

Teachers' Perceptions Regarding the Urgency of Improving Critical Thinking in Early Children

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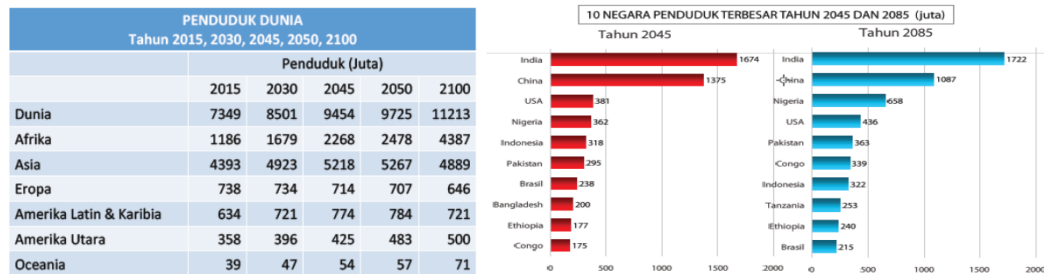
Abstracts: Teachers play the most important role in education apart from curriculum, infrastructure, methods, parents and the environment in improving critical thinking in early childhood as a quality generation towards golden Indonesia 2045. The purpose of this study is to describe teacher perceptions regarding the urgency of increasing critical thinking in early childhood as a quality generation towards golden Indonesia 2045. Teacher information regarding the urgency of increasing critical thinking in early childhood uses case studies with a qualitative approach. The informants consisted of 5 PAUD teachers in the city of Pekanbaru. The results of the study reveal that teachers feel that increased critical thinking is needed from early childhood towards a quality generation, especially in preparing for golden Indonesia 2045, teachers make efforts in the form of providing various learning strategies, teachers stimulate children's critical thinking with questions, teachers do not only try to improve cognitive, but also the attitudes and behavior of children make adab above knowledge.

Keywords: Critical Thinking, Teachers' Perceptions, Early Children.

1. INTRODUCTION

In the current era of revolution 4.0, most people cannot be separated from technology, and life is increasingly complex, so early childhood may be also prepared them to have better abilities, especially in thinking skills (Hatzigianni et al., 2021). It's time for children to be given more productive activities to become a quality generation toward golden Indonesia 2045 (Miftahurrohmah et al., 2021), in line with the statement (Malihah, 2015), this generation brings benefits for Indonesia to become a developed country, better prepared to take every opportunity and challenge. Raikou et al (2017) explained one of the efforts to improve children's critical thinking skills cannot be separated from the teacher's perception and implementation in education. Teachers have an urgent position in the learning process, in addition to forming the morals and character of children as a quality generation toward golden Indonesia 2045 (Taufik, 2020). (Fotso et al., 2012) state that as a generation, ideally, students can master every task and demand that exists at this stage of development.

Indonesia is one of 9 countries concentrated on population growth, apart from India, Nigeria, Pakistan, the Democratic Republic of the Congo, Ethiopia, Tanzania, the United States of America, and Uganda (Alam & Murad, 2016). The United Nations predicts that the world's population will reach 8.5 billion by 2030 (Saeedi, 2019). Most of the additional population comes from developing countries. The population will increase again to 9.7 billion in 2050, and 11 billion in 2100 (Warner & Jones, 2017).



Source: Ministry of Education and Culture (2017)

Indonesia has the opportunity to enter the 5th largest economy in the world in 2045. (Warner & Jones, 2017) and (Lutz & Kc, 2010) stated that by 2045, Indonesia's population will reach 309 million people with a Gross Domestic Product (GDP) of US\$29 thousand per year. Under these conditions, Indonesia has the opportunity to enjoy a 'demographic bonus', namely acceleration of economic growth as a result of changes in the age structure of the population which is marked by a decrease in the dependency ratio of the non-working age population to the working age population. For this condition to run optimally, it is necessary to prepare a quality generation in managing and implementing all plans so that they are achieved according to the expected goals (Permatasari & Murdiono, 2022).

Achieving a quality generation is not only needed as an adult (Prentice & Garcia, 2000). The younger generation can contribute to national development because the current generation will be replaced by the next generation in the future so the existence of the younger generation is expected to be able to bring changes in democracy in a better direction (Gilmanshina et al., 2021; Hanif et al., 2023). However, it is precise during early childhood, one of which is realizing the importance of critical thinking at that time which has an impact on the future of early childhood (Cortázar, 2015). Education in the context of human resources to face the challenges of the 21st century must refer more to the learning concept proclaimed by the UNESCO commission in the form of "four pillars of education", starting early even in the womb (Steffens, 2015). One part of cognitive development is critical thinking (Princess, 2021). The specific goal of early childhood education is for children to be able to think critically. reasoning, solving problems, and finding causal relationships Critical thinking is the ability to make rational decisions about what to do or what to believe (Sari et al., 2021). For this reason, it is very important to teach critical thinking skills from an early age, because early childhood is a very strategic period for developing knowledge they have.

One part of cognitive development is critical thinking. As the specific goals of early childhood education are for children to be able to think critically, give reasons, solve problems and find causal relationships (Santín & Feliu-Torruella, 2020). Critical thinking is the ability to make rational decisions about what to do or what to believe (Lin et al., 2020). For this reason, it is very important to teach critical thinking skills from an early age, because early childhood is in a very strategic period to develop the knowledge they have (Sari et al., 2021).

According to Tozduman (2020), there is a difference between thinking and critical thinking, namely ordinary thinking is usually simple and lacks standards, whereas, critical thinking is more complex and based upon standards of objectivity and consistency. Critical thinking has a high value of complexity and consistency, so the level of thinking ability is much higher than just thinking (Whitham, 2008). Ordinary thinking activities do not involve too many high-level cognitive activities such as analyzing, synthesizing, concluding, and evaluating (Aizikovitsh, 2015).

The development and change of society that is so fast in this information age, requires students to master several skills as stated (Savage, 2018) including Critical thinking and problem-solving (expert thinking); Communication and collaboration (complex communication); and Creativity and innovation (applied imagination and invention) Polat & Aydin (2020) For children to be able to face competition in the information advancement era, a generation that can think critically is needed, namely thinking with mature concepts and questioning everything that is considered inappropriate in a good way.

Based on observations and reinforced through interviews with class teachers, it was found that some teachers did not understand the importance of increasing critical thinking in early childhood, besides that children's thinking abilities were still not optimal. Of the 21 children, only had a percentage of success or completeness of 38.09%, or only 8 children whose thinking skills were good or complete. Children tend to be passive in learning, give up easily, and are static. This is shown in the attitude of the child who is reluctant to express opinions when the teacher asks questions and tends to give a silent response when the teacher shows something new to the child. Besides that, children give passive responses in learning activities, children are more dominant in repeating what the teacher has disclosed than expressing it based on their knowledge. This is supported by research results that data obtained from 55% of children who have not been able to think critically, namely in the weak category of critical thinking. Continuing research results by Yarali & Aytar (2021) namely the critical thinking ability of children aged 5-6 years is still low with a percentage of 49.80%. Furthermore, research from Karadağ & Demirtaş (2018) also found that 8 children were good and good at thinking, but 21 other children were still not good enough with a percentage of 38.09%. The low ability of children's thinking, the difficulty in expressing ideas, and the difficulty of children in solving a problem still occur in children aged 5-6 years (Gilmanshina et al., 2021).

Based on the things above, it is necessary to conduct an in-depth investigation of teacher perceptions regarding the urgency of critical thinking in early childhood as a quality generation toward golden Indonesia 2045. The teacher's view (perception) of students is something that must be considered, considering whether it is successful or not education is also determined by how the teacher views what will be carried out. The purpose of this study is to describe teachers' perceptions regarding the urgency of increasing critical thinking in early childhood as a quality generation toward golden Indonesia 2045

2. METHOD

The method in this study used a case study with a qualitative research approach (Gammelgaard, 2017; Herman et al., 2022cc). A case study is research that describes a phenomenon that occurs by explaining a case that occurs in a group so that it can provide important information to be of concern (Hodgetts, 2012). So the information is obtained regarding the urgency of increasing critical thinking in early childhood as a quality generation toward golden Indonesia 2045. Respondents in this study totalled 5 teachers. Structured interviews and extended questions through related references. Respondents who gave answers came from early childhood education teachers in Pekanbaru City. To obtain information about the urgency of increasing critical thinking in early childhood as a quality generation toward golden Indonesia 2045, several questions were prepared referring to one of the research instruments (Rokhman et al., 2014); 1) Explain the urgency of increasing critical thinking in early childhood as a quality generation toward golden Indonesia 2045? 2) What are the steps to increase the critical thinking of early childhood as a quality generation toward golden Indonesia 2045? According to Spradley, analyzing data has its stages, namely data collection, data presentation, data reduction, and conclusion (Khan, 2014).

3. Research Design

To welcome a quality future generation toward golden Indonesia 2045, the development of education in the future needs to be focused on creating a quality, advanced, independent, and modern Indonesian society as well as enhancing the dignity of the nation. The significant success of construction education in building a quality generation shows that the 2045 generation must have a mass generation, meaning that it is hoped that early childhood must have a positive attitude, be open, confident, able to analyze, and have the ability, to be honest, and fair.

3.1. Data Script

3.1.1. The Urgency of Critical Thinking in Early Childhood as a Quality Generation Towards Golden Indonesia 2045

Based on questions related to the level of importance of early childhood critical thinking skills as a quality generation towards golden Indonesia 2045, answers were obtained with details as many as 4 respondents gave answers.

Respondent A1 stated that children are an asset for the progress of the nation, as a child, it is important to equip themselves in preparation for future progress, especially in 2045 which is targeted towards golden Indonesia, of course, it must be prepared from now on and from an early age. Because preparing children to think critically is very important so that they can increase creativity, improve problem-solving abilities, can provide encouragement for children's development, train children's intelligence, and hone children's knowledge.

Furthermore, according to respondent A2, children who think critically can make useful decisions based on the information they find, children who have manners, and also can be independent, especially in overcoming various problems in the future, children are also able to have innovations to develop and lead to work so that the embodiment of the golden generation can be achieved. Therefore, the ability to think critically is needed in a quality generation toward golden Indonesia 2045.

Then the answer of respondent A3 revealed the current conditions "In the 21st century it is usually related to technology, yes, we see many changes that have occurred, such as ease of access, innovation, creativity, even all changes are going fast, so preparations are needed in facing this revolution, including early childhood so that they are also qualified, able to be independent, cognitively able to develop, able to solve problems". he said.

Furthermore, the reason for the importance of being disclosed is "Many children today are creative, although many are also affected by the negative effects of technology, we hope that by thinking critically, these children can think openly in the future because with these changing conditions, they are also able to express opinions, provide solutions in the future, and I think this should be stimulated and trained from an early age," said A4 in the school office.

Preparing for the golden generation is part of the task of special formal education in Kindergarten. Teachers as cogs in the course of education, need to change old learning that still emphasizes learning outcomes. While the process of forming aspects of development is rarely considered even though early childhood has an important role in the growth and development of the Indonesian nation. One of its roles is to convey material in class that requires interesting media, the right strategy, and through storytelling activities, play so that it can stimulate critical thinking skills in early childhood.

3.1.2. Teacher's Steps in Efforts to Improve Critical Thinking in Early Childhood As a Qualified Generation Towards Golden Indonesia 2045

These findings indicate that teachers' efforts to improve critical thinking in early childhood as a quality generation towards Indonesia Gold 2045 have taught teachers to hone children's critical thinking skills. However, the results obtained have not met expectations. The answers from respondents regarding efforts to increase critical thinking in early childhood as a quality generation towards golden Indonesia 2045. Various efforts in the process of efforts to improve this, although various models have not been fully implemented. Responses A2, A3, and A4 agree that it is important to increase children's critical thinking starting early, starting with simple things, and stimulating children to actively talk, ask questions, and tell stories about activities or feelings that they feel. Added by respondent A1, although there are also obstacles such as the child's limited focus, children who sometimes have lower motivation, bored children, or children who have slow cognitive power, interaction, and lack of facilities. In conveying material in class media is needed, as well as good strategies, such as media images, audio media, or video, media objects

related to the topic of discussion, strategies such as asking frequently, being cheerful, stimulating with guided discovery activities, games, because children usually like to play, said respondents A2, and A3.

From the results of observations delivering learning material in class is not optimal because the existing facilities at school are still minimal, for that the teacher needs adequate facilities, and the teacher must shift the paradigm from teaching to learning, learning from children.

4. RESULTS AND DISCUSSION

4.1. The Urgency of Critical Thinking in Early Childhood as a Quality Generation Towards Golden Indonesia 2045

Based on the results of the research that has been described above, the urgency of critical thinking in children in this era is nothing new, many researchers reinforce this. explained that Early Childhood Education (PAUD) is the basic foundation of education given to children aged 0-6 years as an effort to optimize stimulation from an early age, including critical thinking stimuli. As is known, children aged 0-6 years are in their golden age. Children at this age children can absorb all information up to 80%. Early childhood development moves fast so that all information provided by the environment will be absorbed properly or not properly (Vinayastri & Handayani, 2017). Various information given to children is the duty of adults around them, both parents, teachers, and others.

Educating children is the same as educating society because children are part of society. Educating children means preparing future children for a better life, as well as educating the community means educating the nation (Moseley et al., 2018). Critical thinking is the ability to analyze facts, generate and organize ideas, defend opinions, make comparisons, draw conclusions, evaluate arguments and solve problems (Aizikovitsh-Udi & Cheng, 2015). By having the ability to think critically, children are not easily influenced by information that is not necessarily true, they are not easily discouraged and are enthusiastic about doing new things (Aizikovitsh-Udi & Cheng, 2015). Efforts are made to improve the quality of children's education that focusing on developing children's thinking abilities (Fisher, 2001).

There are several reasons for the need to establish a culture of critical thinking. One of them is to deal with the rapidly changing world where new knowledge emerges every day, while old knowledge is reorganized and explained (Leisman et al., 2016). In this age of rapid change, the top priority of an education system is teaching children how to learn and think critically (Horenstein et al., 2011). The ability to think critically is needed and plays an important role in life in the era of globalization and the era of development of science and technology which is characterized by changing, uncertain and competitive conditions (Dwyer et al., 2014). One of the benefits of inviting children to think critically is teaching children to think systematically in a certain order, when the brain thinks systematically, we get used to solving problems systematically, and mathematics also teaches us to think deductively, namely concluding general things (Pathoni et al., 2020).

Canuto (2018) defined that critical thinking refers to one's thinking in assessing the validity and goodness of an idea, thought, or view and being able to respond based on evidence and cause and effect (Fernández-Santín & Feliu-Torruella, 2020). Critical thinking is evaluating information or arguments logically and not taking that information for granted. Harris (2019) clarified people who can think critically are people who do not just accept and reject information. Larsson (2017) stated that the purpose of critical education is to be able to increase a critical attitude in children so that later they will be able and courageous to assess inventions, systems, values, or culture through the knowledge process. Sternberg (2017) stated that the importance of training critical thinking skills so that children develop their creative processes from an early age. Fung (2014) stated that early children who can think critically will ideally achieve the ability to solve problems so that they are used to thinking creatively and will be full of ideas, visions, and insights in developing their personality in the future.

4.2. Teacher's Steps in Efforts to Improve Critical Thinking in Early Childhood as a Qualified Generation Towards Golden Indonesia 2045

Based on the results of the research described above, it can be seen that there are media and variations in steps to improve critical thinking in early childhood. Things to pay attention to are the condition of the children, learning media as well as strategies in the process, such as in learning the teacher asks a lot of questions children. Sternberg (2003) stated critical, analytical and creative thinking can be trained in children by getting them to ask why and try analytical answers. Gilmanshina (2021) explained that children aged 4-6 years can be taught to think critically, namely through the ability to observe, the ability to assume (assume), the ability to predict, the ability to find errors, the ability to predict causes, the ability to make decisions, and the ability to make categories.

Children's play activities are also important to do with the strategy of asking children, by asking questions can satisfy their curiosity about things that are happening around them, for example wanting to know how wide the classroom is, how tall I am, how long my shoes are and so on (Köngäs et al., 2022). Meanwhile, according to Garashi (2001) said that playing can also improve communication skills and provide more opportunities for children to explore so that children can understand concepts and basic understanding of knowledge more easily.

In addition, carrying out guided discovery activities (Wang, 2011) is a child-centered learning process in which children play an active role in finding information and gaining their knowledge with observation to gain more meaningful learning. Kerns et al. (2016) put forward the role of children, namely building knowledge for oneself, making choices, finding mistakes through pictures and decisions, conducting experiments, observing, experiencing, raising questions, and finding answers simply. The teacher's role is to direct, guide, and prepare equipment and information to develop children's ability to think through independent discovery (Black et al., 2017).

According to Köngäs et al (2022), problem-solving strategies can improve critical thinking and children's ability to adapt to new learning situations. (Burke & Williams, 2019) argues that learning that provides opportunities for children to acquire skills in problem-solving will improve children's thinking abilities. Savage (2018) and (Karadağ & Demirtaş, 2018) stated the ability to think critically in children can be improved through scientific abilities by solving problems. This goes along with thinking (Sholihah, 2020) which states that problems that are well-known by children can be used and will be easier for children to solve and conclusions are formulated.

CONCLUSION

The Indonesian nation welcomes Indonesia Gold 2045 will achieve a large demographic bonus so that a strong generation is needed, namely the millennial generation. To create a quality generation towards Golden Indonesia 2045. Critical thinking is the ability to analyze facts, generate and organize ideas, defend opinions, make comparisons, draw conclusions, evaluate arguments and solve problems. By having the ability to think critically, children are not easily influenced by information that is not necessarily true, are not easily discouraged, become a generation of quality, and are enthusiastic about doing new things. Efforts are made to improve the quality of children's education that focusing on developing children's thinking skills, such efforts pay attention to media and strategy. Picture media, audiovisual, asking strategies, problem-solving, games, and carrying out guided discovery activities.

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