

Teaching kindergarteners creativity with "OCCUT": Origami paper

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ABSTRACT One of the objectives of the kindergarten curriculum is to enhance originality or creativity. Children's creativity in kindergarten can be optimized through educational media. This study aims to provide a comprehensive account of the planning, execution, progress, and challenges educators encounter in utilizing origami paper as an instructional tool at the Assyfa Learning Center (YALC) Pasuruan Foundation Kindergarten. The present study employs descriptive research methodologies, adopting a qualitative approach. The research sample consisted of two educators and ten preschool-aged children. The findings derived from the data analysis indicate that the planning and implementation executed by teachers exhibit a commendable level of quality. In contrast, children's creative growth manifests in diverse ways through their output. This activity encompasses many intriguing conditions, prompting an examination of the child's state during its execution.

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INTRODUCTION

Childhood is commonly referred to as the "golden age" because of the heightened receptiveness of children to environmental stimuli (Schabas, 2023; Vedianty et al., 2023). Which plays a crucial role in facilitating their physical and spiritual growth (Karim & Zoker, 2023; Winson et al., 2023), ultimately influencing their future academic achievements (Darmayanti, 2023; Zahroh, Rachmawati, et al., 2023). One aspect that warrants consideration is achieving success in early childhood education.

Early childhood education is a deliberate and structured approach that targets children between birth and six years (Mubarok et al., 2023; Pradana & Uthman, 2023). This approach involves the provision of educational stimuli to facilitate physical and spiritual growth and development (Arif et al., 2023; Rahman, 2023; Santiago et al., 2023). Early childhood education's ultimate goal is adequately preparing children for their subsequent educational endeavours (Apiyah & Suharsiwi, 2021; Nasiha et al., 2023; Suharsiwi et al., 2022). In addition, (Suharsiwi et al., 2023) assert that Early Childhood Education is a pedagogical approach that prioritizes establishing fundamental aspects of physical growth and development, including fine and gross motor coordination. It also emphasizes the cultivation of intelligence (Setiyanti et al., 2022;

Supriatna et al., 2023), encompassing cognitive abilities (Fauzi et al., 2022), creativity (Sopa et al., 2022), emotional intelligence (Dewi & Zahroh, 2022; Fitiyah & Zahroh, 2021), and spiritual intelligence (Nasution et al., 2021).

Furthermore, Early Childhood Education addresses social-emotional aspects, encompassing attitudes, behaviour, and religious beliefs (Hanifah et al., 2021; Wakhidah & Zahroh, 2022). Additionally, it focuses on language acquisition and effective communication (Husna & Zahroh, 2023; Sa'diyah & Zahroh, 2023), considering the distinctive characteristics and developmental stages experienced during early childhood (Boakes, 2008; Morgan, 2016). The scope of education being discussed encompasses formal, informal, and non-formal forms of instruction (Ma, 2018; Onal, 2013; Wang, 2017). Kindergarten is a component of early childhood education within the formal educational framework (Demaine, 2007; Zhang et al., 2019).

The primary objective of the kindergarten learning activity program is to establish a solid groundwork for fostering children's attitudes (Liu et al., 2023; Meloni et al., 2021), knowledge (Miyashita, 2015), abilities, and creativity, essential for their adaptability to the environment and future growth and development (Melaku, 2018; Vaivada, 2020). One of the objectives of the kindergarten curriculum is to enhance originality or creativity. According to (Rahmad et al., 2022), creativity is an individual's capacity to generate novel concepts or tangible creations that exhibit a notable degree of divergence from existing entities. Individuals may possess this capacity provided they can cultivate their creative aptitude (Humaidi et al., 2022; Rahmah et al., 2022; Syaifuddin et al., 2022).

Children's creativity in kindergarten can be optimized through educational media (Khoiriyah et al., 2022; Safitri et al., 2023). Teachers employ various educational resources, like origami paper, to foster student creativity. (Sugianto et al., 2017), Asserted that origami, as an artistic pursuit, has numerous advantages for youngsters, including enhancing their creative and imaginative faculties.

In a broad sense, origami paper shares similarities with conventional form. However, it is a more captivating educational tool with a more excellent range of designs and colours. The utilization of learning media holds significant importance and is a crucial component in early childhood learning. Its presence enables the successful attainment of learning activities and objectives, ensuring their effective and efficient implementation. According to (Hudha et al., 2023), the term "media" refers to any tangible instrument capable of conveying messages and encouraging pupils to engage in learning. Moreover, (Darmayanti, Utomo, et al., 2023) posited that using instructional materials during the pedagogical process can engender novel aspirations and interests, foster motivation and stimulation in learning endeavours, and even psychologically affect youngsters.

The developmental phase of children's creativity in utilizing origami paper as an educational tool encompasses their creative and physical proficiencies, including fine motor skills. According to the Early Childhood Education Content Standards outlined (Durmuşoğlu et al., 2021), children between the ages of 5 and 6 possess artistic capabilities that enable them to create diverse shapes using paper. Additionally, the

Early Childhood Education Content Standards (Rahayu et al., 2022; W. Yang et al., 2021) indicate that children within the same age group demonstrate physical abilities that involve imitating uncomplicated paper folding techniques, typically involving 5 to 6 folds. Moreover, by Regulation 58/2009 issued by the Minister of National Education of the Republic of Indonesia, the developmental milestone of fine motor skills in children aged 5-6 years, specifically about folding origami paper, involves the ability to imitate various shapes.

According to a preliminary study conducted by researchers at the Assyfa Learning Center (YALC) Pasuruan Foundation Kindergarten, it was observed that teachers utilized origami paper as an instructional tool in the arts and creativity centre. This approach aimed to foster children's creativity by offering examples and guiding them through paper folding. The art of origami involves the folding of paper to create a representation of a particular form or shape. In addition to this, the instructor also encourages the youngsters to articulate their opinions or ideas freely.

Extensive research has been conducted on the endeavours of educators in fostering children's creativity through origami paper (Arduini, 2019; Arduini et al., 2019; Ge, 2012; Martinez, 2012; P. K. Yang, 2015). The distinguishing characteristic of this study lies in the utilization of folded origami paper to depict the form of an animal, specifically the octopus. This activity's primary objective is to foster the development of kids' creativity and to serve as an instructional tool for teaching counting and storytelling. Additionally, upon the conclusion of the exercise, the instructor will extend an invitation to the students to present the octopuses they have created by verbally stating the respective names assigned to their creations.

Hence, based on the above information, scholars seek to investigate further using origami paper as an educational tool for fostering children's creativity by creating "Octopus Media". This inquiry stems from the recognized significance of invention in child development. This study aims to comprehensively describe the utilization of origami paper, known explicitly as "OCCUT," in fostering creativity among kindergarten students.

METHOD

This study employs descriptive methodologies to elucidate the findings from observations and interviews conducted using the "OCCURITA" origami paper as an educational tool for fostering creativity in children aged 5-6 years at YALC Pasuruan. The application of "OCTOPUS" origami paper as an instructional tool for promoting children's creativity and gathering comprehensive data about the research subject. The Miles and Huberman approach, consisting of four stages (Data Collection, Data Reduction, Data Display, and Conclusion) (Darmayanti & In'am, 2022; Zahroh, Maghfiroh, et al., 2023), is employed for data analysis during fieldwork. The sequential progression of the methodology used in this study is visually represented in Figure 1.

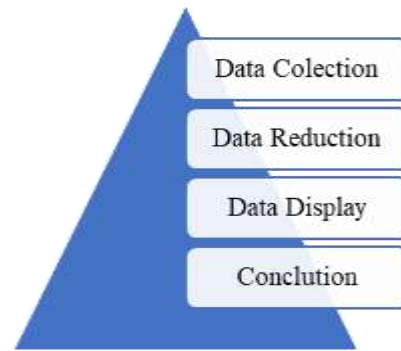


Figure 1. methodology employed in this study

The research conducted in this study was divided into four distinct stages, as depicted in Figure 1. Firstly, the initial step in the research process involves data collection. The present study examines the utilization of the "OCCURITA" origami paper in fostering children's creativity, encompassing planning, implementation, and development. Additionally, it investigates the challenges educators encounter when employing "OCCURITA" origami paper as an instructional tool to enhance the creative abilities of young learners at YALC Pasuruan Kindergarten. The data utilized in this study were acquired using several methods, including observations, interviews, documentation studies, and field notes.

Next, the process of data reduction is discussed. The present study focuses on analyzing data about using "OCCURITA" origami paper to foster the development of children's creativity at YALC Pasuruan Kindergarten. The research encompasses various aspects, including planning, implementing, and developing children's creativity. The study also investigates the challenges teachers encounter while employing origami paper as an educational tool in promoting creativity among kindergarten children.

The third aspect pertains to the display and presentation of data. This study involved the presentation of data in the form of a concise depiction of the utilization of "OCTOPUS" origami paper, the process of planning, implementation, and the fostering of creativity among children at YALC Pasuruan Kindergarten. The study also examined the challenges teachers face when employing origami paper as an educational tool to enhance the creative abilities of children at Pasuruan YALC Kindergarten.

Finally, the concluding step involves forming a judgment or conducting a verification. The conclusions derived from this study are predicated upon the findings of data analysis derived from field notes, observations, documentation, and other pertinent information gathered during fieldwork. The conclusion drawn involves using "OCTOPUS" origami paper as an instructional tool to enhance the creative abilities of children attending YALC Pasuruan Kindergarten.

RESULT AND DISCUSSION

The present study was conducted at YALC Pasuruan Kindergarten, situated in the specified location. The researchers interviewed art centre teachers and developed observation guidelines using checklists, documentation, and field notes.

The findings from the interview indicate that the role of planning in the learning process is of significant importance. The planning process occurs one week before the learning event, specifically seven days in advance, using the RKH methodology (Choirudin et al., 2021; Darmayanti, Hidayat et al., 2023). The teacher incorporates origami paper as an educational tool to foster children's creativity (Gunawan et al., 2023; Zahroh, Darmayanti, et al., 2023). The teacher aligns the origami activities with the established themes and sub-themes.

Through careful observation over five sessions, from the commencement to the conclusion of each lesson, the teacher develops a daily activity plan (RKH) to guide the learning process. Moreover, based on the findings of a comprehensive literature review done across four sessions, the researcher acquired insights regarding using origami paper as an instructional tool in the shape of a teacher-created daily activity plan (RKH). The fine motor abilities of kindergarten children in folding activities using origami paper are addressed by the Regulation of the Minister of National Education of the Republic of Indonesia Number 58 of 2009, which establishes the Early Childhood Education Standards (Ahmed et al., 2021; Usmiyatun et al., 2023). Through imitation, the youngster can replicate the form of an "OCTOPUS," which is crafted by the teacher with origami paper. The configuration of the "Octopus Media" prototype is visually depicted in Figure 2.



Figure 2. Octopus Media

As indicated by the observations, The use of origami paper as a pedagogical tool was carried out by pre-established lesson plans. During the folding activity, the children displayed a high level of enthusiasm. Moreover, based on the findings of documentation studies conducted throughout multiple sessions, researchers acquired data regarding the incorporation of origami paper as an educational tool. This information was gained through images capturing children's engagement in folding the "OCCUT" shape. Most children in group B demonstrated the capacity for imitation by successfully reproducing and expanding upon the teacher's provided example during the activity involving folding the "OCTOPUS" shape.

The findings derived from the observations conducted by educators at the arts and creativity centre, encompassing the commencement and conclusion of each class, indicate that using origami paper as an instructional tool can foster the development of children's creative abilities. The image depicted in Figure 3 appears to be similar to the subject matter being discussed.



Figure 2. subject matter being discussed

In Figure 3, kids are observed creating perforations in their "octopus" model. There exist minuscule apertures. There exist significant gaps. The apertures are employed to denote the vacuous appendages of the octopod. Students are instructed to create four perforations on each leg. Students are acquiring counting skills indirectly. Several pupils presented more than four holes, prompting another student to inquire, "Madam, why does Andin's creation consist of five holes?" "Should they not be four, madam?" asked the student. This observation suggests that pupils acquire the skills of numeracy and critical thinking through the use of these talents in their everyday tasks. When questioned about the five holes created, the pupil responded subduedly, stating, "Mother, the holes I made are of diminutive size, ma'am." To prevent the octopus from experiencing impaired mobility, it is advised not to introduce any openings or gaps, ma'am. This observation suggests that pupils can enhance their creative aptitude by generating problem-solving strategies, emphasizing the potential ramifications of implementing such solutions within their everyday pursuits. The presence of compassion is evident in this context. In addition, a student created a representation of an octopus adorned with hair-like structures on its head. The student elucidated that these structures were intended to resemble hair. Various manifestations of creativity were observed in diverse octopuses, exhibiting variations in height, girth, and other physical attributes.

The form depicted in Figure 2 and Figure 3 holds the potential for replication in future educational contexts. Moreover, according to the interview findings, teachers encountered two challenges (Afifah et al., 2022; Yuniwati et al., 2023). Firstly, there needed to be more origami paper as teachers need additional instructional materials. Secondly, some children displayed disinterest in engaging in folding activities. Based on the findings obtained from interviews conducted with art centre teachers and teachers from group B, it was observed that the teachers' planning in managing the arts centre involved the creation of a daily schedule (referred to as RKH) one day before the implementation of the learning activities. This planning process was guided by the Rani Darmayanti, Choirudin

provisions outlined in PERMEN No. 58 of 2009, which specify the learning objectives, developmental aspects, and age stages relevant to children's development. Upon the child's arrival in the classroom, the instructor extends a warm greeting, inquiring about the child's well-being and expressing admiration for their beauty.

The present study examines the planning strategies instructors employ in managing art centres specifically designed for children aged 5. Every educator holds their perspective regarding the instructional tools that can foster children's creativity, including using origami paper for folding exercises. The utilization of this particular origami paper is frequently observed within the arts and creative centre at YALC Pasuruan Kindergarten, as it is favoured by the children in attendance. In addition, origami paper serves as a medium for folding activities and engaging in cutting, tearing, and collage endeavours.

In the next section, we will analyze the outcomes of interviews and researchers' observations about using origami paper as an educational tool to foster the creative abilities of children attending YALC Pasuruan Kindergarten.

This study explores the potential of utilizing origami paper as an educational tool to enhance the creative development of children attending YALC Pasuruan Kindergarten. Developing a Daily Activity Plan (RKH) for incorporating origami paper as an educational tool to enhance the creativity of YALC Pasuruan Kindergarten students is conducted according to the guidelines outlined in PERMEN No. 58 of 2009. (Darmayanti et al., 2021) posits that "Pla, running" is a strategic endeavour to ascertain the individuals or entities accountable for distinct actions to attain shared objectives.

Furthermore, as stated by (Schachter, 2019; Yildirim, 2010), additional measures might be undertaken in formulating strategies. (a) Develop a monthly activity calendar based on the centre rotation schedule to facilitate teachers' preparedness in accommodating each group of children engaged in collaborative play or work at the arts centre. (b) Prioritize acquiring pertinent information about the designated theme, drawing from authoritative source books, and formulating relevant questions for the children. Additionally, organize a comprehensive learning plan that encompasses a range of activities. (c) Subsequently, the teacher should meticulously arrange the play environment, ensuring that the tools and materials selected align with the designated theme and are set according to the established plan. (d) Facilitate children's successful engagement by giving them an initial entry point into the play experience, fostering their sense of accomplishment and support. Therefore, educators must engage in deliberate preparation one day before the scheduled activity while also adhering to the guidelines outlined.

Using origami paper as an instructional tool for the "OCCUT" program aims to enhance the creative development of young learners at YALC Pasuruan Kindergarten. The study focused on using origami paper as an instructional tool to enhance the creative abilities of children enrolled in the YALC Pasuruan Kindergarten's Group B, specifically the art and creativity center group. (Nur Atika et al., 2019) Asserts that the centre's establishment encompasses various aspects such as teacher training, setting

organization, play initiation, engagement during play, clean-up procedures, and reflection on the experience.

In the context of utilizing origami paper as an educational tool for fostering children's creativity, it is imperative for instructors to effectively incorporate this resource into their instructional practices to facilitate optimal learning outcomes. The present study focuses on using origami paper as an instructional tool to foster creativity among children aged 5-6 years at YALC Pasuruan Kindergarten.

The present study investigates using origami paper as an educational tool for fostering children's creativity at YALC Pasuruan Kindergarten. The cultivation of creative abilities in early childhood education Children, specifically young individuals, can acquire knowledge and skills through the guidance and demonstration provided by their teachers. Moreover, children can articulate their thoughts and perspectives regarding folding origami paper. Using origami paper as an educational tool at YALC Pasuruan Kindergarten facilitates the enhancement of children's creative abilities. This phenomenon is evident in the proliferation of youngsters engaging in origami paper folding activities when their interests extend beyond the prescribed examples provided by the instructor.

Challenges encountered by educators when using origami paper as an instructional tool. When employing origami paper as an educational tool, teachers face challenges and barriers from students and teachers.

Nganga (2009) posits that obstacles to the learning process may arise from various sources, including the teacher, students, family environment, or facility-related concerns. The challenges encountered by educators when utilizing origami paper as an instructional tool to foster the creativity of YALC Pasuruan Kindergarten students encompass two main aspects: (a) Teacher-related difficulties, which manifest in insufficient preparation of instructional materials, leading to a shortage of paper during the implementation of the activity, and (b) Student-related obstacles, characterized by a lack of interest exhibited by the children towards engaging in folding exercises. To surmount these challenges, educators must foster effective collaboration among their peers. To address these challenges, the teacher employs the following strategies: (a) Before the instructional session, the teacher diligently prepares the educational materials, taking into consideration the quantity of media required and the number of students while also ensuring that the materials align with the specific needs of the children.

CONCLUSION

Researchers found that "OCCURITA" origami paper is a suitable learning medium for 5-6-year-olds at YALC Pasuruan Kindergarten regarding planning and implementation, and children's creativity has developed. Children can create from the teacher's examples during folding exercises but must focus more on them. Both teachers and students make "OCTOPUS" origami paper challenging for YALC Pasuruan Kindergarten teachers to use as a learning medium. Teachers must prepare learning

media. Therefore, origami paper lacks learning media during learning. Children in poor health do not desire to fold origami paper.

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