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# The utilization of the "shake and take" learning media in introducing one to one corespondence in group B Paud Al Bunyamur Kemayoran Jakarta Pusat

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**ABSTRACT**

In introducing one-to-one correspondence using media in group B at PAUD Al Bunyamur Kemayoran, Central Jakarta, the aim is to understand the concept of numbers and children feel learning while playing. The time of observational research was carried out in December 2020 to May 2021. This type of research was classroom action research which was carried out in two cycles. The subjects in the study were students in group B at PAUD Al Bunyamur Kemayoran, Central Jakarta, totaling 15 children. The data obtained were taken from observation sheets and documentation. Analysis of research data used qualitative and quantitative approaches which were analyzed descriptively. The results showed that the use of "shake and take" media in explaining one-to-one correspondence could understand the concept of numbers. After taking action shows a change for the better. In the first cycle, it increased to 33.33% with the category developing as expected. And in the second cycle there was a significant increase to 83.33% with a very well developed category. It can be concluded that through the use of "shake and take" media in explaining one-to-one correspondence, one can understand the concept of numbers.



## INTRODUCTION

Human life cannot be separated from the role of mathematics, because without realizing it, mathematics is an important part and is needed anytime and anywhere. In early childhood, the mathematical ability of each child is different because it is necessary to do activities and games that can encourage children to like mathematics so that a positive attitude towards mathematics itself can appear (Rozana et al., 2020). In addition, mathematics needs to be introduced to early childhood so that they are more skilled at solving problems in everyday life. Lestari (2014), There are several math games for early childhood that have concepts that must be understood and carried out, namely the concept of numbers, algebraic concepts, classification concepts, pattern concepts, geometric concepts, measurement concepts, data analysis, and probability.

Sari et. al (2022), explained that learning media is a tool in conveying information in the world of education where the informants are educators and the recipients of information are students who can affect the effectiveness of the learning process not only used in the classroom but also outside the classroom. Guslinda (2018) explains that learning media is a form of equipment, method, or technique used to distribute messages, helping to reinforce lesson materials so that they can generate interest and motivation for students or students to participate in the teaching and learning process. Nizwardi (2016) revealed that learning media are everything related to software and hardware that can be used to convey material content from learning resources to students (individuals or groups), which can stimulate thoughts, feelings, attention, and interest in learning. Hamdan (2020), revealed that learning media are all forms of objects and tools used to support the learning process. From some of these opinions, I can conclude that learning media are tools or methods to convey information so that early childhood feels happy in receiving learning from education.

The name of the animal that contains the numbers 25–50 and the dice point, which will be paired by the child. There is one glass along with the dice 25–50 that will be shaken. The child to start

the game or the child's learning activities. It is different from the ludo game, which is a game on a rectangular board that has four sides where the ludo pawns are, each consisting of four points as a place for pawns, and the winner is determined by who first completes the journey of the pawn, starting out of his own box area until he returns to the space that has been set determined (Aprilianti et al., 2014).

The implementation of this learning is carried out with the RPPH that has been made by the researcher, which includes the opening, core, and closing. The researcher will apply the theme and sub- theme used on that day, and the researcher will also introduce the game activities and the steps that will be taken by the children. In this opening activity, the child prays, sings, and the researcher explains the material and what has been prepared, while in the core activity, the child will do learning activities by playing, mentioning the names of the animals in the puzzle, after that, explaining the learning objectives, taking a break, and Closing activities are carried out by the method of conversing, asking children's feelings after doing learning activities, singing, and praying. The purpose of this shake and take game is so that children know the concept of learning to count in an interesting, safe, comfortable, and fun atmosphere (Simatupang, 2020).

In the learning media "Shake And Take", there are 2 components as follows: a) Dice and glass The glasses and dice in this "shake and take" game are square, with each side of the dice reading 25–50. The drawing of the dice is carried out by the players once in turn. b) Animal maze The researcher explains what the names of the animals are in the animal pictures, and the researcher shows the children the game medium of randomly pairing animal fragments, namely there are numbers 25–50 with various forms of animal pictures. Animal puzzles are made of cardboard that is pasted with pictures of animals still in the form of animal fragments. The animal fragments will be combined according to their partner. The child will pair the broken animal pictures according to the numbers and dice that have been shaken at the beginning of the game. c)). How to Use the Learning Media "Shake And Take" Instructions for the game that must be run by each player: 1) Players will start the game by hompimpa to determine who will run the game first, then hompimpa to fourth, fifth, and sixth order, they will choose who is the last player.

The beginning of one-to-one correspondence Mathematics is an ability that can be mastered by a child in solving various problems they face in everyday life. This relates to patterns, sequences, classifiers, sizes, concepts of numbers, one-to-one correspondence, and concepts of geometric shapes using concrete media before operating symbols (Mutiara & Agustin, 2017). Abstract symbols and interact through play. Classification is intended so that children can group objects around them based on type, function, color, or shape, such as children playing with objects paired with numbers in class. And sorting patterns is the ability of children to recognize and follow patterns that are similar in sequence (Suryana, 2014).

When there is a sequence of pencil, crayon, and paper patterns, the child can reorder it by putting the pencil, crayon, and paper after it. In connecting the concept of numbers, children are expected to be able to count objects and relate them to the appropriate number symbol. Noerhasanah (2018) revealed that one-to-one correspondence is the most basic component of a number concept. One- to-one correspondence is an understanding that one group has the same amount of something as another. Fatimah (2009) in Fatimah & Widiyatmoko (2014) explains the one-to-one correspondence modeling method, where children are invited to pair one object with another so that they understand the meaning of numbers while moving their hands.

Hermanto et al. (2019), revealed a one-to-one correspondence in which one represents one object, while five represents five objects. After children are familiar with the concept of one-to-one correspondence, they can be taught about the concept of more and less. Essa (2011) in Cahyati et al. (2018), one-to-one correspondence is a way for early childhood to begin to accept the understanding of numbers by matching an object with other things. As for the conclusions from several meanings of one- to-one correspondence, it is the most basic activity for counting activities that refer to objects. Through this activity, the child will immediately begin to understand the number of objects or objects used by counting them. Matching activities by doing one-on-one correspondence are fundamental learning for children to match from one object to another. One-to-one correspondence activity begins to develop in infants early in sensorimotor activity. He discovered that they were able to hold an

object in each hand, but he was only able to put one object in his mouth at a time. The degree of ease in one-to-one correspondence activities should involve the use of real items such as small toys and common objects. Furthermore, it can use other real objects in one-to-one correspondence, such as blocks, chips, and can use ice cream sticks. The next level can use real cutout shapes such as circles or squares, animal pictures, fruit pictures, and so on. In introducing one-to-one correspondence using media in group B at PAUD Al Bunyamur Kemayoran, Central Jakarta, the aim is to understand the concept of numbers and children feel learning while playing.

## RESEARCH METHODS

The researcher uses a classroom action approach research method. Where the researcher will provide a one-to-one correspondence learning method through fun play (Mustafa et al., 2020). This study examines in detail and in depth the activities of using the media "shake and take" in introducing one-to-one correspondence at PAUD Al Bunyamur Kemayoran, Central Jakarta. The media is a teaching aid in learning activities at school so that students can easily understand them and then describe the data by making observations at school. Suyanto, in Nilakusmawati, Sari, K., & Puspawati (2015) said that classroom action research is a form of reflective research by taking certain actions. To improve or improve learning practices in the classroom in a more professional manner. Therefore, classroom action research is closely related to the problems of everyday learning practices undertaken by educators.

The research design with a classroom action approach aims to improve the quality of the learning process and the actions given by children must be involved more effectively, efficiently, creatively, and innovatively. Therefore, with this classroom action approach, it affects the quality and quality of education. In the classroom action approach, the researcher makes the object to be studied directly by examining teachers and students in the use of the one-to-one correspondence method in schools. Research techniques in the form of observation, interviews, questionnaires, and documentation in the form of pictures, in the form of photos of activities using the media "shake and take" in introducing one-to-one correspondence at PAUD Al Bunyamur Kemayoran, Central Jakarta. Researchers will collect complete and valid data thoroughly to be analyzed. The method used by the researcher uses a classroom action approach. The goal is to make an early childhood mathematical concept easy to understand and fun so that the learning process is good and smooth.

The class action research design was selected with a cycle model that was carried out repeatedly and continuously, meaning that the longer it was expected to increase the change or achievement of the results. In each action there is a research focus, which is then the focus of this research being carried out and during observations. The results of these observations are then reviewed as a reflection stage for further actions. It can be seen in the following chart 1.

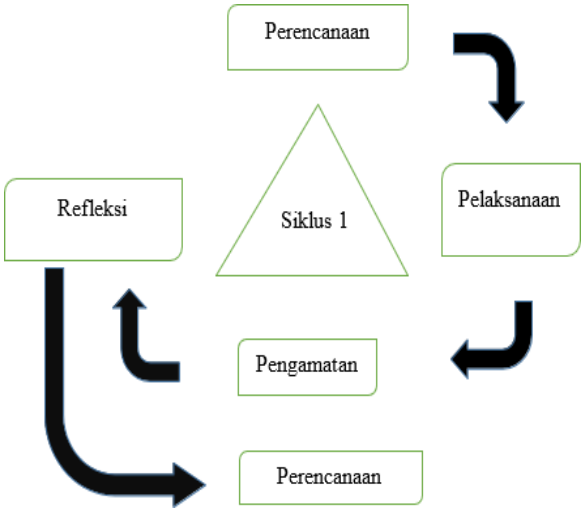


**Figure 1. Classroom Action Research Design**

## RESULTS AND DISCUSSION

This classroom action research (CAR) was conducted from April 6 to May 6, 2021 at PAUD Al Bunyamur, precisely on Jalan H. Ung Dalam 254 D, Rt 008 Rw 02, Postal Code 10650 Utan Panjang, Kemayoran Village, Central Jakarta. The research subjects were group B, with six students: two boys and four girls. The researcher met the principal of the school, namely Dra. Dina Rahmasari. PAUD Al Bunyamur is divided into 2 groups, including group A and group B. The homeroom teacher for group B is Mrs. Tiara Husna Santika, S.M. Group B consisted of six children, consisting of four girls and two boys.

For learning media at this school, they only use student workbooks, origami paper, sticks, glue, crayons, and a blackboard. Children are not able to understand one-to-one correspondence. Sometimes they are confused about what they are doing because the teachers teach them to use their fingers. Researchers are very happy to introduce the use of "shake and take" learning media in introducing one- on-one correspondence to group B at PAUD Al Bunyamur Kemayoran, Central Jakarta. Children will feel learning while playing and having fun.

### Description of the Before Cycle

Prior to this classroom action research, the researcher carried out as a teacher introducing one-to-one correspondence to group B PAUD Al Bunyamur Kemayoran Central Jakarta using only fingers and writing instruments. By using fingers, the quality of one-to-one correspondence learning is not optimal. Students before the cycle obtained student learning outcomes scores as in table 1 below.

**Table 1 Student Learning Outcomes Data Before Cycle 3**

| No | Category | Score | Number of Students | Percentace | | |
|---|---|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 0 | 0/6 x 100% | = | 0 % |
| 2. | Develop As Expected | 7 | 1 | 1/6 x 100% | = | 16,67% |
| 3. | Start Growing | 6 | 3 | 3/6 x 100% | = | 50,00% |
| 4. | Undeveloped | 5 | 2 | 2/6 x 100% | = | 33,33% |
| | Amount | | 6 | 100% | | |

The percentage of the score is still not developed even though there are no students who get a score of 8, while students who get a score of 7 are 16.67% (1 child), while 50.00% (3 children) are get a score of 5, as much as 16.66 (2 children).

Thus, student participation in the learning process is also not optimal. Researchers also made observations on aspects including enthusiasm, concentration, actively asking questions and the courage to answer questions. The participation scores are obtained as follows in this table 2:

**Table 2. Data on Student Participation Prior to Cycle**

| No | Category | Score | Number Students | ofPercentace | | |
|---|---|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 0 | 0/6 x 100% | = | 0% |
| 2. | Develop As Expected | 7 | 0 | 0/6 x 100% | = | 0% |
| 3. | Start Growing | 6 | 4 | 4/6 x 100% = 66,67% | | |
| 4. | Undeveloped | 5 | 2 | 2/6 x 100% = 33,33% | | |
| | Amount | | 6 | 100% | | |

Student participation as a behavior that accompanies different learning outcomes in the starting to develop category gets a score of 6, as much as 66.67% (4 children), while the undeveloped category gets a score of 4, as much as 33.33% (2 children).

**Action Planning Cycle I**

The action plans that the researchers examined in the use of "shake and take" learning media in introducing one-to-one correspondence in order to improve the quality of learning in group B PAUD Al Bunyamur Kemayoran Central Jakarta, were as follows: First, the researchers prepared research tools, including weekly lesson plans. and the implementation of daily learning, which includes indicators, basic competencies, learning outcomes, learning objectives, learning methods, learning tools and materials, learning steps, and assessments. After the student observation sheets and student learning outcomes sheets.

Second, apply learning media sequentially. Introduce the names of animals with the available puzzle pictures, their characteristics, food, and habitats. After that, the teacher showed the shake and take learning media in introducing one-to-one correspondence such as animal puzzle pieces, dice, glass, and glue to paste when the puzzle was installed.

The three teachers provide opportunities for students to ask or answer teacher questions about shake and take learning media, the characteristics of animals that have been introduced by students. The aim is to determine student learning outcomes.

**Action Implementation Cycle 1**

Weekly lesson plans Learn through workbooks that have been designed at the planning stage and carried out at this implementation stage. The activities are as follows:

a. Greetings, pledges, prayers, singing, and patting patterns are included in the opening.
b. Core activity: the teacher introduces the names of animals, animal characteristics, animal foods, and their habitats. Start by pairing the numbers on the dice with puzzle pieces that have the same numbers and dice points as the dice, then pair the puzzles, gluing the puzzles together using puzzle pictures and animal videos.
c. Closing activities include children sharing their thoughts and feelings after the main activities of prayer and greetings.

**Cycle 1 of reflection**

After doing the student result sheet through the question sheet in the learning the use of shake and take media in introducing one-to-one correspondence in group B in cycle 1, then obtaining data on student learning outcomes.

**Table 3 Cycle 1 Learning Outcomes Data Table**

| No | Category | Score | Number of Students | Percentace |
|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 2 | 2/6 x 100% = 33,33% |
| 2. | Develop As Expected | 7 | 3 | 3/6 x 100% = 50,00% |
| 3. | Start Growing | 6 | 1 | 1/6 x 100% = 16,67% |
| 4. | Undeveloped | 5 | 0 | 0/6 x 100% = 0 % |
| | Amount | | 6 | 100% |

Based on the table 3 data above, the researcher can understand that there is a positive impact from the action in cycle 1 by applying shake and taking learning media in introducing one-to-one correspondence. Before the cycle, there were no students who got a score of 8. After the cycle 1, the number of students who got a score of 8 reached 33.33% (2 children).

Learning outcomes show an increase in students in the categories that indicate the criteria for improving the quality of learning in this classroom action research. Learning outcomes also get an increase in student participation. Based on the participant observation sheet that explains one-to-one correspondence, table 07 shows it more clearly: The students in the class obtained the data in table 06 as follows: Introducing one-to-one correspondence can be seen more clearly in table 4 as follows:

**Table 4. Cycle 1 Student Participation Data**

| No | Category | Score | Number of Students | Percentace |
|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 3 | 3/6 x 100% = 50,00% |
| 2. | Develop As Expected | 7 | 2 | 2/6 x 100% = 33,33% |
| 3. | Start Growing | 6 | 1 | 1/6 x 100% = 16,67% |
| 4. | Undeveloped | 5 | 0 | 0/6 x 100% = 0% |
| | Amount | | 6 | 100% |

Before the first cycle there were no students who scored 7 and 8. After the action and the first cycle, students who scored 7 and 8 reached 33.33% and 50.00%, respectively. Meanwhile, in the data of learning outcomes before the cycle, there was still one student who got a score of 5, while in the participation data of the first cycle of students, there was no student who got a score of 5. (Not yet developed) increasing learning outcomes using shake and take learning media in introducing one-to-one correspondence in group B at PAUD Al Bunyamur Kemayoran, Central Jakarta from before the cycle and after the first cycle by applying shake and take learning media in

**Table 5. Data of Pre-Cycle and Cycle 1 Belajar Learning Outcomes**

| No | Category | Score | Pre cycle Total students | % | Cycle I Total students | % |
|---|---|---|---|---|---|---|
| 1 | Very Well Developed | 8 | 0 | 0 % | 2 | 33,33% |
| 2 | Develop As Expected | 7 | 1 | 16,67% | 3 | 50,00% |
| 3 | Start Growing | 6 | 3 | 50,00% | 1 | 16,67% |
| 4 | Undeveloped | 5 | 2 | 33,33% | 0 | 0 % |
| | Amount | | 6 | 100% | 6 | 100% |

The table 5 data above shows that there is an increase in learning outcomes between before and after cycle I. However, considering that there are still some students who get learning outcomes that have not developed with a score of 5 percentages of 33.33% and there is even one student who gets learning outcomes starting to develop with a score of 6 percentages of 16.67%, it is necessary to carry out additional actions in cycle II.

**Description of Cycle II**

Action planning in cycle II is the same as action planning in cycle I. There are only two additional actions in cycle II, namely providing solutions to students whose learning outcomes are still not developed, in order to increase the category's ability to develop very well or develop according to expectations.

**Cycle 1 of Action Implementation**

The lesson plans made at the planning stage are fully implemented at this implementation stage. The activities are as follows: a) The opening includes greetings, pledges, prayers, singing, patting patterns, and student motivation. (b) Core activities include:

The teacher introduces the names of animals, animal characteristics, animal foods, and their habitats. Start pairing the numbers on the dice with puzzle pieces that contain numbers and dots with the dice. After that, pair the puzzles and glue the puzzles using puzzle pictures and animal videos. c) Closing activities include activities such as student learning outcomes sheets, closing questions, and greetings.

**Cycle II retrospection**

After doing the second cycle of action from the student learning outcomes sheets, we obtained data in table 6 as follows:

**Tabel 6. Cycle II of Student Learning Outcomes Data**

| No | Category | Score | Number of Students | Percentace |
|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 5 | 5/6 x 100% = 83,33% |
| 2. | Develop As Expected | 7 | 1 | 1/6 x 100% = 16,67% |
| 3. | Start Growing | 6 | 0 | 0/6 x 100% = 0% |
| 4. | Undeveloped | 5 | 0 | 0/6 x 100% = 0% |
| | Amount | | 6 | 100% |

Based on the data table 6 above, it can be understood that there was a significant increase in learning outcomes compared to cycle I. In cycle I, students who got a score of 8 were 33.33%, and a score of 7 was 50.00%. In the second cycle, students who got a score of 8 reached 83.33% and a score of 7 reached 16.67%. After the second cycle was carried out, there were no students who got a score of 5 or 6. The increase in learning outcomes was supported by student participation in cycle I. And student observation sheets in cycle II obtained data in table 7 as follows:

**Table 7. Student Participation Data Cycle II**

| No | Category | Score | Number ofStudents | Percentace |
|---|---|---|---|---|
| 1. | Very Well Developed | 8 | 5 | 5/6 x 100% = 83,33% |
| 2. | Develop As Expected | 7 | 1 | 1/6 x 100% = 16,67% |
| 3. | Start Growing | 6 | 0 | 0/6 x 100% = 0% |
| 4. | Undeveloped | 5 | 0 | 0/6 x 100% = 0% |
| | Amount | | 6 | 100% |

The student participation data above is the same as the student learning outcomes data in table 7. There are no students whose participation is in the category of starting to develop and not yet developing. Everything increased in the category of developing according to expectations and developing very well. To improve student learning outcomes from before the cycle to cycle I and cycle II can be seen and understood by the data on learning outcomes between cycles as follows:

**Table 8. Data of Inter-Cycle Learning Outcomes**

| No | Category | Score | Pre Cycle Total students | % | Cycle I Total students | % | Cycle II Total students | Total students |
|---|---|---|---|---|---|---|---|---|
| 1 | Very Well Developed | 8 | 0 | 0 % | 2 | 33,33% | 5 | 83,33% |
| 2 | Develop As Expected | 7 | 1 | 16,67% | 3 | 50,00% | 1 | 16,67% |
| 3 | Start Growing | 6 | 3 | 50,00% | 1 | 16,67% | 0 | 0% |
| 4 | Undeveloped | 5 | 2 | 33,33% | 0 | 0 % | 0 | 0% |
| | Amount | | 6 | 100% | 6 | 100% | 6 | 100% |

Based on the results of the table 8 above, the researcher concludes that the increasing student learning outcomes in the above categories from cycle to cycle indicates the category of improving the quality of learning in this classroom action research. In other words, the performance indicators from the data can be achieved in cycle II so that no action is needed in the next cycle.

The data above shows an increase in the quality of one-on-one correspondence learning for children through the application of "shake and take" media from the pre-cycle, cycle I and cycle II as shown in the image below:

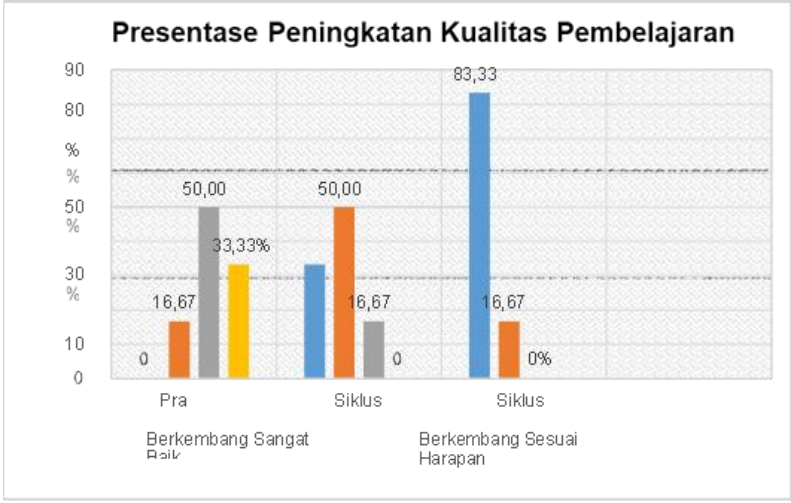


**Figure 2. Improving the quality of children's learning with the application of "shake and take" media in explaining before and after cycle 1 to cycle ii, one-on-one correspondence**

## Discussion

The results of classroom action research in improving the quality of learning in group B PAUD Al Bunyamur Kemayoran Central Jakarta through the use of shake and take learning media in introducing one-to-one correspondence. Researchers will describe it as the increasing student learning outcomes in the above categories from cycle to cycle shows the category of improving the quality of learning in classroom action research. And the results of student participation also increased from before the cycle to the next cycle, showing a good increase in terms of quality and quantity as an indicator of increased learning. Introducing one-to-one correspondence by utilizing learning media according to experts so that children feel learning while playing can stimulate thoughts, feelings, and learning interests. Improving the quality of learning, the use of shake and take learning media in introducing one-to-one correspondence in group B was marked by an increase in learning outcomes and student participation. Before the cycle, during cycle I, and during cycle II, the results that reached the category of developing as expected and developing very well were accompanied by a rise in the number of people in that category.

Quality of learning as a student activity to acquire knowledge By utilizing learning media, so that children feel happy when learning while playing. This shake and take learning media explains the one-to-one correspondence method, inviting children to pair one object with another. Through this activity, the child will begin to understand the number of objects and objects that are counted. Based on the results of the researchers' observations, the use of shake and take learning media in introducing one- to-one correspondence in group B at PAUD Al Bunyamur Kemayoran Central Jakarta as an effective learning resource and serves to improve the quality of learning.

## CONCLUSION

This classroom action research concludes that the use of shake and take media in introducing one-to-one correspondence in group B at PAUD Al Bunyamur Kemayoran Central Jakarta can improve the quality of learning and the concept of numeracy learning. The results of this study from observations of the development of each cycle, including the results of the actions in the first cycle, namely the child, showed an increase in one-to-one correspondence learning outcomes in the

developing category as expected. The results of the second cycle of action on the application of the use of shake and take media showed an increase in one-to-one correspondence learning outcomes with a very well developed category. This study achieved the desired results. Correspondence learning activities are carried out with pleasure and joy so that children can focus on doing them. The study's results show that using shake-and-take media to teach one-to-one correspondence in group B at PAUD Al Bunyamur Kemayoran Central Jakarta can improve the quality of learning and the idea of learning to count.

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