In terms of theory, children's play activities are one of the most enjoyable activities. This is because for them the process of doing something is more interesting than the results they get themselves. That is, the process becomes one of the things that children like, (Desmita in Murni 2017).

Application of cognitive development theory in learning spaces by teachers in Raudhatul Athfal

The teacher's efforts to design learning in accordance with the cognitive development of their students are very diverse. In fact, teacher learning design efforts from planning to application and assessment depend on the cognitive abilities of their students. However, teachers often only follow the design determined by the institution or even by the curriculum that applies nationally without making a prior diagnosis of the development of their students. This is where it is important for the teacher to identify the abilities possessed by students early. So that teachers can determine the model of approach, as well as methods that are appropriate to their development.

The method is a way to implement plans that are arranged in one real activity in order to achieve the goal optimally. This means that the learning method is a presentation technique that is mastered by the teacher in order to present learning material for students both individually and in groups, so that the material is absorbed, understood, and can be utilized by students properly (Khadijah 2016).

From the results of the research, teachers are indeed good listeners, provide a place for students to be able to argue, and become friends for students to discuss with each other. This is in line if we compare it with the theory in the thought of Jurgen Habermas, one of the philosophers in critical philosophy, then we will find that there are many critical aspects that should be present in interpreting student development. Jurgen Habermas is a philosopher from a critical school. He also criticized the epistemology of his predecessor, namely Karl Marx. He is known as

one of the critical philosophical figures, namely his thoughts are always associated with criticism of social relations (Englund, n.d.) So it is very possible in interpreting a child's learning development to be invited to argue so that students feel they have the ability to discuss. It is in this discussion forum space that students can develop, construct their knowledge, and understand.

Of the several communication principles presented in the learning space, in general exchanging information will make it easier for students to have different perspectives on looking at things. As in the perspective of Jurgen Habermas, a thinker who has had quite a big impact on scholars studying social issues. His works on "The Theory of Communicative Action in 1984 and The Philosophical Discourse of Modernity in 1987 are quite popular. Habermas' moral awareness and communicative actions have created conditions for a paradigm shift of procedural communicative rationality. While in his theory of discourse and deliberative democracy, he has positioned himself as a defender of a certain kind of modernity. Habermas implies his critical view of the characteristics of classical modernity with its technological rationality and colonization of the living world. The theory of communicative action that he developed is a theory of social integration. The source of his inspiration is included in the framework of inter-subjectivity theory which is then collaborated with the US classical pragmatist George Herbert Mead. Speech act theory then becomes universal pragmatics, Durkheim's theory of social order. In some of his works, Bertocci Facts and Noons further developed the ethics of discourse into the idea of a self-governing legal society based on freedom and equal citizenship. From this view, we understand that the right to voice and argue for children is a form of freedom that needs to be realized.

If we look at the context of Habermas's thinking, then we will see that the competencies that exist in students are not only interpreted as individual development that is isolated, but requires social interaction through the intermediary of the symbolic structure of life. That is, here the teacher has a very important role as part of students' social interactions. However, it is also necessary for

schools to design special curricula where students and teachers can interact intensely individually, not only collectively as in class.

There are several things that affect a person's cognitive development, referring to Piaget's theory. These six factors include a) heredity factors that come from heredity, b) environmental factors, c) maturity factors, d) formation factors, e) talent interest factors, f) freedom factors (Susanto 2011). All of these factors cannot all be controlled by the teacher. The role of the teacher in the classroom can control some of the environmental factors. The environment is one of the parts that can influence children's cognitive development, this is like the Tabularasa theory popularized by Jhon Locke. That every child in the world is born like a white paper, then what makes it colorful is the environment. This means that the role of the teacher in the learning space is one of the determinants. Teachers and schools need to design the best learning environment for their students. In the following the author describes in Figure 2 which shows the factors that can be targeted in the school environment.

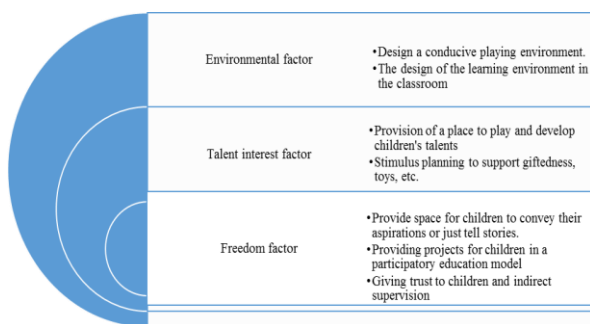


Figure 2. Attitudes that can be taken by teachers and schools regarding students' cognitive development

Next is the freedom factor. This factor indicates the freedom of humans to think divergent (spread) which means that humans can choose certain methods in solving problems and are free to choose problems according to their needs. The indication is that when a child is given the freedom to think, the freedom to choose what he needs and the freedom to try to solve his problems independently, then in fact he has tried to develop

his cognitive abilities. This is one of the concerns for the teacher to give assignments both independently and in groups to children. Of course, with a form of assignment that gives an indication and potential that the child can do it the way they want. According to researchers, the key to freedom is trust. If a child is given their own freedom by both the teacher and their parents in completing a particular project, then it makes them try and think that "they can do their best". When they have this belief, efforts will automatically arise to think of solving problems. That's when cognitive abilities will develop, utilize their analytical abilities, so that they are able to produce thoughts and steps that are the result of their thinking efforts.

Conclusions

The cognitive development of RA Darul Sa'adah's children in aspects C4, C5, and C6 can be seen in several indicators in each developmental domain. However, not all of these indicators appear. If we look at the relationship between cognitive abilities in aspects C1, C2, and C3, then aspects C4, C5, C6 are aspects that arise without any planning from the learning space. However, this aspect (C4, C5, C6) often appears outside the realms of lesson planning to be developed.

Teacher application efforts for students when viewed from the theory of cognitive development, the aspects for C1, C2, and C3 have been applied both administratively and applicatively. However, for aspects C4, C5, and C6, regarding the cognitive development of students in the aspects of "analyzing", "evaluating", to "creating" is not visible in the activities carried out by the teacher to their students. However, the things that show indications of student activities to analyze, evaluate, to create are visible from several things. The teacher does not necessarily reject student activity in the form of verbal or action, but the teacher tries to accommodate, provide space for discussion, open a comfortable atmosphere, be a good listener, a good commentator and a good evaluator.

References

- Bujuri, Dian Andesta. 2018. "Analisis Perkembangan Kognitif Anak Usia Dasar Dan Implikasinya Dalam Kegiatan Belajar Mengajar." *LITERASI IX* (1).
- Englund, Tomas. n.d. "Jürgen Habermas and Education." *Journal of Curriculum Studies, Taylor & Francis*. www.tandf.co.uk/journal.
- Goal, CHR. Jimmy L. 2014. *A to Z Human Capital (Managemen Sumber Daya Manusia) Konsep, Teori, Dan Pengembangan Dalam Konteks Organisasi Publik Dan Bisnis*. PT. Gramedia Widiasarana.
- Jena, Ananta Kumar, and Bhabatoshi Paul. 2016. "Cognitive Developmental Phenomena of Pre-School Children in Relation to Social-Economic Status, Anthropometric Status, and Home Environmental Status." *I-Manager's Journal on Educational Psychology* 10 (2). files.eric.ed.gov.
- Khadijah. 2016. *Perkembangan Kognitif Anak Usia Dini*. Medan: Perdana Publishing.
- Murni. 2017. "Fisik, Kognitif, Dan Psikomotorik Pada Masa Kanak-Kanak Awal 2-6 Tahun." *Jurnal Ar-Raniary: Universitas Islam Negeri Ar-Raniary Banda Aceh* III (1). <https://jurnal.ar-raniary.ac.id>.
- Nafiati, Dewi Amaliah. 2021. "Revisi Taksonomi Bloom: Kognitif, Afektif, Dan Psikomotorik." *Humanika, Kajian Ilmiah Mata Kuliah Umum* 21 (2): 151–72.
- Susanto, Ahmad. 2011. *Perkembangan Anak Usia Dini*. Jakarta: Kencana Prenada: Media Group.
- Wulan, Ana Ratna Wulan. n.d. "Taksonomi Bloom-Revisi." FPMIPA UPI.
- Yu, Meng, and Simon M Smith. 2021. "Grounded Theory : A Guide for a New Generation of Research." *International Theory: A Guide for a New Generation of Researcher* 16.