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**INTERNATIONAL JOURNAL OF  
 ADVANCED RESEARCH (IJAR)**

Article DOI:10.21474/IJAR01/6784  
 DOI URL: <http://dx.doi.org/10.21474/IJAR01/6784>



### RESEARCH ARTICLE

#### SCHOOL READINESS: PLAYING KAPLA BLOCK TO ENHANCE FINE MOTORIC SKILL

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#### Manuscript Info

##### Manuscript History

Received: 19 January 2018  
 Final Accepted: 21 February 2018  
 Published: March 2018

##### Keywords:-

Fine motoric skill, playing kapla block, action research.

#### Abstract

This research aims to offering a way to overcome the problems of fine motoric skill on block centre activity with the expectation that there will be enhancement by means of play kapla block. This action research used the models of Kemmis and Taggart, which was implemented in 2 cycles. This research was carried out in four stages: planning, actions, observations and reflections. The subject of this research was 22 students of Kerjasama group, RA Nurul Ikhlas in Depok. The data collection was carried out through observations, interviews, field notes, documents, vide and students file project. The results of the action research are; 1) every childs fine motoric skill can be enhanced through playing kapla block; 2) the increase of the fine motoric skill occurs on the aspect of manipulation, fluency, dexterity and coordination of eye and hand; 3) there's an optimum increased ability of fine motoric skill at the end of the second cycle of this action research

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#### Introduction:-

Motoric skill is needed for a child to prepare their self in writing process. There are many problems happened in child fine motoric skill development. It is base on nerve working and make coordinate in all body and follow the rhythm, so a child become more competent, active and adroit. That is why a child needed stimulus to make the best physical-motoric intelligent, so motoric ability can be developing as optimum.

The Abilities , the first ability is dominant with children skills to move the body organs. In every moving on people body, it includes a hundred muscles difficult. Cronbach said describing the skills by words it likes automatic, fast, and accurate (Hurlok, 1987). It can be saying that a person has an skill if the moving is well include automatic, fast, and accurate.

Robert and friends study showed that motoric skill ad the relation with intelligent in school achievement (Roebbers, 2014). This because of the muscle of hand directly to active the child center nerve brain it always said the function of people intelligent.

The game of kapla beam include the constructive playing category. The constructive game according to Mutia it happened when the children come in the creation or construct a product or to answer the problems who they make it (Mutia, 2012). In constructive game it means to build a paradigm and reflect in a form of building or creation or solution.

Smilansky said the playing of constructive or the game of build the building consist the use of noun or the other things( examples, build the bridge by small beam, build the park from sand, make a doll from the clay, ect) (Mustafa, 2008). In the other hand game with the noun it makes something can be saying the constructive game.

Constructive game in exercises building in using beam can improve motoric skill. Sanstroock said the building of beam children as illustrator the developing fine motoric skill of child (wellhousen & kieff, 2001). It can be understood that children motoric skill it says if the building have been in high level of the beam building, it likes dramatic game is used with building the structure.

Wardoyo (2013) in her studied about the development of motoric skill through beam game. It showed that children motoric skill, special for fine motoric skill it can improve through beam game. The research is action research by the result it likes improvement in cycle I obtained 60.41% from before the action is 38.19% and then it improve in cycle II become 86.46%. The result above as a basic of the beam game can be developing children motoric skill.

Montolalu and friends in Khilmiyah (2011) said that beam game is a tool game and connect with the tools to build every constructive. By playing with beam, children get the chance to train together with the eyes, hand, and physic coordinate. This is describing that playing beam game can improve children motoric skill, that is work together with eyes and hand.

Base on the relevant previous, the researcher need to try to improve children motoric skill (group B work together). The researcher do this research relate with children motoric skill, that is “ developing motoric skill through beam kapla game at group B with cooperation RA Nurul Ikhlas Depok” base on background above the research problem as follows:

1. How do the process beam kapla game to improve children motoric skill for group B cooperation with RA Nurul Ikhlas Kota Depo?
2. How the result of beam kapla game to improve children motoric skill group B cooperation with RA Nurul Ikhlas Kota Depok?

#### Research Method:-

This research use Kemmis and Mc Taggart method that is describing a simple cycle model research process act in the class. Every cycles have fourth steps they are planning, action, observation, reflection. (Kemmis, Taggart & Nixon, 2014). The objective of the research is to get the data who have relate with developing motoric skill through beam kapla game. It will do at group B cooperation with RA Nurul Ikhlas Depok it consists 22 child. This is the researching cycle design by the researcher agree with Kemmis and Mc Taggart ‘s model

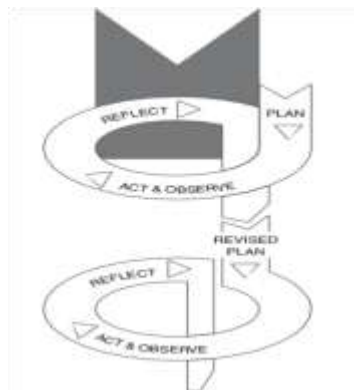


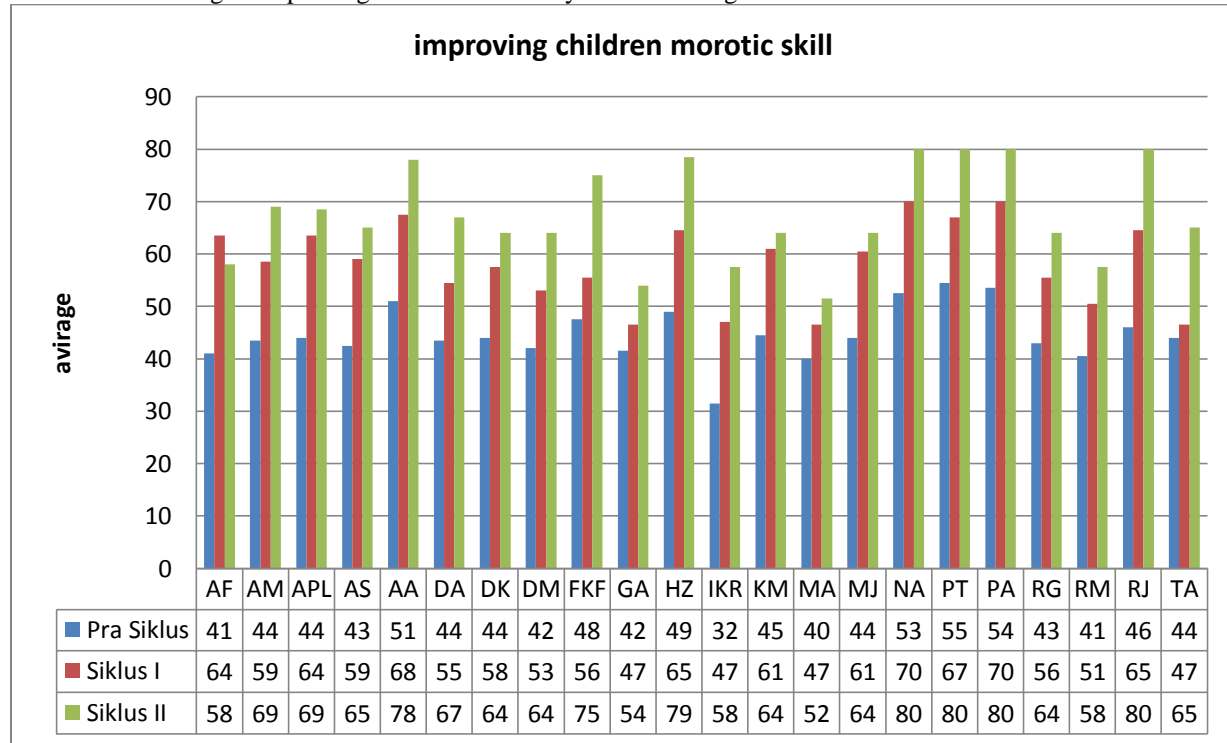
Figure 1:- The action of spiral series by Kemmis and Taggart model.

#### Research Findings:-

The result on this research showed that there was improving in children motoric skill they were manipulation, fluently, skills, and hands cooperation. That was proving to get improving average of children motoric skill group B cooperation with RA Nurul Ikhlas Depok as follows, first assessment (pra-cycle) the average 56.00, final assessment for cycle II 85.00. final assessment cycle II obtained 80%. The result of observation in the cycle showed that in improving children motoric skill, motoric learning activity was begin by cognitive phase, in this phase learning

motoric skill included intellectual skills, know, classification, identification, ect. Association phase (training), leraning in this phase was focusing on attention and how was good moving. Automatic phase of final phase learning skill was esy, did every task or skill.

This was describing of improving of values for every children as significance



Based on a graph above there was one child on the first assessment obtained low score for manipulate, they were IK; for fluently, IK, MA, dan RM; for the skills, IK; for coordinating, IK. There was one child on the first assessment obtained excellent score for manipulate, PT; for fluently, PA; for the skills, that was PT; for coordination PA.

There was a child in the first cycle obtained low score for manipulate, AK; for fluently, AF and IK; for skills, Am and TA; for coordinating, MA. There was one child in the cycle I obtained excellent score for manipulating, AP, AA, HZ, NA, PT, PA and RJ; for fluently, AA, NA, PT, PA; for skills, AA,NA and PA; for coordinating NA and PA.

There was a child in the second cycles obtained low score for manipulating, MA; for fluently, MA; for skills, MA was MA. There was a child in the second cycles obtained excellent score for manipulating they were NA, PT, PA, and RJ; for fluently they were NA, PT, PA, and RJ; for skills they were AA, HZ, NA, PT, and RJ; for coordinating they were NA, PT, PA, and RJ.

There was a child in the first assessment obtained low score in motoric skill form the fourth aspects they were IK(manipulating =33; fluently = 50; skill = 35; coordinating = 40). But, after did the act it had been improving in could be seen on the final assessment it obtained IK (manipulating = 65; fluently = 65; skills = 75; coordinating =73) although it was getting yet the target in learning process of the final cycle motoric skill in the second cycles, but it had been improving than before. IK obtained improving in manipulated aspect, skills and coordinating in the eyes hand was begin (MB) in the first manipulated to develop agree with hoped (BSH) in the final of the second cycles, but IK had the development of motoric skill optimal in fluently aspects.

There were fourth in the final assessment (cycles III) motoric skill was excellent score for all of components they were NA, PT, PA, and RJ (manipulating = 100; fluently = 100; skills = 100; and coordinating = 100). Based on the observation in the first cycle until second cycles, NA, PT, PA, and RJ could be manipulating beam kapla as well, agile, and clear the form of the building.

**Discussion:-**

Motoric skill had corelate with the moving in the act who did by the children in their development. Cognitive motoric child was different in the manipulating and skills. Motoric skill was begin by motoric. It likes Gunarza in Izzaty (2017) he said improvement of the age in developing from the moving of motoric skill to motoric was needed attention and good control. In the other hand children motoric skill would develop if motoric was good.

Motoric skill according to Yufiarti might be done based on the aspect in motoric learning. It means that the responds of the children had relation with the other developing aspects, it likes language aspects or children cognitive. There were steps in learning motoric according to Yufiarti (2017) (1) cognitive Phase, (2) fiction phase (association), (3) automatic phase.

**Cognitive Phase:-**

In this phase good motoric or bed motoric included intellectual skills it likes know, classification, identification, etc.

**Association phase:-**

Learning in this phase focused on the attention and how to do good moving.

**Automatic phase:-**

In this phase or final phase learning skill movement was easy, did the assignment or in the skills, in this case Yufiarti had meaning minimize the students troubles.

The third phase motoric above should do as steps in order to get the optimal learning. In the first step or cognitive phase motoric leaning also included intellectual skill. It likes Piaget in development cognitive theory he said that children motoric cognitive gave the chance to export and understood the area, saw many structures different cognitive. (Roebers and friends 2014). It can e understood cognitive development and otoric development was needed each other.

**Motoric skill was needed to manipulate object. It like Cherly in Nirwana said that:-**

“ fine motor skill a motor skill involving very precise movements normally accomplished using smaller musculature. Fine motor skill control is needed to manipulate, fine motor control has a significance impact on the extent to which many skills can be performed proficiency, accordingly, the degree of fine motor control display during the performance of a skill can be used assess skill development. (Nirwana,2017)

The activity of object manipulation could do as children learning media. It could be doing through display. It like Sarama and Celemts said that constructive game is children's object manipulation to do something (Sarana and Clements, 2009). Constructive games is very precious with thinking activity or child cognitive. In children object manipulation had been using thinking technique.

Skills, the main fine motoric skill was precious with the child ability in movement the body. In every body movements of people, included a hundred muscles. Cronbach said skill was describing by words like automatic, fast, and accurate (Hurlock, 1978).

One of the object can be manipulation by children was beam it from wood or plastic. Playing beam according to Mulyadi in Nento the kind of activity which had the characteristic constructive, where the child could build something by using beams that prepared before. (Hastini, 2016) it explained that beam game is constructive game.

Playing beam also trained children fine motoric skill. It likes Cambellin in Pebria said that beam game could be development the developing and coordination eyes and hand., trained fine motoric skill, trained I did the problems, the games could give free imagination for them, so that things could be creating (Suhartini, 2016). Beam game according to Cabellin above explained fine motoric skill could improve through played beam and imaginative activities.

Briam research showed that there were two main types in playing beam, they are free playing and playing beam as structures (Verine, and friends 2014). Free playing was given the beam to the child and build design agree with they choose. Structure beam playing the children was asked to build a structure from an example/ model.

Based on the opinions above using beam as media had some steps. First step using beam as a media was begin from the child bring a beam without made a building. Second steps the child blunt the beam on the floor. The third steps children try to relate two beams or more beams and try to build a curve or bridge. The next steps realltion some beams and build a room and then the children try to give a name to the building which child made although that building was not like a nature form. The final steps the children try o build a building that difficult.

Based on the opinions above it can be saying that fine motoric skill could improve by beam game. There were some steps on this research as follows:

1. First step, teacher integrated theme and beam game activity with two ways communication technique. Children listening teacher talking about the theme and related with their task that they will do. Children were ask to discuss about theme to give motivation and give the child sense of being in their task that teacher give.
2. Point steps, teacher bring the children to focus on the process and focus on three important aspects they were manipulation, fluently, skills, and coordinating eyes and hand. The activity is done as group and individu so the children did not feel bored.

The manipulating activity was done to describing and color. All activities saw that the children using their fingers to manipulating. Example for drawing activity it seems the children focus on their draw agree with they creativity. Beside that, the children do coloring many things including their finger at the time they draw special for the point of the line from the picture. On vertical building activity it seems the children had hig concentrate and imagination to build as vertical and forming.

On fluently aspect it must be the children fast movement, hands' precise, and fingers. On this research was found that the imitation and writing could train the children fluent I building activity.it means that the high intensity could train children fine motoric skill. In this horizontal building activity it seems running well. This fact supported by horizontal building is easy than vertical building that needed the carefulness and spirit.

The agile finger aspects was trained through reverse side the paper activity and choosing their photos activity in meeting cycle I. The reverse side the paper was done in cycle I, the children found difficult in reverse side the paper. The children was not yet show their agile in reverse side the paper activity. But the agile saw when the children did choosing photos activity it the result on cycle I activity. In building activity children's fingers agile seem the their arrange the beam kapla after their playing. Children had high fine motoric skill to arrange the beam that had the same size and color.

In the eyes hand aspects was done through fold and adhere paper activities. Fold paper activity a half of the children could do their task to build car. Children's hand seem harmony with the eyes in build the car. After fold paper activity the next activity was adhere on the paper with glue. Adhere by glue stick it showed the coordination good eyes and hand. The children seem enthusiast and concentrate in adhere activity. In the other beam building the more child could do the different form so it could intrgate and created dramatic playing.

In the final steps, teacher did reflection in every children's work with the process questioning and answering so he children would have a good memory in their activities.

The result of children fine motoric skill group cooperation with RA Nurul Ikhlas Depok

Children fine motoric skill cooperation with RA Nurul Ikhals Depok in pra-cycle was on un development, it was begin form developing and development agree with the hopes obtained 45 score or 56.25%. the result it was not done criteria as classical 80%.

Five children AAA, AZF, NAF, PT , and Pas were in development category based on the aim it mean that they could to do fine motoric skill activity, 13 children AMZ, APL, ASC, DAP, DKP, DAM, FKF, KMR, MJA, RMA, RJM, and Taq were in the beginning developing it means that 11 children begun to do activity and fourth children could not develop they were AF, GAYK, IKR, and Maam it means that they were not yet to do fine motoric skill activities. On the manipulation aspects, fluently, agile, and coordinating eyes and hand, it seems there were indicators that difficult to do by children.

Based on the result of observation pre-cycle had done as qualitative and quantitative the researcher made the conclusion needed a plain act in cycle I to improve children fine motoric skill. This research will do by beam kapla game.

The result of cycle I children fine motoric skill score group cooperation with RA Nurul Ikhlas Depok were in begin development, developing agree with the aim, and very developing obtained 58 or 72%. The result did not get the score as classical 80%.

Six children were in good developing category they were AAA, HZF, NAF, PT, PAS, and RJM it means that they could do fine motoric skill activities. 12 children would be developing as the aims they were AMZ, APL, ASC, DAP, DKP, DAM, FKF, KMR, MJA, RGS, RMA, and TAG it means that the children had have skill to do the activity and fourth children try to development it means that the children begun to do fine motoric skill activities they were AF, GAYK, IKR, and Maam.

The result above showed that the act in cycle I was still need simulation in deep to improve the next cycle so the researcher and collaborator agree to submit cycle II. The result of children fine motoric skill score group cooperation with RA Nurul Ikhlas Depok I cycle II had improvement 72.50% by the average class score 85%, the children average got the aim classical category 80%.

From 22 children there were 18 they were AMZ, ASC, APL, AAA, DAP, DKP, DAM, FKF, GAYK, HZF, KMR, KMR, MJA, NAF, PT, PAS, RGS, RJM, and TAG were in very development category it means that they could do fine motoric skill activities, fourth children they were AF, IKR, MAAM, and RMA were in developing category, the children could do the activity. The result observation in manipulation aspects, fluently, agile, and coordination eyes and hand it seem had improvement in cycle I.

Significance improvement from the act in pre-cycle, cycle I and cycles II. The high presentation for manipulating aspects was got in pre-cycle is PT by 14.5%, low score IKR 6.5%. high presentation for manipulating aspects obtained in cycle I were API, DAP, HZF, AAA, NAF, PT, PAS, and RJM by presentation 18.0%. low score is GAYK 10.0%. high presentation for manipulating aspects was got In cycle II they were AAA, HZF, NAF, PT, PAD, and RJM by presentation 0.0%. lowest score was Maam 13.0%.

Highest presentation for fluently aspects was getting in pre-cycle they were Pt and Pas 14.0%, lowest score IKR, Maam, and Rma 10.0% highest presentation for fluently aspect in cycle I they were Aaa, Naf, Pt, and Pas 17.5%, lowest score they were Af and Ikr 11.5%. highest presentation for fluently aspect in cycle II were Hzf, Naf, Pt, Pas and Rjm 20%. Lowest score in cycle II was Maam 13.0%

Highest presentation in coordination aspects eyes and hand in pre-cycle was Pas 14.0%, lowest score IKr 8%. Highest presentation in coordination eyes and hand aspect in cycle I were Naf and Pas 17.5%, lowest score was Mam 10%. Highest presentation for coordinating eyes and hand aspects in cycle II were Naf, Pt, Pas and Rjm 20%, owest score was Maam 13.0%.

Basd on the result above it can be saying every children faced significance improvement in fine motoric skill after was given constructive playing through beam kapla. The result children fine motoric skill had get the criteria so given the act was stop in cycle II.

### **Conclusion:-**

Based on the result above, the conclusion as follows:

The process activity was done with two cycle. The activity in cycle I and cycle II consists planning steps, implementation, observation, and reflection. The activies consist three aspects they were manipulation, fluently, agile, and coordination eyes and hand. The activity done in manipulating aspects they were drawing and color and also building as vertical. The activity in fluently aspects were imitation using a beam kapla and writing name and building vertical. The activity was done in agile were reverse side the paper and choose photos and arrange beam kapla. The activity was done in coordination eyes and hand were fold the papers or guel and variation the form building.

In the first activity, teacher integrate theme and display beam kapla by communication technique two ways. Children listening teachers' speech about theme and relation with the task which the children will do teacher asked the children to discuss about theme to give motivation and give sense of being in their task. Point activity, teacher bring the children to focus on the process with three aspects manipulating, fluently, agile, and coordinating eyes and hand. This activity was done by group and individual so the children could not be feel bored when they playing. The final steps teacher did reflection for their works with the process questioning and answering so the children got memory in the end their leaning process.

Media that using in this activity display beam games is the tools of their writing and beam kapla 1024 units. The things would use papers, pencils, markers, and crayon, glue, and child photos. Beam kapla was using 1024 unit; the squer beam 200 units, rectangular 640 units, white beam kapla 40 units, green beam kapla 35 units, red beam kapla 38 units, blue beam kapla 32 units and yellow beam kapla 39 units.

Display beam kapla activity could improving children fine motoric skill group cooperation RA Nurul Ikhlas Depok. Every children had benn improving in manipulating aspects, fluently, agile, and coordinating eyes-hand. This could be prove that from the data pre-cycle 45.00 score or 56.25% improved in cycle I 58.00 score or 72.50% and cycle II improved in average class 68.00 or 85.00% it means that contribution of beam kapla display had success to improve children fine motoric skill over the target in criteria 80%. So the next cycle did not need to stop in cycle II.

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