



The Effectiveness of the Make A Match Collaborative Method on the Outcomes of English Language Development of 5-6 Year Old Children at Mardisiwi 01 Kindergarten, Punten Village

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Abstract

The development of English which is classified into aspects of language development is one of the foreign languages that children must master, especially in modern times like today. In early childhood, learning English begins with being taught how to recognize vocabulary. The collaborative method is a learning strategy where learning provides opportunities for children to communicate and interact with each other. The collaborative method of *make a match* or can be called the game of finding pairs is a learning method using cards, where each card given to the child includes a question card and an answer card. This study aims to determine the effectiveness of the collaborative *make a match* method on the achievement of English language outcomes for children aged 5-6 years. This research uses quantitative methods using *pre-experimental design* with the type of *one group pretest-posttest*. This study obtained an average *pretest* result of 11.23 and an average *posttest* of 15.90. Based on the results of hypothesis testing using *Paired Sample T-Test*, the significance result is $0.000 < 0.05$. The effectiveness test used *N-gain Score* of 0.5308 and *N-gain percent* of 53.0821%. It can be concluded that there is a difference in the collaborative *make a match* method on the results of English language achievement of children aged 5-6 years at Mardisiwi 01 Kindergarten, Punten Village with the effectiveness category which is quite effective.

Keywords: Children's English; Collaborative Method; Make A Match

1. Introduction

Language is an important issue in early childhood development. In their social life, children will interact with each other so that they need to be taught language as a form of expressing themselves through oral (Friantary, 2020). Along with the times, the phenomenon of using English, especially in children as a second language, has become a hot topic in various circles. Many education experts believe that mastering foreign languages, especially English, is a must because until now it cannot be denied that English is still a global or international language (Susanthi, 2021). As an international language, the importance of using English greatly affects our future generations.

The rapid development of technology in the 21st century requires a quality generation so that they are required to be able to master the 4Cs, including *critical thinking, communication, collaboration* and *creativity* (Curriculum Standards and Education Assessment Agency, 2022). This 21st century competency or 4C is closely related to the profile of Pancasila students. In line with this, communication is one of the demands in 21st century competencies where children must master the ability to communicate affectively. In the profile of Pancasila students, *communication* is closely related to the dimension of global diversity. It is undeniable that cultural acculturation that occurs in this day and age will be increasingly common, especially in the spread of foreign languages in Indonesia, namely the use of English in various circles. This

phenomenon further proves that the demands of children in the 21st century must be able to communicate in bilingualism or even multilingualism.

In connection with this, English must have been introduced and inserted in learning, especially at the PAUD level. Learning a foreign language is better to start as early as possible because at that age it is easier to absorb the language used in the environment around them (Fatihaturosyidah & Septiana, 2019) . Research in one of the Early Childhood Education in Pekanbaru City, namely PAUD Kasih Ibu, obtained the problem of learning English in children who showed difficulty in mastering English vocabulary, causing a loss of motivation in children in participating in English learning (Arwati & Fadillah, 2019) . There are many ways that educators can provide English language learning in the classroom. The methods that are often used for educators in introducing English vocabulary are through singing and TPR methods.

Another method that is considered the easiest to implement is through *games* or games can be an alternative method of learning English that is fun for children. The games chosen must also be meaningful to children, so that creative educators are needed so that children can learn while playing (Pransiska, 2020) . Based on the results of observations made at Mardisiwi 01 Kindergarten, Punten Village, in introducing English also uses the singing method which is given in ice breaking activities to memorize numbers or recognize colors. In addition to singing, there is also through guessing using flashcard media that educators do to children in introducing English in the classroom but it is not done regularly.

There are many methods that can be used by educators in introducing English vocabulary to children. Collaborative methods can be applied to early childhood learning as a stimulation of language learning in groups. In line with the concept of the education curriculum regarding the demands of children who are required to have 21st century competencies, namely the *collaborative* aspect, the characteristics of the collaborative methods used should support the 4Cs and also have a direction to encourage the development of early childhood English *skills*. One of the collaborative learning methods that can be used is the collaborative learning method with *make a match* type. Collaborative method with *make a match* type can be a step that educators can take as a new method in helping educators provide more varied foreign language learning methods. To test the effectiveness of the collaborative method in learning English with the type of *make a match*, researchers are motivated to conduct research at Mardisiwi 01 Kindergarten, Punten Village.

2. Method

This research is a quantitative research method. According to Sugiyono (2022) that quantitative methods are research methods based on the philosophy of *positivism*, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative or statistical, with the aim of describing and testing predetermined hypotheses. This research uses an experimental method with *Pre-Experimental Design (non design)* with the type of *one group pretest-posttest* which aims to test the effectiveness of the collaborative learning method *make a match* in children's English learning. The following *one group pretest-posttest* design according to (Sugiyono, 2022) is described as follows.

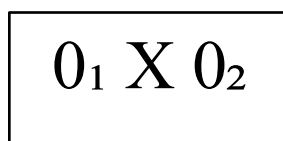


Figure 1. Research Design

This research was conducted at Mardisiwi 01 Kindergarten, Punten Village, which is located at Jalan Kayun No. 1 Punten, Kec. Bumiaji, Batu City which was conducted on

July 22 - July 29, 2024. In this *one group pretest-posttest* research design using one group of children aged 5-6 years who were sampled as many as 30 children. Before being given treatment, children first do English learning with the singing method which will be used as *pretest* data. When collecting *pretest* data, researchers made observations of children with research instruments that had been made by researchers. After the *pretest* was conducted, the group of children was given *treatment* by applying the *make a match* collaborative learning method. The group of children was given a test to collect data on the results of English learning achievement after being given *treatment* to compare with the previous situation according to the research instrument that had been prepared.

This study uses 2 variables, namely the collaborative *make a match* method as the independent variable (X) and the results of the achievement of English language development of children aged 5-6 years as the *dependent* variable (Y). The results of this study are to determine whether there is a difference in the collaborative *make a match* method on the achievement of English language development of children aged 5-6 years at Mardisiwi 01 Kindergarten, Punten Village and how strong the effectiveness is. The research instrument used in this study used an observation sheet. The observation sheet was used to obtain data and information about the results of children's English language development outcomes after and before being given treatment or *treatment* in the form of collaborative learning methods *make a match*.

Table 1. Research Instrument Lattice

Variable	Sub Variable	Indicator	Item Number	Number of Questions
Outcomes of English Language Development of children aged 5-6 years (Y)	Vocabulary	1. The child can mention vocabulary in English	1	2
		2. The child is able to mention the meaning of English words into Indonesian	2	
Effectiveness of Make A Match Collaborative Method (X)	Accuracy	1. The child can respond to questions from the teacher using English words.	3	1
		2. The child is able to match the picture with the answer	4	
		1. The child is able to match the picture with the answer	4	2
		2. Children are able to play the game as directed	5	

Source: (Pertwi et al., 2021) (Putri & Muryanti, 2020) (Wanti, 2022)

The instruments used have obtained the feasibility of instrument validity from validators who are experts in the field of child language. In addition to using the validity test from *expert judgment*, the research instrument was also tested for reliability using *Cronbach's Alpha* with the help of calculating using SPSS Windows 27.0 software.

Reliability Statistics

Cronbach's Alpha	N of Items
,729	5

Figure 2. Reliability Test Results

Based on the table above, the reliability test results obtained an alpha value of 0.729. This shows that the instrument gets an alpha value > 0.60 which means reliable. Thus the instrument can be used for research.

3. Results and Discussion

3.1. Result

3.1.1 Normality Test

The use of parametric statistics requires that the data for each variable to be analyzed must be normally distributed (Sugiyono, 2022) . That way the normality test is carried out to find out about the distribution of data from each variable has a normal value or not. The decision-making criteria for the *shapiro-wilk* test are if the significance value > 0.05 then the data distribution meets the assumption of normality, whereas if the significance value

<0.05 then the data distribution does not meet the assumption of normality. The normality test uses the *shapiro-wilk* test with the help of *SPSS Statistic 27.0 software*. The normality test results are shown in the following table:

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PRETEST	,110	30	,200 [*]	,975	30	,686
POSTTEST	,149	30	,086	,957	30	,254

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Figure 3. Normality Test Results

Based on the table above, the *shapiro-wilk* test results show that the *pretest* data obtained is 0.686 > 0.05, which means that the data is normally distributed. While the *posttest* data obtained is 0.254 > 0.05, which means that the data is also normally distributed.

3.1.2 Homogeneity Test

The homogeneity test is carried out to determine that the sample data groups from the population have the same variance. In this test using the *Levene Statistic* test to calculate the homogeneity test using *SPSS Statistic 27.0 software*. The test criteria are if the significance value > 0.05 then the data variance is homogeneous, while if the significance value <0.05 then the data variance is not homogeneous.

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Belajar Bhs. Inggris	Based on Mean	,077	1	58	,782
	Based on Median	,045	1	58	,833
	Based on Median and with adjusted df	,045	1	55,157	,833
	Based on trimmed mean	,082	1	58	,776

Figure 4. Homogeneity Test Results

Based on the table above, it can be seen that the homogeneity test results show that the significance value is 0.782 > 0.05. The conclusion is that the data generated from each sample has the same variance or is homogeneous.

3.1.3 Hypothesis Test

Hypothesis analysis is carried out to test the truth of the hypothesis that has been made previously. Hypothesis testing in this study is the T-Test test using the *Paired Sample*

T-Test formula with the help of SPSS *Statistic 27.0 software*. The samples used in data calculation are *pretest* and *posttest* scores. The *Paired Sample T-Test* test is used to see the effect of the collaborative *make a match* method on group B English development at Mardisiwi 01 Punten Kindergarten to be used as a reference in making decisions whether the hypothesis is accepted or rejected and to test whether there is a difference before and after being given *treatment* or treatment.

Table 2. Paired Samples Statistics Results

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	11,2333	30	2,12835	,38858
	Posttest	15,9000	30	1,91815	,35021

Based on table 2, the results of the paired sample statistics test show that the pretest average value is 11.2333 while the posttest average value is 15.9000. This proves that the pretest average value to the posttest average value has increased.

Table 3. Paired Samples Statistics Results

Paired Samples Correlation				
		N	Correlation	Sig.
Pair 1	Pretest & Posttest	30	,530	,003

Based on table 4, the result of the correlation calculation between the *pretest* and *posttest* scores is 0.530. This proves that the two variables have a strong relationship. The significance value of 0.003 means that the possibility of error that will occur from the calculation of the correlation value is 0.003. Thus it can be concluded that there is a significant correlation between the two variables with a calculation accuracy rate of 99.97%.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PRETEST - POSTTEST	-4,66667	1,97105	,35986	-5,40267	-3,93066	-12,968	29	<,001

Figure 5. Hypothesis Test Analysis Results

Based on table 4.6, the results of the parametric statistical test with the *Paired Sample T-Test* formula get a Sig value. (2-tailed) of 0.000 which means the Sig. (2-tailed) value obtained <0.05. This means that H_a is accepted and H_0 is rejected. So it can be concluded that there is an average difference between the *pretest* and *posttest* English language learning outcomes or there is an effectiveness of the collaborative *make a match* method on the English language outcomes of children aged 5-6 years applied to group B at Mardisiwi 01 Punten Kindergarten.

3.1.4 Effectiveness Test

In assessing the effectiveness of the *make a match* learning method, researchers used the *N-gain Score* test to determine its effectiveness in improving children's English language development outcomes. This test does not measure the progress of each child alone, but rather provides evidence of the effectiveness of the whole learning process. The *N-gain* score ranges from -1 to 1, where a positive value indicates an increase in learning outcomes while a negative value indicates a decrease in children's learning outcomes.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ngain_score	30	,17	,90	,5308	,19289
Ngain_Persen	30	16,67	90,00	53,0821	19,28879
Valid N (listwise)	30				

Figure 6. N-gain Scor Test Results

The table above presents data from the N-gain score and N-gain percent test results which show that the mean N-gain score is 0.5308. In that case the N-gain value of $0.30 \leq 0.5308 \leq 0.70$ has increased with a moderate category. Meanwhile, the N-gain percent column shows a *mean* result of 53.0821%, which shows that the N-gain value is included in the moderately effective category.

3.2 Discussion

Based on the results of data analysis from this study that the collaborative method of *make a match* on the results of English language achievement of children aged 5-6 years shows an increase, especially on the addition of vocabulary in children's English language learning. The results obtained in the initial trial, where researchers used conventional methods used in learning English through singing still showed deficiencies. In line with the opinion expressed by Kamila et al (2024) student activeness during learning indicates that the accuracy of the learning method chosen by the educator will have an impact on achieving the intended learning objectives. In addition to the method, children's learning motivation also affects their attractiveness during the learning process. According to Jasiah et al (2023) The limited attractiveness of children in learning can be a barrier to children's interest and motivation to be actively involved in the learning process. Children's decreased motivation to learn can affect the results of children's developmental achievements, so direct child involvement is necessary in the learning process.

Children's involvement directly affects their English skills because it is given with a new method. In line with the opinion of Nasution et al (2025) that interaction and active involvement of children in the learning process does not make children passive listeners but they can actively participate in learning activities. That is where children can develop social skills through interactions with their friends. Children's activeness when learning takes place is very important. According to Kamila et al (2024) that child-centered learning really requires children's activeness where they are directly involved (*learning to do*) in the learning process. Children who are active in learning prove that the learning activities carried out attract students' interest in learning.

In its application, the collaborative *make a match* method is a new step in introducing or improving *vocabulary* in children. Learning vocabulary is very important because it is their initial capital in understanding English or communicating. This is in line with the opinion of Pertiwi that vocabulary is the most important part that children must master in learning English (Pertiwi et al., 2021) . With the addition of vocabulary mastered by children, children's pronunciation skills are also stimulated. Children's pronunciation ability is seen from the moment they are able to mention English vocabulary correctly as much as possible. This is supported by the opinion of Sari and Lestari in (Putri & Muryanti, 2020) that one way that can be done in honing English speaking skills is to increase vocabulary.

The media used in this method are paired cards that can attract children's attention to play the game. The existence of interesting learning media can build children's enthusiasm, they have a high curiosity so that they quickly respond to immediately take and play it. According to Wulandari et al, the use of learning media in the teaching and learning process can foster new interests and desires, arouse motivation and have a psychological influence on learning (Wulandari et al., 2023) .

During the initial trial activities which used the singing method, children had little interaction with anyone. It is evident that the collaborative method attracts children's learning motivation because children tend to be active in activities carried out in groups. In line with the opinion of Nuraini that the implementation of collaborative learning models can help children's learning activities become more interesting and attract their

interest and motivation to learn and provide opportunities for children to communicate with fellow friends (Nuraini, 2023) .

The make a match collaborative method triggers children's cooperative behavior in groups. The positive impact of the collaborative *make a match* method is that it can stimulate collaboration and communication skills through cooperation. The opinion of Hasanah and Himami who said that children's cooperation grows naturally because children are required to complete learning activities by interacting with their groupmates (Hasanah & Himami, 2021) . Based on this, the characteristics of the *make a match collaborative* method support 21st century competencies, namely *collaborative* and *communication* which are included in the 4Cs and encourage the development of early childhood English language skills.

4. Conclusion

The conclusions that can be formulated based on the results of research on the Effectiveness of the *Make A Match* Collaborative Method on the Outcomes of English Language Development of 5-6 Year Old Children at Mardisiwi 01 Kindergarten, Punten Village are as follows.

1. English language development of children aged 5-6 years at Mardisiwi 01 Kindergarten in Punten Village before being given the collaborative *make a match* method shows low learning achievement results, this is evidenced in the average results of the initial trial.
2. Children involved in the collaborative *make a match* game showed significant English language development, characterized by a difference, namely the increase in the average achievement of English language development after being given the collaborative *make a match* method. This method provides a positive impetus to the development of early childhood English *skills*, especially in the aspects of *vocabulary* and *pronunciation*.
3. The collaborative *make a match* method is quite effective in improving children's language skills, especially English in the medium category. The *make a match* collaborative method triggers children's interaction and collaboration during the game, so that English learning can be presented with a variety of methods that are more fun.

It is suggested and recommended that the application of the collaborative *make a match* method be applied regularly at Mardisiwi 01 Kindergarten in Punten Village to support language skills, especially English as a bilingual or even multilingual. The collaborative *make a match* method can be a more fun method choice as a step to increase learning motivation with new learning habits and can add to their learning experience.

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