

The Effectiveness of Educational Games in Understanding Learning English for Kindergarten Students Bunga Bangsa School, Indonesia

Kiki Irafa Candra¹, Rizqy Aisyah Leonia¹, Eni Suyantri^{2*}

¹Universitas Negeri Yogyakarta, Indonesia

²Universitas Mataram, Indonesia

*Corresponding Author: enisuyantri@unram.ac.id

Article History

Received : June 16th, 2024

Revised : July 08th, 2024

Accepted : August 02th, 2024

Abstract: Education to children is very instrumental for understanding future learning, to be able to provide understanding for children must be with a fun learning model with games. This study aims to see the effectiveness of educational games *Word Scavenger Hunt* on the understanding of English learning at Bunga Bangsa Kindergarten, this study uses quasi-experimental methodology with a control group and an experimental group. In addition, the students of Bunga Bangsa Kindergarten gave positive reactions to the educational games used in learning because the educational games made the learning process more fun, exciting and by incorporating educational games into English learning is an effective approach to improve learning outcomes. In addition, the media can stimulate students' desire and enthusiasm to learn English in the long run. So in conclusion, Bunga Bangsa Kindergarten students understand English learning more easily through the *Word Scavenger Hunt* educational game than only with the Conventional learning model.

Keywords: *English Learning, Game Education, Student*

INTRODUCTION

In the current era of globalisation, mastery of the English language is an important skill that children should have from an early age. In Indonesia, English education often begins at the Bunga Bangsa Kindergarten (TK) level, with the aim of equipping children with a solid foundation for future communication. However, the traditional approach of teaching English to children often faces challenges, such as a lack of engagement and interest from students. To

overcome these challenges, many educators and researchers have focused on the use of educational games as an alternative method to enhance English language learning. Educational games, designed with the principles of education and child development in mind, are expected to create a fun and effective learning environment. Educational games in kindergarten are very diverse. In this study, the educational game used is *Word Scavenger Hunt* with the auxiliary media, namely *Flash Card*. Described in Picture 1.



Picture 1. Flash Card

Word Scavenger Hunt is a word hunt activity that can be designed to stimulate language development in early childhood. The

activity engages children in a search for specific words in their immediate environment, both indoors and outdoors. This approach has the

potential to motivate students, improve their language skills, and help them understand and apply English vocabulary and structures in a more natural and fun way. The benefits of the game are very diverse including, Vocabulary Development, Speech Improvement, Language Structure Understanding, and Cognitive Skills Development.

This article will also explore the effectiveness of educational games in English language learning for kindergarten students at Kindegarten Bunga Bangsa, Indonesia. By examining the implementation and impact of educational games in the form of *Word Scavenger Hunt*, it is hoped to provide insight into the extent to which this method can improve English language understanding and skills at an early age. The main focus of this article is to assess how educational games contribute to children's learning, and to evaluate the benefits and challenges faced in their implementation in educational settings.

The relevance of educational games in English language learning is clear in this context. Language education in early childhood is an important phase to form the foundation of language skills. However, teaching English in early childhood has its own challenges. Children at this age tend to be more responsive to learning that involves games and interactive elements. Therefore, the use of educational games in English learning is expected to be an interesting alternative to explore. Understanding how well educational games can improve children's English language skills at Bunga Bangsa Kindergarten is the primary objective of this study. The second objective is to understand how students feel about this teaching method. In addition, this study aims to identify factors that influence the effectiveness of educational games when applied to students' English language acquisition environment.

The main objective of this research is to understand how well kindergarten children learn English through the use of the Word Scavenger Hunt educational game. The research is also intended to help improve early childhood education pedagogical techniques, making them more efficient and engaging. The ultimate goal of this research is to provide a basis for kindergarten teachers to develop better strategies in teaching English to their students. In addition, this research also aims to expand our understanding of effective and fun methods for children to learn

English. English language learning in early childhood education has different characteristics from language learning at the next level of education. At this stage, the learning approach must be adapted to the child's overall development, including cognitive, emotional, social and physical development. Therefore, the acquisition of English language skills in kindergarten emphasises the following aspects:

1. Game-based Learning

Children from the toddler stage to the lower grades in primary school tend to learn while playing. Therefore, English language learning at this stage should be designed by incorporating elements of fun as well as educational games. These games can be in the form of nursery rhymes, word games, role-playing activities, and various other creative activities that can arouse children's interest and motivation to learn English.

2. Use of Relevant and Experience-Based Materials

The learning materials used to teach English should be relevant to students' daily experiences. The aim is to establish a connection between English teaching and students' daily life experiences. For example, using learning materials that introduce the names of objects around them, common daily activities, and simple stories that are easy for children to understand.

3. Child-Centred Learning

English language learning in kindergarten should be designed to be child-centred. This means that teachers should pay attention to the interests, needs and development of each child in the learning process. Thus, teachers can adjust learning strategies and materials to suit the characteristics and needs of each child.

4. Use of Technology and Interactive Media

Utilising technology and interactive media, such as educational games, animated films and learning software, can be a very effective method of teaching English to kindergarten students. Technology and interactive media have the potential to enhance children's learning experience by making it more interesting and less monotonous. In addition, such media can foster a sense of independence and encourage exploration in the learning process.

5. Collaboration Between Teachers, Parents and the Community

Cooperation between educators, caregivers and the surrounding community is essential in facilitating children's early language learning in kindergarten. Parents can act as educational allies who assist children in improving their English language skills at home, while the surrounding environment, including peers and the surrounding community, can provide additional inspiration and motivation for children in their English language acquisition.

By prioritising the incorporation of the above-mentioned factors into the English language learning curriculum in kindergarten, it is hoped that children will have a fun and meaningful experience while mastering English language skills early on. When it comes to building a strong foundation for future development, nothing is more important than language skills taught in early childhood education programmes. Educational games play an important role in helping children learn while keeping them engaged and entertained. Some of the important roles of educational play in the early years of a child's education are as follows:

1. Increase Learning Engagement and Motivation

The aim of this project is to use interactive and fun educational games to provide instructional and engaging learning experiences for children. These experiences are expected to increase children's engagement and motivation in the learning process. By engaging in educational games, students can acquire knowledge in a more natural way, free from the pressure and excessive expectations often associated with traditional learning methods.

2. Facilitate Active and Experiential Learning

Educational games facilitate student learning through hands-on experience. By engaging in various educational games, children can actively explore, experiment and participate in other forms of active learning, which enhances their understanding of subjects at a deeper level.

3. Developing Social and Cognitive Skills

Engaging in collaborative play with peers using educational games helps develop a range of social skills in children, including effective communication and the ability to cooperate. In

addition, games provide opportunities for students to improve their cognitive abilities, such as problem-solving strategies, decision-making skills and creative thinking.

4. Strengthening Emotional Connection with Learning

Well-made educational games have the potential to foster a fun and fulfilling learning experience for students, thus enhancing their emotional connection to the learning process. Children's motivation to learn English can be enhanced by fostering a sense of happiness and joy during the learning experience.

5. Encourages Independent Learning and Exploration

By engaging in educational play, children are given the opportunity to acquire knowledge independently and through exploration, so that they can develop their independence and curiosity. Early childhood learning requires active and proactive involvement of children in the learning process, which is very important. Educational games play an important role in early childhood learning, especially in the context of learning English. Using engaging and dynamic methodologies, educational games can improve students' English skills in a more efficient and entertaining way, starting from an early age.

METHODS

The research method used involves a quantitative approach with a quasi-experimental type of research with a control group and an experimental group. In this study, the experimental class and control class were not randomly selected so that the design in this study was in the form of a Nonequivalent (Pretest and Posttest) Control Group Design. According to Sugiyono (2017, p. 79) Nonequivalent (Pretest and Posttest) Control Group Design is the most popular approach in quasi-experiments, experimental groups and control groups are selected not by random means. Both classes were given a pretest and posttest and only the experimental group received treatment. This method allows comparisons between the group that used the educational game and the group that did not, although control over all outside variables cannot be fully exercised. It provides a practical approach to assessing the impact of educational games while still considering the

limitations of real-world settings (Isnawan, n.d.). Meanwhile, according to Sugiyono (2014: 77), Quasi Experimental Design has a control group, but it cannot function fully to control outside variables that affect the implementation of the experiment.

This study aims to compare English learning outcomes between two groups of children: one who used the educational game Word Scavenger Hunt and another who followed traditional English teaching methods. The research population consists of children in kindergarten at Bunga Bangsa School, with two groups of kindergarten classes selected as samples. The experimental group will use the Word Scavenger Hunt game in the English learning process for a certain period, while the control group follows the conventional method. The research instruments include pretests and posttests to measure children's English language skills, observation notes to record children's engagement and responses, and questionnaires for teachers to evaluate the effectiveness and difficulty of the methods used. The research

procedure began with the development and validation of the instruments, followed by the implementation of the initial test, intervention with games, observation during learning, and the final test. Data were analysed quantitatively using descriptive and inferential statistics and qualitatively through analysis of observation notes and feedback from teachers. The study aimed to determine whether there was a significant difference in English language proficiency between the two groups, as well as provide recommendations regarding the use of educational games in the English curriculum for early childhood.

FINDINGS AND DISCUSSION

Findings

This study initially collected 1,162 pretest results and 1,613 posttest results. After being treated with educational games as learning media, the pretest average score was 68.35, while the posttest average score increased to 94.88.

Table 1. Recapitulation of Pretest and Posttest Scores

No.	Data	Pretest	Posttest
1.	Valid	12	12
2.	Visiting	0	0
3.	Mean	68.35	94.88
4.	Median	66	100
5.	Mode	66	83
6.	Minimum	42	83
7.	Maximum	75	100
	Total	1162	1613

The Table 1 above presents the pretest and posttest scores collected from 17 students at Light Bud Kindergarten. The pretest data includes 17 samples with a total score of 1,162. The data has a mean of 68.35, median of 66, and mode of 66. The scores range from a minimum of 42 to a maximum of 75. In the same table, the posttest data from the 17 samples totalled 1,612. The mean score for this data set is 94.88, with a median and mode of 100. Scores ranged from a minimum of 83 to a maximum of 100. This shows a 26% increase in the mean score from 68.35 to 94.88, indicating a significant improvement in English language skills, particularly in vocabulary related to fruit names, through the use of educational games as learning media.

Then the significant decision rule or significant test rule criteria:

H1 will be accepted if $t\text{-Calculate} \leq t\text{-Table}$, H1 will be accepted if $t\text{-Hitung} \geq t\text{-Table}$

The t-Table value can be determined using the t-distribution table with a significant level of $\alpha = 0.05$ and the value of $db = n-1 = 17-1 = 16$. Then the value of $t_{0.05} = 1.7746$ is obtained. It can be concluded that H0 is rejected and H1 is accepted, which means that the hypothesis in this study is accepted that educational game learning media is effectively used in learning English.

Discussion

This study evaluated the effectiveness of the educational game *Word Scavenger Hunt* in improving English comprehension among kindergarten students at Sekolah Bunga Bangsa, Indonesia. The results showed a significant improvement in the English language skills of

students who participated in the game compared to the control group who used traditional teaching methods. These findings can be linked to some relevant educational theories. Jean Piaget suggested that play is an important way for children to actively learn and build cognitive structures (Sandra Levey & Susan Polirstok, n.d.).

This research supports Piaget's theory by showing that games like *Word Scavenger Hunt* help students assimilate new vocabulary in a fun context. In addition, Lev Vygotsky's theory of the Zone of Proximal Development (ZPD) is also relevant, as the game provides challenges appropriate to the students' abilities, allowing them to learn English with the necessary support (Piaget, 1964). Albert Bandura's theory of social learning through observation and imitation is also appropriate, as the game encourages social interaction among students, enriching their learning experience. Intrinsic and extrinsic motivation, as described in motivation theory, play an important role, with games enhancing student motivation through elements of fun and competition. Finally, the principle of constructivism which emphasises active learning is also supported by the results, as the game engages students in hands-on exploration and application of English knowledge.

This study is in line with research conducted by several researchers who have explored the effects of educational games in English language learning and early childhood cognitive development. One of the relevant studies was conducted by (Mamahit & Reandsi, 2022) who found that vocabulary-based games can improve English language skills in early childhood. Their research showed that games involving physical and mental activities, such as word searches, can improve vocabulary comprehension and overall language skills.

In addition, research (Sariharjo et al., n.d.) on the effectiveness of games in English language teaching also supports this finding. The researcher found that educational games not only increased students' motivation but also deepened their understanding of new vocabulary and language use in social contexts. S. Case (Case et al., 2011) also conducted a study showing that technology-based games can increase English language engagement and learning among young children. Their results show that active interaction through digital games can help

children learn language in a fun and effective way.

Finally, research by (Alifah & Pransiska, 2023; Latifa & Muryanti, 2022) shows that game-based learning can improve cognitive and language skills, especially if the games are designed to include an element of challenge appropriate to children's abilities. This research suggests that well-designed games can support language learning and improve students' comprehension. As such, this study is consistent with the findings of those studies which show that educational games, such as *Word Scavenger Hunt*, are effective in improving English language skills and learning engagement in young children. Overall, the findings suggest that *Word Scavenger Hunt* educational games not only make the process of learning English more interesting but also more effective, in accordance with various underlying educational theories.

The pretest data showed an average score of 68.35 on the thematic learning outcomes of Bunga Bangsa Kindergarten students, with moderate English learning outcomes, particularly on fruit names, before using the educational game media. Posttest data showed an average score of 94.88, with 82% of students in the very high category, 18% in the high category, and no students in the medium, low, or very low categories. The utilisation of educational game media resulted in improved student learning outcomes due to the interesting and stimulating nature of the media content, leaving a deep impression and conveying a clear message. Findings from observations and descriptive statistical analyses concluded that educational games are a successful tool in teaching English to students at Bunga Bangsa Kindergarten, Madiun City. However, there are some drawbacks, such as the need for adequate resources and increased costs to implement it into classroom teaching.

In conclusion, the use of educational games in early childhood education has a positive impact on improving student learning outcomes. The learners responded positively to the use of educational games, found it more fun and meaningful, and showed increased motivation and a strong desire to learn English. The following is an analysis of the research results on the effectiveness of using educational games in learning English for students at Bunga Bangsa Kindergarten. The following discussion presents the findings that have been collected:

1. The Relationship Between Educational Game Use and English Language Proficiency Improvement

From the results of this study, it is clear that there is a significant relationship between the use of educational games and the improvement of English language skills in learners. The samples involved in the study who learnt by using educational games experienced a greater increase in English learning achievement compared to learners who did not use educational games. This suggests that the use of educational games can effectively improve learners' understanding and mastery of English.

2. Factors Affecting the Effectiveness of Game US age Several factors influence the effectiveness of using educational games in learning English, among others:

a. Game Design and Content: The design and content of educational games should be adapted to the different cognitive development levels and interests of young children to attract attention and facilitate effective learning.

b. Teacher Involvement: The role of teachers in supporting the use of educational games is very important. Teachers need to provide sufficient guidance and support to students during the use of educational games to ensure effective learning.

c. Learner Motivation: Learners' motivation or interest also affects the effectiveness of using educational games. Motivated learners will be more active in participating in learning by using educational games.

3. Implications of the Research Results for English Language Learning Practices at Bunga Bangsa Kindergarten. The findings of this study have several implications for the practice of English language learning in kindergarten, including:

a. Learning Material Development: The practice of using educational games will enable teachers to develop English learning materials that use educational games as one of the strategies to improve learning effectiveness.

b. Teacher Training: The implementation of the use of educational games requires teachers to receive sufficient training and guidance in the use of educational games so that they can implement them effectively in learning.

c. Collaboration between Teachers and Parents: Collaboration between teachers and parents can also increase the effectiveness of using

educational games in English language learning by involving parents in supporting and reinforcing learning at home.

With these factors in mind, English language learning practices at the kindergarten level can be continuously improved with the aim of achieving the best learning outcomes for students. The use of educational games is an effective strategy to achieve this goal in this study and can be an integral part of the language education curriculum.

CONCLUSION

This study produced interesting and highly significant data on the efficacy of using educational games in learning English for kindergarten children. Therefore, the use of educational games in English language learning at Bunga Bangsa Kindergarten, Madiun City, proved to be beneficial and can be used as a strategic approach to improve children's English language skills. Implementing measures to improve the use of educational games will yield good results in improving the quality of English language acquisition and creating a more efficient and enjoyable learning environment for kindergarten students.

ACKNOWLEDGMENT

This section displays authors' appreciation to sponsors, fund donors, resource persons, or parties who have an important role in conducting research.

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