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# TEACHERS' VIEWS ON THE IMPORTANCE OF CRITICAL THINKING SKILLS IN EARLY CHILDHOOD EDUCATION IN TANZANIA

## ПОГЛЯД ВИХОВАТЕЛІВ НА ВАЖЛИВІСТЬ НАВИЧОК КРИТИЧНОГО МИСЛЕННЯ В ДОШКІЛЬНІЙ ОСВІТІ ТАНЗАНІЇ

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#### ABSTRACT

In the 21<sup>st</sup> century, critical thinking skills are essential for children in early childhood education, to help them in their learning and life in general. To cultivate and promote these skills in early childhood education, children need the support and guidance of their teachers. It is therefore imperative to understand teachers' views on the importance of critical thinking skills in early childhood education. The **aim** of this study is to address this question and explore teachers' views on the importance of critical thinking skills in early childhood education in Dodoma, Tanzania.

**Methodology.** This study employed a qualitative research approach with a phenomenography research design. The total sample of the study was five informants, selected through purposive sampling

У 21 столітті від дітей вже у ранньому дитинстві вимагаються навички критичного мислення, які допомагають їм у навчанні та житті загалом. Щоб формувати та розвивати ці навички в ранньому дитинстві, діти потребують підтримки та допомоги своїх вихователів. Це підкреслює необхідність розуміння поглядів вихователів на важливість навичок критичного мислення в ранньому дитинстві. Таким чином, це дослідження має на **меті** вивчити погляди вихователів на важливість навичок критичного мислення в дошкільній освіті в Додомі, Танзанія.

**Методологія.** У дослідженні використовувався якісний підхід дослідження з феноменографічним дизайном дослідження. Загальна вибірка дослідження складала п'ять вихователів, відібраних за допомогою методики

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technique. The study used in-depth interviews with pre-primary schoolteachers to elicit data on their views towards the importance of critical thinking skills in early childhood education in the Kongwa District of the Dodoma region. After the data collection process, the analysis was done using the Miles and Huberman Model (2014).

The **findings** demonstrate that critical thinking skills are important in early childhood education: they enhance children's problem-solving abilities, their creativity and the foundations of learning; they foster intellectual development among children and they enhance their socialisation and language development. In conclusion, this study contributes to understanding teachers' views on the importance of critical thinking skills in early childhood education in Tanzania, and in other areas around the world.

**Conclusion.** Based on the importance of critical thinking skills in early childhood education, this study recommends the need to incorporate critical thinking skills into the core curriculum, across several subject areas in early childhood education by including activities that encourage and motivate children to think critically.

**Key words:** critical thinking, development of critical thinking, 21<sup>st</sup> century skills, thinking process, childhood.

цілеспрямованої вибірки. У дослідженні було використано глибокі інтерв'ю з вихователями дошкільних закладів, щоб отримати дані про їхні погляди на важливість навичок критичного мислення в освіті дітей раннього віку в районі Конгва, в регіоні Додома. Після процесу збору даних було виконано аналіз за допомогою моделі Майлза та Хубермана.

**Результати** показали, що навички критичного мислення є важливими в освіті дітей раннього віку, вони покращують здатність дітей вирішувати проблеми, покращують креативність, дають підґрунтя для навчання, сприяють інтелектуальному розвитку серед дітей, а також покращують їх соціальний і мовний розвиток. Зрештою, це дослідження сприяє розумінню поглядів вихователів на важливість навичок критичного мислення в ранній освіті Танзанії та інших країнах світу.

**Висновок.** Виходячи з важливості навичок критичного мислення в ранній освіті, дослідження стверджує, що існує потреба включити навички критичного мислення в основну навчальну програму в різних предметних галузях у ранній освіті шляхом залучення заходів, які заохочують і мотивують дітей мислити критично.

**Ключові слова:** критичне мислення, розвиток критичного мислення, навички 21 століття, процес мислення, дитинство.

## INTRODUCTION

In the 21<sup>st</sup> century, *critical thinking skills are essential for pupils in early childhood education to help them in their learning and life in general.* To cultivate and promote these skills in early childhood education, children need the support and guidance of their teachers. It is crucial, therefore, to understand teachers' views on the importance of critical thinking skills in early childhood education. Critical thinking is one of the most important 21<sup>st</sup> century skills and a requisite of today's knowledge economy (Polat & Aydin, 2020).

It is also one of the most essential indicators of the quality of pupil learning in early childhood education (Alsaleh, 2020). This tells us that it is essential for pupils to develop critical thinking skills in today's rapidly changing world. According to Pollarolo, Størksen, Skarstein and Kucirkova (2022), the importance of promoting critical thinking skills in pupils from a young age is the focus of extensive discussion today. This indicates the importance of critical thinking skills: they enable pupils to make informed choices that have a long-term impact on society, the environment, and the national economy.

The concept of critical thinking is viewed differently by academics, philosophers and psychologists. For example, Pollarolo et al. (2022) define critical thinking as 'reflective and reasonable thinking that is focused on deciding what to believe or do' and is considered

to be a 'practical dimension of higher-order thinking'. From a psychological point of view, critical thinking is the application of cognitive skills that increase the probability of the intended outcome. Critical thinking can be used to describe a thinking process that is purposeful, reasoned and goal directed (Alsaleh, 2020).

Moreover, Alsaleh insists that critical thinking is the kind of thinking involved in solving problems, formulating inferences, calculating probability, and making decisions. Based on the above review of the various meanings of critical thinking, it is important to note that no single definition of critical thinking is applicable to every discipline at every level of education. Therefore, this study establishes that critical thinking is the ability of pupils to use soft skills such as curiosity, observation, creativity, problem-solving and communication. Other soft skills include reflection, open-mindedness and resilience.

It is worth noting that critical thinking is a multifaceted skill that can be developed and enhanced through practise and experience. According to Hamby (2014), a critical thinker must possess the following virtues: a willingness to inquire, open-mindedness, fairness, respect for dialectical partners, humility, compassion and empathy.

Other qualities of a critical thinker include introspection, curiosity, inference, analytical thinking, active listening and effective communication (Patel, 2018). Moreover, critical thinkers are those persons who can move beyond 'typical' thinking models to an advanced way of thinking; they produce both more ideas and improved ideas than poor thinkers (Ruggiero, 2012). Murawiski (2014) notes that critical thinkers become more adept in their thinking by using a variety of probing techniques which enable them to discover new and often improved ideas. In addition, Murawiski observes that critical thinkers test their first impressions, make important distinctions among choices, and base their conclusions on evidence rather than on their own feelings. They are also sensitive to their own limitations and predispositions.

The ability to think critically enables pupils to solve problems. Pupils who possess strong critical thinking skills can effectively identify and solve problems in various contexts (Diamond & Lee, 2011). This indicates that teachers should engage pupils in activities that promote critical thinking, to foster the development of problem-solving skills in young pupils.

Studies also demonstrate that critical thinking skills have a positive impact on pupils' academic achievement. This tells us that the ability to think critically allows pupils to better understand and apply concepts across different subject areas. Moreover, critical thinking skills are important in fostering cognitive development. According to Piaget's theory of cognitive development, pupils in early childhood education fall under the preoperational stage, where they begin to think logically and engage in more complex mental operations (Nucci, 2015).

From a global perspective, teachers play a vital role in promoting the development of critical thinking skills in pupils during early childhood education. By encouraging inquiry, analysis, and evaluation, teachers can help pupils develop their cognitive abilities and become independent thinkers (Halpern, 2014).

Furthermore, Halpern identifies a number of methods that teachers can use to promote critical thinking skills among children. These include asking open-ended questions, practising problem-solving activities, encouraging reflection, providing diverse perspectives, following problem-based learning and providing feedback to pupils.

According to Geng (2021), teachers should use modern and advanced technologies to reinforce pupils' imaginations and interests in order to develop their critical thinking skills.

In Tanzania, one of the objectives of early childhood education is to promote the overall development of the child, that is, his or her mental, physical, social and emotional characteristics and capabilities. Another is to develop creative and logical thinking skills in children (URT, 2016). This shows that the government of the United Republic of Tanzania recognizes and values the importance of critical thinking skills for children.

TanzaniaVision 2015 recognizes the importance of critical thinking skills among students of all education levels (Kavenuke, Kinyota & Kayombo, 2020). The United Republic of Tanzania [URT (2000)] announced that the government recognized the 21<sup>st</sup> century as an era of change, due to the impact of technology and globalisation. However, Tanzania Development Vision 2015 and the Education and Training Policy of 2014 [Ministry of Education and Vocational Training (URT), 2014], declared that many Tanzanian graduates still lack such necessary critical thinking skills as self-confidence, an inquisitive mind, exploiting opportunities and evaluating alternatives to problems.

Likewise, in Tanzania, early childhood education plays a vital role in laying the foundation of children's future learning and holistic development. Therefore, the importance of the role of teachers in promoting and facilitating the nurturing of critical thinking skills among children is acknowledged.

However, little is known about teachers' views on the importance of critical thinking skills in early childhood education. This study therefore aims to explore teachers' views on the importance of critical thinking skills in early childhood education in the Dodoma region, Tanzania. This study was guided by one research question: *What are teachers' views on the importance of critical thinking skills in early childhood education?*

The **purpose** of this study is to explore teachers' views on the importance of critical thinking skills in early childhood education in the Dodoma region, Tanzania.

## LITERATURE REVIEW

Critical thinking skills have been recognized as a vital component of early childhood education, as they enable children to think creatively, analyze information, and make informed decisions (Paul & Elder, 2006). In early childhood education, critical thinking skills are essential for children to develop curiosity and problem-solving skills, think creatively, and build a foundation for their future learning (Pollarolo, et al., 2022).

Teachers play a significant role in promoting critical thinking skills in early childhood education. They can encourage children to think critically and practise thinking critically by providing them with opportunities for open-ended play, by encouraging questions, and by fostering an enabling learning environment (Hart, 2011).

Teachers can also model critical thinking skills by engaging in reflective practice and encouraging children to evaluate their own learning (Katz & Chard, 2000). Geng also insists (2021) that to promote critical thinking skills, teachers should use modern technology as an aid to developing their critical thinking skills, to motivate pupils' imaginations and interests.

In Tanzania, as in other countries, early childhood education is critical for children's future success. The country's education system focuses on the importance of critical thinking skills in the curriculum which highlights the need for teachers to prioritize these skills in their teaching practices (MoVT, 2014). However, there is limited research on teachers' views on the importance of critical thinking skills in early childhood education in Tanzania.

## **METHODOLOGY**

This section presents the methodology used to extract the findings of this study. It comprises research design, participants, data collection tools, and data analysis:

### **– Research Design**

This study employed a qualitative research approach involving in-depth interviews with five pre-primary schoolteachers from five early childhood education centres in Kongwa, Dodoma. Qualitative research approach was used to gain a comprehensive understanding of teachers' views on the importance of critical thinking skills in early childhood education. This approach was appropriate to this study because it was best suited to providing an in-depth understanding of informants' experience and insights into their views on the importance of critical thinking skills in early childhood education.

The study was guided by phenomenography as a research design. Phenomenography is a qualitative research approach that is employed to investigate the difference or variations, in the way that informants within a specified population experience a particular phenomenon (Nyamapfene, 2021). In this study, phenomenography as a research design was used, to explore the different views that informants have on the importance of critical thinking skills in early childhood education.

### **– Location of the Study**

The study was undertaken in Kongwa District as this district was able to host several educational programmes that empower teachers in their support of pupils' education.

### **– Data Collection Tools**

In-depth interviews with five pre-primary schoolteachers were used to elicit data on the teachers' views on the importance of critical thinking skills in early childhood education. Individual interviews were conducted with teachers to explore their views on the importance of critical thinking skills in early childhood education. Interview guides were used to gather data from teachers about their views on the importance of critical thinking skills in early childhood education.

In-depth interviews were appropriate for this study because they helped to gather detailed information, by probing and reflecting, in order to gain further understanding of the teachers' views about the importance of critical thinking skills. Also, these in-depth interviews established a sense of rapport due to their conversational nature which enabled follow-up questions and clarification. Additionally, the conversational nature of the in-depth interviews allowed the informants the freedom to include what they felt was important with reference to critical thinking skills.

### – Informants of the Study

Five teachers were selected based on their experience in teaching early childhood education specifically, and their willingness to participate in the study. Interviews were recorded, transcribed, and translated into English for analysis.

### – Data Analysis

The study adopted the Miles and Huberman model for qualitative data analysis. According to Miles, and Huberman (2014), qualitative data analysis consists of three concurrent flows of activity, which include data reduction, data display, and conclusion drawing/verification.

In the section of data reduction, I organized, selected, and summarized the data elicited in the field. This involved coding the data, or categorizing and labelling different segments or units of data. The coding process helped to identify patterns, themes, and relationships within the data. In the second section of data display, once the data was coded, it was displayed visually, most often in the form of matrices.

Data display helped to reveal the connections between different codes, categories, and themes. It also enabled a comprehensive overview of the data and facilitated the identification of emerging patterns. In the third section of conclusion drawing/verification: in this final stage, I drew conclusions from the analyzed data. I interpreted the findings and made connections to existing literature, and developed explanations based on the data.

## RESULTS

The study's findings reveal that teachers in Dodoma recognize the importance of critical thinking skills in early childhood education. When analyzing their views on the importance of critical thinking skills, several themes emerged:

### – Problem-Solving Abilities

The findings of the study indicate that teachers acknowledge the importance of critical thinking skills in enhancing problem-solving skills among pupils in early childhood education. They believe that critical thinking helps pupils to identify a problem and find solutions to that problem through play. Teachers stress the importance of critical thinking skills in helping children to resolve conflict through play.

The findings show that critical thinking skills are important for pupils, helping them evaluate and navigate new challenges. The findings also reveal that teachers understand the importance of critical thinking skills in empowering pupils to make informed decisions about their own life. As one teacher said:

*Critical thinking skills are important in early childhood education; they help pupils to manage conflict and use dialogue to negotiate a solution. They also help pupils to identify and resolve issues, as well as making informed decisions about their own life.*

The above quote suggests that teachers view critical thinking skills as important because they help pupils in early childhood education to develop problem-solving skills which are important in their learning and development.

### – Creativity

Another theme emerged from the findings on teachers' views about the importance of critical thinking skills: teachers agree that critical thinking is important in promoting creativity among pupils in early childhood education. Teachers stress the importance of creativity in pupils' cognitive, emotional and social development. In addition, the findings show that when children are encouraged to be creative, this can boost their self-confidence, problem-solving skills and ability to adapt to new situations. One teacher said:

*The importance of critical thinking is that it promotes pupils' ability to analyze problems, consider multiple perspectives, and generate creative solutions. When pupils develop strong critical thinking skills, they are better equipped to face challenges in an open-minded and innovative way.*

The above quote suggests that critical thinking skills are important tools in enhancing pupils' creative skills in early childhood education.

### – Foundation of Learning

The findings indicate that teachers view critical thinking skills as the foundation of learning among pupils in early childhood education. Teachers believe that critical thinking not only enhances pupils' learning, but also contributes to their development. The findings indicate that critical thinking skills can help pupils develop literacy skills earlier in life. Additionally, the findings show that critical thinking skills empower pupils to ask thoughtful questions and explore their natural curiosity more easily. One teacher had this to say about the importance of critical thinking skills in early childhood education:

*Critical thinking skills are important in laying the foundation for pupils' lifetime of learning, creativity, and personal growth. These skills equip pupils with the tools they need to navigate challenges, think independently, and become adaptable, innovative problem-solvers. All of the above are vital for success in the 21st century.*

The quote above confirms that critical thinking skills are vital, not an option, for pupils on their learning journey. It stresses the importance of critical thinking skills to pupils' learning in early childhood education.

### – Fostering Intellectual Development

The findings reveal that teachers believe critical thinking skills are important in fostering intellectual development among pupils in early childhood education. They also show that critical thinking skills serve as a crucial foundation for pupils' learning and overall intellectual development.

Similarly, the findings indicate that critical thinking skills stimulate intellectual development by encouraging pupils to analyze information, consider different perspectives, and draw their own conclusions. In addition, the findings indicate that as children engage in the process of critical thinking, their ability to reason, problem-solve, and make informed decisions is enhanced in several areas. One teacher said the following:

*Nurturing critical thinking skills is essential for pupils' intellectual development. By nurturing these skills, we empower pupils to become independent thinkers, creative*

*problem-solvers, and active learners, setting them up for lifelong success and fulfillment.*

The above quote indicates that critical thinking skills are important aspects in stimulating pupils' intellectual development during early childhood education.

#### – **Enhancing Social Development**

The findings indicate that critical thinking skills are important in enhancing social development among pupils in early childhood education. The findings show that teachers believe that critical thinking skills encourage pupils to share their toys, communicate more easily and interact with their peers and adults.

The findings also reveal that critical thinking helps children to form friendships and collaborate with others in class. Likewise, the findings show that critical thinking skills are important in developing pupils' self-awareness and self-regulation. Teachers believe that critical thinking skills promote self-awareness and enable pupils to recognize their own biases, emotions and behaviours. One teacher said:

*Critical thinking skills are important in early childhood education because they can enhance children's communication abilities, making them more effective in social settings at school and at home and fostering stronger relationships with their peers.*

The above quote indicates that critical thinking skills are the foundation of pupils' social life in early childhood education. By developing pupils' critical thinking skills, they are able to navigate the complexities of social relationships, develop stronger connections with their peers, and contribute to a more collaborative and empathetic social environment.

#### – **Language Development**

The findings indicate that teachers are aware that critical thinking skills are important in promoting language development among pupils in early childhood education. The findings indicate that teachers believe critical thinking skills are important in enhancing pupils' verbal communication skills. The findings also indicate that critical thinking allows pupils to express their thoughts and ideas more clearly.

The findings also confirm that teachers believe that critical thinking skills are important because they enable pupils to become active listeners, ask clarifying questions, and analyze the information they receive. The data also show that teachers think that critical thinking skills can improve pupils' language comprehension, as they learn to process and understand spoken language more effectively. One teacher said the following: *In my view, critical thinking skills are very important for pupils in early childhood education. They help children to use more complex words when conversing with peers and adults.*

## **DISCUSSION**

This study has two main limitations: The first limitation is the scope of data collection. The study relied on interviews alone, which provided a limited understanding of teachers' views. The second is subjective interpretation and ambiguity. Different teachers had different understandings of the meaning of critical thinking skills (Gavrysh

& Dotsenko, 2021; Gembaruk, 2023; Veretiuk & Chetveryk, 2024), which threatened to introduce ambiguity into the study.

Therefore, I had to ensure that the informants had a clear understanding of the concept to minimize this limitation. Despite the limitations, critical thinking skills were found to be important in early childhood education. A study by Murawisk (2014) asserts that critical thinking helps pupils to become effective problem-solvers. Murawisk adds that critical thinking helps pupils decide how to resolve a problem by using relevant knowledge effectively.

Critical thinking skills can also help pupils to maintain a critical approach throughout the problem-solving process. Research conducted by Young (2023) also revealed that critical thinking skills help pupils to tackle problems from different angles and consider different perspectives, increasing the likelihood of finding effective solutions.

According to Adeleye (2018), critical thinking skills promote creativity in individuals. They help individuals to come up with creative solutions to problems, then weigh up the usefulness and relevance of the new ideas to the task at hand. Adeleye adds that creativity is an important component of education at every level of study around the world, including Tanzania.

Lau (2011) notes that in order for an individual to be creative, he or she needs critical thinking skills to help them come up with new and useful ideas and explore alternative approaches. Moreover, critical thinking skills are the foundation of learning among pupils. A study by Murawisk (2014) and Raj, Chauhan, Mehrotra and Sharma (2022), confirms that critical thinking skills offer pupils the opportunity to understand and take responsibility for their learning in early childhood education. They help them ask more challenging questions and participate in the learning process more intensely.

Iyer (2019) suggests that critical thinking skills help individuals to learn and think for themselves, to question hypotheses and to analyze and synthesize events. Iyer insists on the importance of questions during the teaching and learning process, for both pupils and teachers, believing this the cornerstone of critical thinking, and the source of knowledge formation during the learning process. Additionally, critical thinking skills play an important contribution to enhancing pupils' intellectual development. Critical thinking skills enable pupils to become better equipped at analyzing information, evaluating arguments, solving problems, and making informed decisions (Enciso, Enciso & Daza, 2017).

Moreover, a study by Facione (2015) found critical thinking skills to be important in promoting pupils' intellectual development as they aid them in problem-solving skills, decision-making and effective communication. Critical thinking skills are also important for helping students navigate social situations effectively (Abrami, Benard, Borokhovski, Wade, Surkes, Tamim, & Zhang, 2008). Abrami et al. note that critical thinking skills expand pupils' social interactions and help them develop empathy, tolerance, collaboration and cooperation, as well as effective communication skills.

Kuhn (2011) sheds light on the importance of critical thinking skills in promoting language development. Kuhn explores the development of critical thinking skills in social contexts, whereby language plays a vital role in collaborative thinking and

argumentation, as pupils engage in dialogue, negotiate meaning, and justify their arguments.

## CONCLUSION

The findings of this study indicate that teachers believe that critical thinking skills are important in motivating problem-solving abilities, creativity, fostering intellectual development and enhancing social and language development, as well as serving as the foundation of learning in pupils' early childhood education. In conclusion, this study contributes to the understanding of teachers' views on the importance of critical thinking skills in early childhood education in Tanzania and elsewhere.

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## RECOMMENDATIONS

The study's findings suggest that policymakers and experts in early childhood education should prioritize the importance of critical thinking skills in pupils' learning. This can be accomplished by providing teachers with the necessary instruction and learning resources and by helping pupils to develop their critical thinking skills. Such measures should include teacher training and the opportunity for professional development and by focusing on the importance of these skills in the curriculum. Secondly, this study recommends that research is needed into investigating the challenges that teachers face in developing critical thinking skills in early childhood education.

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## CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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