



Improving the Counting Early Competence of the Group B Students of PAUD An-Nisa Through Number Block Media

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Abstract: This research is entitled "Improving The Counting Early Competence of The Group B Students of PAUD An-Nisa Through Number Block Media". This research aims to know the improvement of the group B students' competence of PAUD An-Nisa in counting early by using number block media. In this research, the researcher used Action Research as the research Methodology, which consists of a plan, action, observation, and reflection. This research was done in 2 cycles, and the research instruments used were observation, scoring rubric sheets, and documentation. After implementing the research, the results showed that 1). the students' competence in counting early using the number block media improved significantly. It can be proved by the result of students' learning result in cycle 1 showed 35% to be 89% in cycle 2. 2). Percentage of the student's activities in the first cycle was 50% increase to 94% in the second cycle. 3). The percentage of the teacher's activities in cycle 1 was 65.41%, increasing to 96.5% in cycle 2. Based on the result above, using number block media could improve the competence of the group B students of PAUD An-Nisa in learning to count early. The number block media used could help the students learn to count early so that the student's competence could be improved.

Abstrak: Penelitian yang berjudul "Peningkatan Kemampuan Berhitung Permulaan Anak Kelompok B PAUD An-Nisa Melalui Media Balok Angka" bertujuan untuk mengetahui peningkatan kemampuan anak kelompok B di PAUD An-Nisa dalam berhitung permulaan melalui media balok angka. Dalam penelitian ini peneliti menggunakan metode Penelitian Tindakan Kelas (PTK) yang terdiri dari tahap perencanaan, pelaksanaan, observasi dan refleksi. Penelitian dilakukan dalam 2 siklus dan instrument yang digunakan dalam penelitian ini adalah lembar observasi, rubrik penilaian, dan dokumentasi. Adapun hasil yang diperoleh setelah pelaksanaan penelitian menunjukkan bahwa 1). kemampuan berhitung permulaan anak kelompok B PAUD An-Nisa mengalami peningkatan yang signifikan dilihat dari hasil rubrik penilaian hasil belajar anak pada siklus 1 yaitu 35% menjadi 89% pada siklus 2. 2). persentase aktivitas anak yang diperoleh pada siklus I mengalami peningkatan pada siklus II yaitu dari 50% di siklus pertama menjadi 94% di siklus kedua. 3). Persentase aktivitas guru dalam mengajarkan anak berhitung permulaan melalui media balok angka pada siklus 1 adalah 65.41% meningkat menjadi 96.5%. Dari hasil penelitian ini dapat disimpulkan bahwa penggunaan balok angka sebagai media dapat meningkatkan kemampuan anak kelompok B PAUD An-Nisa dalam berhitung permulaan dan implikasinya adalah media balok angka yang digunakan sangat membantu anak dalam pembelajaran berhitung permulaan sehingga kemampuan anak dapat ditingkatkan.

A. Introduction

Early childhood education is a construction effort given to children from birth until six years through education stimulus to help the children's development and physical and spiritual growth so that the children have preparation when they continue to further education (Yamin & Sanan, 2013). At this time, the children's intelligence aspect can be developed well, and they readily accept what others deliver. Constitution in the year 2014 Permendikbud number 137 in chapter 1 article 1 paragraph 2, that early childhood education is an education given to children that aim to stimulate and maximize the children's development aspects. The sixth development is in early childhood, namely, psychomotor development, intelligence or cognitive, social emotions, language, art, and behavioral value (Ariyanti, 2016).

Therefore, the correct stimulation is needed to help children grow, develop and learn maximally, especially in learning to count early. According to Romlah et al (2016), counting early competence is the children's competence to know the numerical from one to ten, where those numerical are the basic numeric that must and need to be mastered by every child, especially for the child who wants to continue their study or they who are in the kindergarten education. Whereas according to Ridwan & Bangsawan (2021) statement, counting is a way of learning numerals, then those numerical used to identify the number of objects.

Every child's competence in learning to count early need to be increased, such as the competence in mentioning and counting the number from one to ten, showing the sign of the number one to ten, imitating the numeric symbols from one to ten, to match the numeric symbols by using the props or using the engaging media such as number card media, number stick, sempoa, number watch, number block, etc. and the competence to equate the number and number symbols through the game or activity which interesting and prefer by the children, where this game contains the match subject and can develop the children' competence in learning to count early (Oktriyani, 2017).

The use of media in learning to count early of them is number block media is a learning tool which easy to find at the schools and the classrooms of PAUD or kindergarten schools, where number block is used to run the creative learning. Blocks are small media with various shapes and colors and can be used in teaching-learning. Through this media, the children can be taught about the number symbols, shapes, patterns, colors, and sizes combined with an exciting game or activity (Rachmat, 2017).

According to Alfiyanti (2017), number block media is made from wood and designed in block shapes and in different numbers and colors, where one block consists of one number. So that the children enjoy when they arrange the blocks sequentially by the correct number sequence because this media has many colors, and the children prefer colors.

Based on the researcher's observation at PAUD An-Nisa Peusangan Subdistrict Bireuen District about the learning process of the group B students' counting competence, nine students still need to improve in counting early. It was caused by the teaching strategy done by the teacher still focused on the teacher's center. On the other side, the teacher did

not use the learning tools or learning media to teach counting early to help the students learn to count early. The teacher still needed to be more creative in developing the learning media, so the students felt bored, and it influenced the students' competence.

Therefore, to solve this problem, the researcher tried to give a solution to improve the student's competence in learning to count early. The way is using the number block media in many colors. Using number-block media could help the students' problems in the learning process.

Some previous research could be used as a reference by the researcher in conducting the research. First, the research done by Cahyaningrum & Djaelani (2013) entitled "*Improving the Counting Ability Through Block Media to the Group B Students of Kindergarten Guworejo 2 Karang Malang Sragen District in year 2013/2014 Academic*". This research showed that the group B students' counting ability at the kindergarten of Guworejo could be improved significantly. It was proved by the result of the students' learning got a percentage score of 81.18%. Second, the research conducted by Khotimah & Subar (2020), titled "*the Used of Block Media in Introducing the Number Concepts to the Group B2 Students at RA Al Hilal 3 Pucangan Kartasura Sukoharjo in the year 2019/2020 Academic*". In this research, the researcher found that using block media could improve the group B2 students' competence in learning number concepts.

B. Method

The research methodology of this research was Classroom Action Research (CAR). CAR is the research done by the teacher in the classroom that aims to improve the teaching-learning process to be better (Sanjaya, 2013). Below is a chart of the steps of CAR.

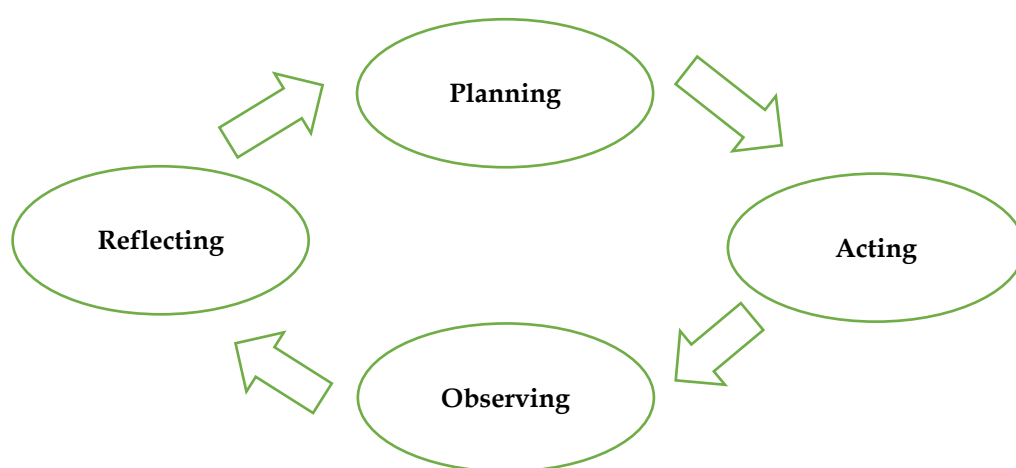


Figure 1. Kurt Lewin Model of CAR (Tampubolon, 2014)

According to Paizaluddin & Ermalinda (2016), Classroom Action Research was done in several steps; first, Plan where in this stage, the teacher prepared some learning tools, such as a lesson plan, learning media, and scoring rubric before the teaching process in the classroom.

The second step is Action. Here, the teacher taught in the class as a model, and the third step is Observation, where in this step, the researcher observes the teaching-learning process in the classroom. The last step is Reflection. In this step, the researcher and the collaborators discussed the learning process that has been done and analyzed the data from the research instrument used during the action. If the result of the reflection does not meet the success criteria, the researcher and collaborators should continue the action to the next cycle.

The research subject was the group B students of PAUD An-Nisa, consisting of 15 students; 9 male students and six female students. The research was done in an even semester in the 2020/2021 academic year. The research instruments used in this research were observation sheets, students' scoring rubrics, and documentation. The technique of data analysis was done by using the Interactive Analysis Model. According to Wijaya (2019), the interactive analysis consists of three phases; data reduction, data display, and data verification (conclusion). Data reduction is the phase where the researcher did the election process, emphasizing, shortening, concentrating, simplification, and making focus data found in the field during the research. In this case, the researcher noted the summary data from the observation sheets and students' scoring rubric and focused on the problems and results of the research.

The second phase is data display. In this phase, the researcher should show the data systematically and sequentially so that the result of the research about the improvement of the group B students in learning counting early through number bloc media could be read and understood easily. The last phase of the data analysis is data verification. It is a phase where the researcher makes a conclusion based on the actual data collected from the observation, students' scoring rubric, and documentation (Sudijono, 2015).

C. Result and Discussion

Result

This research was conducted at PAUD An-Nisa Peusangan Subdistrict Bireuen District. The research was done in two cycles from the 30th Mai until the 7th of June 2022. In this research, the researcher joined two collaborators as observers. Below, the researcher showed the result of the research as follows:

A. The Result of the Cycle I

The first cycle was done in two meetings, from the 30th until the 31st, Mei 2022. The result of the first cycle could be seen as follows:

1. Teacher's Activity in Cycle I

The percentage of teacher's activity in cycle I can be seen in the table below.

Table 1. Teacher's Activity in Teaching Counting Early by Using Number Block Media

No	Aspects	Observer I			Observer II		
		Skor	S.Max	%	Skor	Smax	%
1	Preparation	13	20	65%	14	20	70%
2	Teaching Learning Activity	26	40	65%	25	40	62,5%
3	Closing	13	20	65%	13	20	65%
		52	80	195%	51	80	197,5%
				65%			65,83%

Based on the table result, the percentage of the teacher's activity in cycle I was 65.41% in the category "not good". Therefore, the researcher needed to continue the research in cycle 2.

2. The Result of Students' Activity

The percentage of students' activity found in cycle two can be seen in the table below:

Table 2. Students' Activity in Learning Counting Early by Using Number Block Media

No	Aspects	Observer I			Observer II		
		Skor	S.Max	%	Skor	Smax	%
1	Preparation	13	20	65%	13	20	65%
2	Teaching Learning Activity	26	40	65%	26	40	65%
3	Closing	13	20	65%	13	20	65%
		52	80	195%	52	80	195%
				65%			65%

Based on the above table, the percentage of students' activity in cycle I was 65% in the category "not good". It showed that the success criteria did not reach yet, so it was needed to continue to the next cycle. The result of Students' Counting Early Competence Scoring

The result of students' learning in cycle I was found in the data explained in the table below:

Table 3. The Result of Students' Learning

No	Indicators of the students' counting early	The number of incomplete students	%	Number of the complete students	%
1	Master to know the concepts of the materials learned	7	70%	3	30%
2	Master to know the number concepts	6	60%	4	40%

No	Indicators of the students' counting early	The number of incomplete students	%	Number of the complete students	%
3	Master uses the symbols or things to mention the numbers	6	60%	4	40%
4	Master to count the number from 1-10	6	60%	4	40%
5	Master to take and suit the numbers of blocks 1-10 correctly	6	60%	4	40%
6	Master to take and arrange the number block from the smallest to the most significant numbers 1-10	7	70%	3	30%
7	Master to take and arrange the number block from the biggest to the minor numbers 1-10	7	70%	3	30%
8	Students take and group the number block into even numbers and odd numbers 1-10	7	70%	3	30%
Total Percentage		6,5	65%	3,5	35%

Based on the above, table 3 shows that the students' early counting competence still needs to improve. It only reached the mean score of 35% in the "strongly not good" category. This result was needed to revise the teaching process, and it needed to continue to the next cycle.

B. The result of the Cycle II

The second cycle was done from the 6th until the 7th of June, 2022. Cycle II was done in two meetings, and the result could be seen as follows:

1. The Result of the Teacher's Activity in Cycle II

The result of the teacher's activity in the second cycle was found in the result of the observation sheets. The result can be seen in the table below:

Table 4. Teacher's Activity

No	Aspect	Observer I			Observer II		
		Skor	S. Max	%	Skor	Smax	%
1	Preparation	18	20	96%	18	20	96%
2	Teaching Learning Process	38	40	95%	38	40	95%
3	Closing	18	20	96%	19	20	100%
		75	80	287%	76	80	291%
		96%			97%		

Table 4 above showed that the percentage of the teacher's activity was 96.5% in the "strongly good" category.

2. The result of Students' Activity in Cycle II

The result of the students' activity percentage can be seen in the table below:

Table 5. Students' Activity

No	Aspect	Observer I			Observer II		
		Skor	S. Max	%	Skor	Smax	%
1	Preparation	23	20	92%	24	25	96%
2	Teaching learning process	36	40	90%	36	40	90%
3	Closing	24	20	96%	25	25	100%
		83	80	278%	85	90	286%
		93%			95%		

Based on table 5 above it showed that the students' activity was 94% in the category "strongly good".

3. The result of the students' counting early learning in cycle II

The result of the students' counting early learning in cycle II can be seen in the table below:

Table 6. The Result of Students' Learning

No	indicator of the students' Counting Early	The number of incomplete students	%	Number of the complete students	%
1	Master to know the concepts of the materials learned	1	10%	9	90%
2	Master to know the number concepts	1	10%	9	90%
3	Master uses the symbols or things to mention the numbers	1	10%	9	90%
4	Master to count the number from 1-10	1	10%	9	90%
5	Master to take and suit the numbers of blocks 1-10 correctly	1	10%	9	90%
6	Master to take and arrange the number block from the smallest to the most significant numbers 1-10	1	10%	9	90%
7	Master to take and arrange the number block from the biggest to the minor numbers 1-10	2	20%	8	90%

No	indicator of the students' Counting Early	The number of incomplete students	%	Number of the complete students	%
8	Students take and group the number block into even numbers and odd numbers 1-10	1	5%	9	90%
Total Percentage		1,1	11%	8,9	89%

Table 6 above showed that group B students' counting early competence at PAUD An-Nisa Peusangan Subdistrict Bireuen District reached the mean score of 89% in the category "strongly good".

Discussion

Based on the result of the research explained before, it was found that there was any significant improvement in the teaching-learning process of the students counting early competence. First, it showed an improvement in the result of students' competence in learning counting early by using number block media was 54%. The result of the student's learning in cycle I was 35% and in cycle II was 89%. It proved that the students enjoyed learning by using number block media. This result relates to the statement by Pradana (2016) statement that number block media is a media used to develop the student's cognitive competence, especially the students' early counting competence.

The result of the teacher's activity percentage during the cycle I and cycle II was a mean score of 65.41% in cycle I and 96.5% in cycle II. This result showed a 31.09% improvement in the teacher's activity in teaching early counting using number block media with the students. It was by statement Eli (2020), that early childhood education is needed to prepare many activities in the teaching-learning process, which combine with engaging media to help the students to develop their competence in learning to count early.

The result of the percentage of students' activity in cycle I was 65% and in cycle II was 94%. It proved that there was an improvement in the students' activity was 29%. This result relates to the statement by Liana (2019) media means that a tool that could be used to send message thought, feeling, attention, and students' wish so that it could support the students in the learning process directly.

D. Conclusion

Based on the discussion and results of the research, early childhood is the best time to give many stimuli to increase the students' development. Caused by this time is a golden time. All developments could develop optimally by giving the activities using the media. One of the students' development aspects that could be improved is the students' competence in counting early. This research showed that using number block media could improve the

student's competence of PAUD An-Nisa in counting early. It proved that by giving enjoyment activities and using exciting media to help the students learn quickly and understand the lesson taught by the teacher.

Otherwise, the researcher gave the suggestions such as; 1). The teacher-researcher suggests that the teacher should give various activities which stimulate the students' competence in learning to count early. 2). For the school officials, it is suggested that the school should prepare the learning tools or media to support the students' learning in the classroom, especially in learning to count early. 3). For another researcher, it is suggested to do the same research or continue the research by using another media or teaching strategy in the teaching process. The media should be exciting and innovative.

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