Teacher’s Reflection: Learning Activities for Stimulating Preschool Children’s Creative Thinking Skill

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Abstract

Teachers play crucial roles in delivering a successful learning process, as optimal learning outcomes will only be achieved with support from competent teachers. In this study, we delved into a teacher’s experience in stimulating 5–6 years old children’s creative thinking during the learning process. Creative thinking skill is one of the important skills in 21st-century education. This study involved teachers of 5–6 years–old children (Class B of Kindergarten) in Surakarta, who focused on stimulating creative thinking in an A-accredited institution categorized as a Sekolah Penggerak in Surakarta City. This study presents a teacher’s experience in successfully stimulating children’s creative thinking through in-depth interviews and reflective journals. The narrative approach was used to analyze the interview transcript and reflective journals to identify the teacher’s learning method for stimulating 5–6 years–old children’s creative thinking. This study identified the teacher’s creativity-stimulating learning process from the narrated experience. Creative thinking was stimulated through intentional learning, which was conducted based on the need analysis, learning principle, and learning achievement at the ECE level, i.e., project-based learning. The learning was conducted through play activities and involved various learning media in delivering more meaningful education and promoting children’s learning enthusiasm through digital media. Challenges in stimulating creative thinking should also be addressed seriously. The study finding showed that stimulating creative thinking requires serious preparation based on each child’s needs, characteristics, and learning principles.

Key words: Learning, Creative Thinking, Preschool Children.

Introduction

In the 21st century, the education sector, especially early childhood education, is demanded to stimulate children’s skills to prepare them to succeed the global competition. One of the skills needed in the 21st century is creative thinking. Early childhood is a critical period for improving individuals’ creative thinking (Behnamnia, Kamsin, & Ismail, 2020), and myriad studies have emphasized the importance of developing preschool children’s creative thinking (Xiong, Liu, & Huang, 2022). Studies in the last few decades have reported the pivotal effect of creative thinking skills on various fields, such as science, technology, economy, and education.
This skill has become increasingly urgent recently, as creative thinking and creativity play pivotal roles in adapting to rapid-changing world (Gencer & Gonen, 2015). Tan (2000) and Greenstein (2012) state that creative thinking may help individuals to succeed in their academics and career (Yang & Zhao, 2021). Individuals with creative thinking skills will likely be able to solve complex individual, social, and global problems. Creative behaviour, according to (Leggett, 2017), serves as an important tool for individuals to participate in a technologically advanced environment. Countries worldwide promote the development of creative thinking through studies and policies (Tabach & Friedlander, 2017).

Early childhood has been renowned as the golden era (Gardner, 2008) due to its special features in children’s development (Gardner, 2008; Shonkoff & Phillips, 2000). Neurological studies reveal that children’s brain exhibit the most intensive growth during this period. A newborn baby’s brain contains around one billion neurons, and only a quarter of them are connected (Mohammed, 2018). They begin to make the connection from newborn until the age of three (Nelson, 1999). From birth to five years of age, children’s brains develop a noncognitive foundation for creativity in the future, including self-control, emotional stability, social skills, and moral senses (Shonkoff & Phillips, 2000). As Shonkoff and Phillips (2000) found, brain ability evolves and adapts better to environmental changes during early childhood than in other life stages (Gong, Zhang, & Tsang, 2020).

Teachers play pivotal roles in stimulating children’s creative thinking skills. They are expected to be able to provide an optimal learning process that stimulates children’s development. Creative thinking processes and good basic knowledge may be developed through social interactions directed by an experienced educator who is capable of directing children’s thoughts. Supportive environments are also pivotal in promoting children’s imagination and provide them with opportunities to play by themselves or together with their friends (Root–Bernstein & Root–Bernstein, 2006). Creative thinking is inseparable from children’s development and allows teachers to better understand the creative process.

Teachers’ personality also serves as one of the factors that promote creativity. They are viewed as a creativity model in the classroom, from whom students learn creative personalities and behaviours (Cropley, 1994). Creative teachers may also act as an effective means to promote students’ creativity development (Fryer & Collings, 1991; Cheung & Leung, 2014). Changes in teachers’ role in the 21st century have demanded teachers pay serious attention to students’ early creativity development, in addition to their conceptual and intelligence development (Leggett, 2017). Policymakers’ interest in this topic may enhance the policy significance in developing teachers’ competencies for stimulating creative thinking. Being creative is one of the dimensions of Pancasila student profile, which is explicitly stated in the Merdeka curriculum and should be optimally stimulated (Sulistiyati, D. M., Wahyuningsih, S., Wijania. I. W., 2021). Previous empirical studies on this topic, however, exhibited a notable limitation. Teachers’ role in stimulating creative thinking has not been explored. Their successful practices in stimulating students’ creative thinking have also not been reported in published studies.

While creative thinking would develop optimally when being properly stimulated by competent teachers, to date, there is no study that explored the teachers’ success in stimulating preschool children’s creative thinking. Therefore, the present study attempted to explore a teacher’s successful experience in stimulating 5–6 years old children’s creative thinking through their learning processes. It also aimed to depict the learning model the teacher applied when successfully stimulating children’s creative thinking.

Method

Research Design and Purposes

This study applied a qualitative narrative design. This design was applied to explore a teacher’s experience in stimulating 5–6 years old children’s creative thinking. Sarbin (1986) stated that a narrative study concludes individuals’ life experiences in a story forum and links the events to the beginning, middle, and ending plots (Wertz et al., 2011). This approach views individuals as a storyteller and their experiences as narration. This approach brings the listeners, readers, and viewers to use the narrator’s perspective when understanding their narration (Riessman, 2008).

This study focuses on delving into one or two individuals’ experiences, collecting data from their narration, reporting their experience, and chronologically drawing the meaning of their experience or using the course of life stages (Creswell & Poth, 2018). Compared to other qualitative methods, narrative study emphasizes more on discovering the chronology of an event narrated by participants and how participants draw meanings and significances of the events (e.g., emotional reaction). The narrative approach suits the purpose of this study, i.e., to explore the learning process delivered by a teacher of 5–6 years old children to stimulate their creative thinking.

Research Setting and Participant Recruitment

This study involved a Kindergarten teacher in Surakarta who taught 5–6 years old children in Surakarta City. The informant was recruited based on a survey of teachers who focused on stimulating preschool children’s creative thinking, worked in an A-accredited institution categorized as Sekolah Penggerak. This study involved one Kinder-
garten teacher who held a Bachelor’s degree in Early Childhood education. She also had an educator certificate and had worked for eighteen years.

In several Early childhood education institutions. She worked in an A-accredited ECE institution categorized as Sekolah Penggerak. She actively engaged in early childhood educator organizations and various teacher’s competence development programs through seminars. She also had active English language skills and became a tutoring teacher in Teacher’s Professional Education Program (PPG) in one of the teacher education institutions in Surakarta. Her sociability, friendliness, and openness were significantly helpful during the in-depth interview. Considering her background, she was a relevant participant in this study. She had consented to participate in this study.

Data Collection

After signing the informed consent form, she was reminded about the research purpose before the interview (i.e., to understand the learning process she applied to stimulate 5–6 years old children's creative thinking in her institution). She was also given an opportunity to ask questions before the interview took place. The interview was conducted offline and online (using Zoom cloud meeting). The offline interview was conducted outside the school, where the informant found it most comfortable. The online interview was conducted through Zoom Cloud Meeting, during which she was allowed to join the interview from anywhere she found comfortable. The interview was attended only by the researcher and the informant. The interview was conducted for 60–90 minutes. To enhance the trustworthiness of the interview result, every event mentioned by the informant was clarified by asking her to make deeper reflections on such events, which may result in more detailed narrative descriptions (Clonelly & CLandinin, 1990). In addition to the in-depth interview, data were also collected from the informant’s reflective journals.

Data Analysis

Data were analyzed using thematic analysis. Narrative inquiry is related to the content (i.e., "what" is said, written, and visually displayed), yet the thematic analysis exclusively focuses on the content (Riessman, 2008). Interviews were audio recorded and transcribed. The audio recording was transcribed verbatim using Google Voice. During the data analysis, each transcript was read several times to understand the informants’ broad experience. The interview transcript and reflective journals were coded to generate themes. The conclusion was drawn by focusing on the narrative structure of the informant’s learning process for stimulating 5–6 years old children’s creative thinking. The first author conducted the literature review, data collection and analysis and wrote this manuscript. She was a student in a doctoral program in Early Childhood Education at a university in Jakarta, Indonesia. The manuscript was reviewed by the second and third authors, who were lecturers at that university.

Results and Discussion

A kindergarten teacher, who served as the study informant, participated in an in-depth interview in offline and online settings. She had eighteen years of teaching experience. The informant told her experience in conducting a learning process that primarily aims to stimulate 5–6 children’s creative thinking in her school. She told the good practices of stimulating 5–6 years old children’s creative thinking optimally. She detailed the method applied, starting from the method selection analysis to the method implemented to stimulate creative thinking, activities in stimulating children’s creative thinking, and the learning media used. The following sections detail the learning implemented to stimulate creative thinking, as narrated by the informant.

Learning Method

Schunk (2012) defines learning as long-standing changes in one’s behaviour or behavioural capacity in certain methods. The learning method is a pivotal component in an intentional learning process, which could be done through Various methods (Santrock, 2009). Before starting the learning, the teacher prepared a learning instrument based on the materials and children's characteristics and needs. The informant stated that she applied a project-based learning to stimulate 5–6 years old children’s creative thinking. It was chosen based on the need analysis of each student, the principle of fun learning at ECE level, which was done by exploring the surrounding materials, in-depth investigation, and adjusting to the learning achievement. It is crucial to consider every student’s needs when selecting the learning method (Er, 2013):

“Sekolah tempat saya mengajar adalah salah satu sekolah penggerak di kota Solo yang menerapkan kurikulum merdeka dan pembelajaran proyek. Metode yang diterapkan adalah metode pembelajaran berbasis proyek/Project Based Learning (PBL)” (Wawancara, Guru, 1 Desember 2022) (The school I am working in is one of the Sekolah Penggerak in Surakarta City. My school applies Merdeka Curriculum and project–based learning) (Interview with Teacher, 1 December 2022).
The method the teacher applied is adjusted to the situation, condition, needs, and characteristics of the institution. It was implemented systematically following the steps determined by the learning method she selected. The project-based learning allows children to investigate the topic they need to learn further (Jackman, 2012).

The project for stimulating 5–6 years old creative thinking was implemented through several stages by considering the learning achievement in each stage and stimulating the indicators of creative thinking in each stage. It was done through enjoyable activities by taking each student’s characteristics and development into account and thoughtfully to prevent them from feeling ‘forced to learn’ during the activities. Children’s creative thinking process was stimulated by adding a concept to the existing topic. For instance, when the topic was the stone, children were stimulated to know the concept of stone shapes and sizes. Exploring various materials provides children with opportunities to express their imagination and ideas during the project. The teacher also threw some open questions to stimulate students to give creative answers based on their knowledge. Various materials, such as relevant books and videos, were also prepared to stimulate students’ divergent thinking. The opportunities provided by teachers were found to stimulate various indicators related to students’ skills in answering questions from various perspectives, expressing original ideas, making objects according to their ideas and creativity, and finding alternative solutions to problems.

During project-based learning, students make an object, through which they develop creative thinking by generating ideas and imaginations and translating them into a concrete work. The project was not set to be done in a single day. Hence, students were allowed to continue working on their project the next day when they needed more time to finish. By doing so, children’s works will be different from one another and depend on their creative thinking development. Creative thinking was also stimulated through Pancasila Student Profile Development Project (Proyek Penguatan Profil Pelajar Pancasila/ P5). P5 was carried out twice a semester, through which six dimensions should be well–internalized into the student. As one of those six dimensions, creativity comprises three elements: 1) developing original ideas, 2) developing original works and actions, and 3) having flexible thinking in finding alternative solutions to the problem. With regard to the third element, students were stimulated to think creatively to find alternative solutions to their problems and solve them properly. Creative students will be able to creatively experiment with various options when facing situational and conditional changes. When students have not internalized the dimension properly, the internalization process is repeated in the next P5 session. This project allows students to develop their creative thinking and behaviours. Project-based learning has influenced the preschool children’s creative thinking (Gencer & Gonen, 2015).

“Pada pembelajaran proyek/PBL ini, untuk menstimulasi berpikir kreatif melalui, Menjawab pertanyaan pada kalimat pemantik: Dimulai di awal sebelum masuk kepada topik maka kami mengajukan pertanyaan pemantik kepada peserta didik. Dalam pertanyaan pemantik yang berupa pertanyaan terbuka ini maka diharapkan peserta dapat menjawab pertanyaan dengan kreatif berdasarkan pengetahuan atau pengalaman yang dimiliki oleh mereka … Proses pembuatan hasil karya. Pada proses ini anak akan mengembangkan proses berpikir kreatifnya dengan mengembangkan ide, gagasan dan imajinasinya serta menuangkannya dalam bentuk karya. Anak akan berkreasinya secara kreatif. Ketika menghadapi kendala atau tantangan pada proses pembuatan hasil karya maka akan mengembangkan proses berpikir kreatif dalam memecahkan masalah tersebut”. 
(Wawancara Guru, 1 Desember 2022)

(During PBL, children’s creative thinking was stimulated through questions; before discussing the main topic, I asked open questions and expected them to answer creatively based on their knowledge and experience… Regarding the creation process, students developed their creative thinking by developing ideas and imaginations and turning them into a work. They worked creatively. Obstacles they faced during the making process would develop their creative thinking to solve the problems – Interview with Teacher, 1 December 2022)

**Learning Activity**

Learning activities involve teachers’ and children’s interaction, and in the preschool context, the learning process is basically done through playing. Any learning process in early childhood education is carried out through playing activities. Playing is one of the crucial components in children’s life. They could learn basic and social skills through playing, and playing materials may positively affect students by stimulating them to explore worlds using imagination and in fun ways (Celebi Oncu & Ozbay, 2005). Playing is children’s natural activity that allows adult to understand their development, views, and needs. Baines and Slutsky (2009) noted that playing has enhanced the quality of life through creative thinking (Oncu & Unluer, 2010).

Various learning–through–play activities are available to stimulate 5–6 years old children’s creative thinking. Play activities provide children with the freedom to explore the learning materials and their creative ideas, making them more enthusiastic about the activities and expressing their imaginations. Some activities done to stimulate their creative thinking were: 1) Fun game, through which children can develop their creative thinking by organizing and setting a strategy; 2) Outbond, during which children’s creative thinking is stimulated by expressing ideas to solve the problems faced during the activity; 3) In–class numeracy games using loose parts as the learning media to
stimulate their creative thinking (Nurjanah, 2020). When children imitated the number 5 using loose parts, they tried to think creatively by selecting the loose part they like and using it to form the number 5 according to their imagination, which may lead to different outcomes between one another; 4) Coding games in the technology centre, in which children are demanded to have creative thinking by reading the signs and directions and solving various problems from the direction. The coding activity may stimulate the children’s creative thinking (Çakır, Korkmaz, İdil, & Uğur Erdöğmuş, 2021); 5) Block and Lego, through which children’s creative thinking developed by arranging block or Lego to make certain shapes; 6) Free-drawing on the given paper; and 7) Playing English using Big Fun 2.

“Fun game. Permainan sederhana yang dilakukan anak juga melatih kemampuan berpikir kreatif dengan mengatur dan menyusun strategi dengan baik... Kegiatan bermain yang terkait dengan numerasi yang dilakukan di kelas seperti membilang, mengurutkan, bermain pola tertentu dan lain-lain”. (Wawancara, Guru, 1 Desember 2022)


“Bermain bahasa Inggris untuk TK B dengan Big Fun 2. Anak distimulasi kemampuan berpikir kreatifnya dengan menjawab pertanyaan dalam bahasa Inggris, mendengarkan cerita berbahasa Inggris, memasangkan gambar, menempel stiker, penanaman karakter dan lain-lain”. (Wawancara, Guru, 1 Desember 2022)

During the learning activity, children were enthusiastic about and interested in the activity. They showed high enthusiasm and expressed their imagination as they were given the freedom and comfort to be creative and think without teachers’ intervention. Children showed enthusiasm when engaged with project-based learning, coding activities, watching video, and learning English using digital media, such as Big Fun 2. Digital media appeared to increase their enthusiasm during the learning process, proving the finding in Vinter, Bard, Lukowski-Duplessy, & Poulin-Charronnat’s (2022) study, who report that the digital games are effective for preschool children’s learning process.

Learning Media

Learning media refers to any tools used to support the learning process. Various media are available for stimulating 5–6 years old children’s creative thinking, which could be adjusted to children’s needs and characteristics. Different media uses potentially promote a constructive, meaningful learning process (Jaafar, Ramli, & Fauzi, 2013). The learning media was selected by considering the children’s and the school’s surrounding environment into account. The use of different materials, e.g., natural materials, advanced artificial materials, reused materials, teacher-made innovative materials, and digital materials, could be a learning source for stimulating creative thinking.

“Media yang digunakan antara lain Looseparts, video, buku cerita, satu set permainan koding, flash card huruf dan angka, aplikasi Big Fun 2”. (Wawancara, Guru, 1 Desember 2022)

Media variations used by the teacher to stimulate children’s creative thinking prevent them from being bored and stimulate them to engage with other learning activities. The learning media was designed as attractive as possible to avoid boredom and enrich children’s knowledge. The interview result showed that students were enthusiastic and found no difficulties when using videos and digital media like the Big Fun 2 application. This finding is consistent with a previous study reporting that some preschool children were able to finish their tasks using digital technology and media (Mourlam, Strouse, Newland, & Lin, 2019).
Learning Challenges

The teacher’s successful learning was not free from challenges. Some challenges she faced to stimulate students’ creative thinking included the challenges to innovate to create a comfortable classroom atmosphere and an interesting learning process. Challenges also emerged in the preparation stage, including determining various play activities that could stimulate children’s creative thinking and facilitating various learning media that suit each child’s characteristics. The challenge also stems from teachers’ self-motivation to continue to develop pedagogical, professional, personal, and social competencies.

“Tantangan yang dihadapi oleh guru saat ini adalah bagaimana menciptakan suasana kelas yang selalu nyaman dan menciptakan pembelajaran yang menarik termasuk bagaimana menyiapkan dan memilih kegiatan yang menarik minat anak supaya anak antusias dan tertarik…” (Reflektif jurnal, Guru, 3 Desember 2022) (Current challenges teachers face is how to create a comfortable atmosphere and interesting learning process, in addition to preparing and selecting activities that can draw children's interest and enthusiasm…) (Journal Reflection, Teacher, 3 December 2022).

These challenges should receive serious attention not only from the teacher but also from any relevant element of early childhood education. Innovative solutions, support, and policies are necessary to address any emerging challenge.

Conclusion

This study explored a teacher’s experience in stimulating 5–6 years old children’s creative thinking in two Kindergartens in Surakarta City. Based on the teachers’ narration, the creativity-stimulating learning process done based on: 1) learning models selected based on need analysis, learning principle, and learning achievement, in this case, project-based learning; 2) learning-through play activities; and 3) various learning media to deliver meaningful education and promote children’s enthusiasm through digital media use. The study finding showed that stimulating creative thinking requires serious preparation based on each child’s needs, characteristics, and learning principles.

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References


