Creative Strategy for E-Scrapbook Media to Stimulate Early Childhood Creativity

Ni Luh Trisna Angreni1*, Didith Pramunditya Ambara2

12 Pendidikan Dasar, Universitas Pendidikan Ganesha, Denpasar, Indonesia

ABSTRACT

Parental affection shown inappropriately can hinder or limit children's activities and movements, so that children cannot explore freely and develop their imagination and creativity. This research aims to determine the significant influence of using e-scrapbook media on the creativity of group B children. This type of research is a quasi-experiment with a non-equivalent control group design. The population in this study was all 42 children from Group B, Denpasar. The research sample was taken using a saturated sampling technique because all population members were used as samples. Group B2, consisting of 21 children, was selected as the experimental group, and Group B1, consisting of 21 children, was selected as the control group. The data collection method used is a non-test method, namely observation using an assessment instrument for children's work based on a creativity assessment rubric. This research uses descriptive statistical analysis and inferential statistics. The results of this study show that the average post-test score in the experimental group was 82.57, while in the control group, it was 63, with a maximum score of 100. The t-test results showed a significant difference in the creativity of children taught using e-scrapbook media and those taught using conventional learning. It was concluded that the use of e-scrapbook media had a significant effect on the creativity of group B children.

1. INTRODUCTION

Education for early childhood is an effort to guide, nurture, stimulate so as to produce abilities and skills that must be achieved by children according to their level of development. (Pura & Asnawati, 2019; Suriati et al., 2019). The provision of early childhood education aims to facilitate all abilities and develop...
children’s skills and is not only focused on teaching reading, writing and arithmetic skills. (Anggraini et al., 2019; Asiah, 2018; Reksyika & Haryanto, 2019; Winarti & Suryana, 2020). Early childhood is synonymous with unique, active, creative, imaginative and curious individuals, so they must be facilitated with activities that can support their character development. (Yuniarni, 2016; Zaenab & Sueca, 2018). Learning activities while playing can provide opportunities for children to seek their own knowledge and learning experiences and then practice newly acquired skills, think creatively and express ideas for new things, and can solve the problems they are facing. (Sabani, 2019; Tanu, 2017). Providing freedom to enrich one’s own experiences through activities one likes can make learning more meaningful and make children creative.

Creativity is the ability to create something new or recreate existing things into new concepts, being able to think creatively in looking for unusual ways to solve a problem, and applying new, useful ideas. (Oktaviana, 2022; Sari et al., 2020). Efforts to develop creativity are influenced by supporting and inhibiting factors. Supporting or driving factors for the development of children’s creativity can come from within the individual, parental support, the surrounding environment, infrastructure, parenting patterns or ways of educating children. (Istiqomah & Maemonah, 2022; Novitasari, 2018). Meanwhile, factors inhibiting the development of children’s creativity, such as evaluating or assessing children’s creativity, giving gifts, competence or competition between children, and an environment that is too restrictive (Munasti et al., 2021; Sartika & Erni Munastiwi, 2019; Solifah et al., 2020). Apart from that, wrong parenting patterns applied by parents can also hinder the development of children’s creativity. Parental affection shown in an inappropriate way can hinder or limit children’s activities and movements so that children cannot explore freely and develop their imagination and creativity. (Anggraeni & Hibana, 2021; Permatasari, 2014).

In the Freedom to Learn Curriculum, the essence of learning activities is meaningful play as an embodiment of “Freedom to Learn, Freedom to Play”. Learning can be more meaningful if it involves lots of references and learning resources such as using technology-based learning media, one of which is in developing children’s creativity (Heswari & Patri, 2022; Shalikiah, 2016). To produce a young generation who is familiar with technology, it is necessary to combine conventional and digital-based learning in teaching and learning activities in schools. One solution is to use the TPACK approach. The TPACK approach stands for Technological, Pedagogical and Content of Knowledge, which is a reference or framework used by educators to design new learning models by collaborating three main aspects which include technology, pedagogy and material knowledge into one unit. (Nurmansyah, 2020; Nusa et al., 2021). The existence of science and technology which is developing so rapidly can be used as a reference to improve the quality of learning carried out by a teacher, therefore a teacher needs to understand and have Technological Pedagogical and Content Knowledge abilities in order to increase his professionalism. (Farikah & Al Firdaus, 2020; Maknun, 2022).

The reality encountered during observations from August to October 2022 at Candra Kasih Kindergarten, Denpasar was that there were problems in efforts to develop children’s creativity, such as children often experiencing mood swings or getting bored quickly and children often say “can’t Ms” before they tried. To do this task. Then, in drawing and colouring activities, the teacher gives examples to the children and the children tend to imitate the examples directly so that the children cannot be creative by determining their own ideas and imagination. Not only that, in activities such as free drawing or when creating work and decorating it according to their own imagination, most children are still confused about expressing their ideas and imagination so they will imitate their friends’ work.

There are a total of 42 students registered in group B at Candra Kasih Kindergarten, Denpasar. The lot was divided into 2 classes, namely group B1 and group B2, each group consisting of 21 children. In each group there are several children whose creative skills have not developed optimally. In group B1 there were 10 children whose creative skills had not developed optimally or were still low, while in group B2 there were 12 children. This data was obtained from the results of observations and assessments carried out by teachers when researchers implemented PLP II at Candra Kasih Kindergarten, Denpasar. Based on these problems, the solution that can be offered is the use of electronic-based learning media which is able to provide opportunities for children to be creative by expressing their ideas and imagination freely. The free expression of imagination can support the stimulation of creativity in group B children at Candra Kasih Kindergarten, Denpasar. The learning media is e-scrapbook media.

Scrapbooks is a scrapbook that contains a collection of pictures, photos, stories, notes arranged and decorated as attractively as possible using various materials. (N. Lestari et al., 2022; Qobiyah et al., 2022). This e-scrapbook media is similar to scrapbooks in general but was developed using electronic media. E-scrapbook media is a media in the form of scrapbook software or in the form of an application that is all in, meaning that with just one software, children can use it for many times. (Rahmawati & Tirtayani, 2021; Rosihah & Pamungkas, 2018). E-scrapbook media can be operated via mobile phone, tablet, laptop or computer and can be used repeatedly and many options are provided in one session, so from an economic perspective this media is not considered expensive. E-scrapbook media can provide concrete stimulus to
children by creating something in the form of pictures, so if you look at the target age, this media is appropriate for early childhood. So using e-scrapbook media in children’s learning activities in a classroom setting can have an influence on children’s creativity. Thus, this research aims to analyze the influence of creativity between groups of children who use e-scrapbook media and groups of children who use conventional learning on group B children at Candra Kasih Kindergarten.

2. METHOD

The type of research used is quantitative research with a quasi-experimental design. The design used in this research is a Non-Equivalent Control Group Design. The design used involved two groups, namely the first group as an experimental group that received special treatment using e-scrapbook media and the second group as a control group using conventional learning or learning that is generally applied in the school. The population in this study was all 42 children from group B at Candra Kasih Kindergarten, Denpasar. The sampling technique used is Saturated Sampling, because all members of the population are used as samples. The data collection method used in this research is a non-test method, namely the observation method. The observation method is an activity that bases field facts and texts through five-sensory experiences without using any manipulation (H. Hasanah, 2017; Nugraha et al., 2021). Observation data regarding the creativity of group B children is a type of data that is quantitative or produces data in the form of numbers. The grid of the creativity observation sheet for group B children can be seen in Table 1.

Table 1. Group B Children’s Creativity Observation Sheet Grid

<table>
<thead>
<tr>
<th>Variable</th>
<th>Basic competencies</th>
<th>Aspect</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>KD 3.15</td>
<td>1) Fluency thinking skills</td>
<td>Able to express yourself when being creative in decorating images</td>
</tr>
<tr>
<td></td>
<td>Get to know various artistic works and activities</td>
<td>2) Flexible or flexible thinking skills (flexibility)</td>
<td>Able to conduct your own experiments when being creative in decorating pictures</td>
</tr>
<tr>
<td></td>
<td>KD 4.15</td>
<td>3) Original thinking skills (originality)</td>
<td>Able to develop your own ideas and imagination when being creative in decorating images</td>
</tr>
<tr>
<td></td>
<td>Demonstrate artistic works and activities using various media</td>
<td>4) Detailing elaboration or elaboration skills (elaboration)</td>
<td>Use many elements / materials / features when being creative in decorating images</td>
</tr>
</tbody>
</table>

Analyzing the data in this research uses descriptive statistical analysis methods and inferential statistical analysis. Descriptive statistics are statistics used to analyze data by describing or describing data that has been collected without the intention of drawing general conclusions or generalizations (Maswar, 2017; Sholikhah, 2016). Descriptive statistical analysis in this study was used to describe data regarding the creativity of children who use e-scrapbook media, through average values (mean), standard deviation and variance. Meanwhile, inferential statistics is a technique of analyzing data from samples to test hypotheses as a basis for drawing conclusions and applying the results to the population (Nurinayah et al., 2021; Nurjanah, 2020).

3. RESULT AND DISCUSSION

Result

The data in this study was classified into two, namely the creativity of group B children who were taught using e-scrapbook media, the creativity of group B children who were taught through conventional learning. The recapitulation of descriptive statistical analysis of data on children’s creativity in the experimental group and control group is presented in Table 2. The level of creativity of group B children can be determined by conventionalizing the average value of children’s creativity using the five scale Benchmark Assessment (PAP) criteria. This shows that the creativity of the experimental group children was higher than that of the control group. The data distribution normality test was carried out to determine whether the frequency distribution of scores for each variable was normally distributed or not. To find out whether the distribution of children’s creativity score data is normally distributed or not, an analysis was carried out using the chi-square formula (Handayani & Abadi, 2020; Lestariani et al., 2019). A recapitulation of the results of the research sample normality test is presented in Table 3.
After the data is declared to be normally distributed, it is continued with a homogeneity test to determine whether the research sample data has a homogeneous variance or not. A recapitulation of the results of the research sample variance homogeneity test is presented in Table 4. Based on these calculations, all data has met the prerequisite tests so that it can be continued with hypothesis testing using the t-test. A recapitulation of the results of the t-test analysis of the research sample is presented in Table 5. Based on the results of the t-test analysis, the value of t-count > t-table is obtained so that H0 is rejected and H1 is accepted. This shows that there is a significant difference in the creativity of children who are taught using e-scrapbook media and the group of children who are taught using conventional learning in group B children at Candra Kish Kindergarten, Denpasar.

Table 2. Recapitulation of Descriptive Statistical Analysis of Data on Children's Creativity Results in the Experimental Group and Control Group

<table>
<thead>
<tr>
<th>Research result</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>82.57</td>
<td>63</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>9.77</td>
<td>9.72</td>
</tr>
<tr>
<td>Variance</td>
<td>95.51</td>
<td>94.65</td>
</tr>
<tr>
<td>The highest score</td>
<td>94</td>
<td>75</td>
</tr>
<tr>
<td>Lowest Value</td>
<td>63</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 3. Recapitulation of Research Sample Normality Test Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Sample Group</th>
<th>Total Sample</th>
<th>Zcount</th>
<th>Ztable</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental Group</td>
<td>21</td>
<td>10.11</td>
<td>11.07</td>
<td>Normally distributed</td>
</tr>
<tr>
<td>2</td>
<td>Control Group</td>
<td>21</td>
<td>6.15</td>
<td>11.07</td>
<td>Normally distributed</td>
</tr>
</tbody>
</table>

Table 4. Recapitulation of Research Sample Variance Homogeneity Test Results

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mean</th>
<th>Elementary School</th>
<th>Variance</th>
<th>F-Count</th>
<th>F-Table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>82.57</td>
<td>9.77</td>
<td>95.51</td>
<td>1.00</td>
<td>2.09</td>
<td>Homogeneous</td>
</tr>
<tr>
<td>Control Group</td>
<td>63</td>
<td>9.72</td>
<td>94.65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Recapitulation of Research Sample T-Test Analysis Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Sample</th>
<th>N</th>
<th>Etc</th>
<th>Mean</th>
<th>T Count</th>
<th>T Table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental Group</td>
<td>21</td>
<td>40</td>
<td>82.57</td>
<td>6.70</td>
<td>2.021</td>
<td>H0 is rejected</td>
</tr>
<tr>
<td>2</td>
<td>Control Group</td>
<td>21</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Developing creativity is an activity carried out in order to foster children's potential from an early age, so that creativity becomes one of the abilities that must be developed from an early age (Hasanah & Suyadi, 2020; Munasti et al., 2021; Sartika & Erni Munastiti, 2019). Creativity is closely related to higher order thinking skills. Children’s creativity can be achieved if they are trained from an early age and accustomed to using higher order thinking skills in everyday life, especially in gaining learning experience at PAUD institutions. (Astuti et al., 2022; Sutama et al., 2020). Having higher order thinking skills can improve children’s thinking abilities at a higher level, especially those related to the ability to think critically, be creative in solving problems, and be able to make decisions in complex situations. (Cahyaningrum et al., 2023; Munar et al., 2022).

On an early age, children are not yet able to think abstractly, so in conveying information to children, appropriate learning media are needed to support their learning activities. (Aprinawati, 2017; Nasution et al., 2020; Ningsih & Mahyuddin, 2021). One learning media that can be used in accordance with current developments is electronic-based media. Even though there is still little application of electronic-based media at the PAUD level, it is not impossible that the use of electronic-based media can be implemented because it can give a new impression to children, so that children become interested in trying it. Previous research states that electronic-based learning media is suitable for use in early childhood learning, because it can support the process of effective and enjoyable learning activities for children. (Indriasih et al., 2020; Putra & Afrilia, 2020). One electronic-based media that can be used to stimulate creativity in early childhood is e-scrapbook media.

Media e-scrapbook has many features so that it can be used according to needs and ongoing themes, not only for picture decorating activities but also for other (Antara & Dewantara, 2022; Rahmawati & Tirtayani, 2021). The attractive appearance of e-scrapbook media makes children enthusiastic about doing
their assignments. Teachers also gave a positive response, saying that e-scrapbook media can provide new impressions and learning experiences for children. The availability of facilities in the form of a computer laboratory makes the use of e-scrapbooks or other electronic-based media easy to implement. The use of electronic-based learning media to stimulate creativity in early childhood is supported by previous research that uses kid-centred applications to develop creativity in early childhood (Afrida, 2019; Jaya, 2019).

In the experimental group, learning activities using e-scrapbook media in an effort to increase children’s creativity have run optimally. The use of e-scrapbook media to increase children’s creativity is a learning innovation that uses today’s digital-based media, which is operated using electronic media, namely laptops. E-scrapbook media can attract children’s interest and attention and make them want to try them by creating or decorating things in the form of pictures and colours so that they can create fun learning activities for children. Learning activities using e-scrapbook media can give children the opportunity to freely develop their imagination and creativity so that they are able to express themselves, develop ideas, and carry out their own experiments using various materials, elements, or things in their environment. The results of this research support previous research that stated that e-scrapbook media is indeed appropriate and appropriate to choose to stimulate creativity in early childhood (Muktadir et al., 2020; Rahmawati & Tirtayani, 2021). The use of e-scrapbook media can also provide stimulation for creative thinking abilities, which are closely related to children’s creativity. Similar research states that using scrapbooking media can improve students’ creative thinking skills. Apart from creativity and creative thinking skills, e-scrapbook media can also stimulate other aspects of children, such as cognitive, language, and fine motor skills. (ID Lestari et al., 2022; Muktadir et al., 2020).

The activity of decorating pictures using e-scrapbook media can be combined with other activities such as recognizing the concept of numbers, counting and looking for traces. Previous research has proven that the use of scrapbook media has an influence on the cognitive development of children aged 5-6 years (Pertiwi, 2019; Ristiyah et al., 2023). Language aspects in children can also be developed through the use of e-scrapbook media, such as activities to recognize vocabulary and vowels. The activity of playing scrapbook cards can stimulate the language skills of group B children. Using e-scrapbook media requires the child’s finger skills to move the mouse along with eye coordination when observing the laptop screen. This activity can train children’s fine motor skills in using a mouse to operate e-scrapbook media. This is proven by previous research which states that using a computer mouse can train children’s fine motor skills (Muktadir et al., 2020; Mutia & Ismet, 2019).

The media e-scrapbook has several advantages when used in this research, such as being modern or electronic-based, so it can give a new impression to children. E-scrapbooks have an attractive appearance and contain pictures, colours, stickers, and emojis, which can increase children’s enthusiasm and interest in trying this media. The development and design of e-scrapbook media have been adjusted to the age level of group B children, so this media is not too difficult to use. The advantage of e-scrapbook media, which is no less important, is that this media can provide opportunities for children to be creative freely according to their ideas and creativity. According to the research results, learning using e-scrapbook media in this research has the benefit of increasing the creativity of young children.

4. CONCLUSION

This research shows that there is a significant influence of the use of e-scrapbook media on the creativity of group B children at Candra Kasih Kindergarten. The results of this research can add insight to school principals and teachers regarding the expansion of media, which includes not only manual media but also electronic media, one of which is e-scrapbook media, which has been proven to be feasible and appropriate for stimulating the creativity of early childhood, especially group B children. The existence of e-scrapbook media can be used as an alternative to learning that targets stimulating creativity with a choice of electronic media.

5. REFERENCES


JJPAUD. P-ISSN: 2613-9669 E-ISSN: 2613-9650


