



The Implementation of Project Based Learning Models in Improving Social Interaction Ability on Children Aged 5-6 Years in Dharma Wanita Bumimulyo Kindergarten Batangan District Pati Regency

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Abstract

Social interaction ability is a part of the social development which is important to be developed early, with good social interaction ability, children will be able to cooperate, sharing, respect and help other people. The stimulation of the child's social interaction ability can be done by implementing an innovative and appropriate learning models, one of them is a project-based learning model. The purpose of this research is to determine the difference the social interaction ability on children aged 5-6 years be examined the project-based learning model implementation in Dharma Wanita Bumimulyo Kindergarten Batangan District Pati Regency. This research is using pre-experimental one-group pretest-posttest types design. The sampling technique using purposive sampling with Dharma Wanita Bumimulyo Kindergarten as the experimental group. Based on the hypothesis testing results of this study, obtained a value of t_{count} amounting -22.148 with sig value (2-tailed) $0.000 < 0.05$, which means that there is a significant differences between the pretest and posttest. So, H_0 is accepted or there is a difference between before and after treatment with project-based learning model in the experimental group.

INTRODUCTION

According to the National Association for The Education of Young Children (NAEYC), an early age or known as "The Golden Age" is a child in the age range of 0-8 years (Diana, 2015: 133). Then, Hurlock (1978: 261) argued that early child who entered the age between 2 to 6 years, is an early childhood age or preschool age. This age is a developmental period that appropriate to develop and improve all the capabilities of the child. But in this research, researchers used the preschool children who are in the age range of 5-6 years.

The way children build their knowledge in the age of 5-6 years old or known as preschool age is through social interaction (Mauladin, 2013: 81). According to Bonner (Ahmadi, 2009: 49) Social interaction is a relationship between individuals or more, where the behavior of one individual affect, change, or improve the behavior of other individuals or vice versa. Children need to establish interaction with a larger social environment outside himself, as in daily life where the child should play with their peers, respect an older person, and love the younger child (Anapratwi, dkk, 2013: 22). Through the social interaction, children learn anything from others (Mauladin, 2013: 81), so that the age of 5-6 years is the effective period to train and familiarize children to develop their social interaction skills. Some social achievement of children at the age of 5-6 years are when the children is able to cooperate with friends, show tolerance, understand the rules and discipline, show empathy (Latifah dan Sagala, 2015: 114).

The maturity of children's social adjustment would be greatly helped if the children receive early education services. Kindergarten is one of the services for early childhood education that provides opportunities for children to expand social relationships, because in kindergarten children can get to know and get along with varied peers (multicultural), whether ethnic, religious, and cultural (Yusuf, 2011: 171).

Based on the observation in Dharma Wanita Bumimulyo Kindergarten in group B children aged 5-6 years showed that generally children are less able to interact well with their peers and teachers at school. The preliminary results of the observations, most of the children in group B Dharma Wanita Bumimulyo Kindergarten still looks flocking in accordance to their likes, there are also children that stand apart so do not join with friends while playing. Some children are still

not able to show discipline attitude. For example, suddenly left the classroom without asking permission to the teacher or did not want to be patient in waiting for his turn.

Relating with these problems, efforts are needed to maximize the child's social interaction skills. Early childhood education teachers have an important role in helping children to optimize their social interaction skills. Wiyani (2014: 160) describe some efforts that have to be made by early childhood education teachers to optimize the social interaction skills of early childhood, such as giving attention to the children, creating a positive behavior in children, provide reinforcement, establish good communication with the children, and give examples of good behavior to children. Teachers also need to implement appropriate learning models to support the development of children's social interaction optimally. With an innovative learning model, and with the right learning atmosphere that attractive and fun, the child will be able to establish cooperation and social relationships both with peers and with teachers at the school.

One of the learning models that can be implemented to improve the children's social interaction is a project-based learning model. According to Jaipaul (Andarbaeni dan Elisabeth, 2013: 287) project method is the method which performed by the whole class, sometimes by small groups in the classroom, and occasionally by the individual. Project-based learning model allows teachers give to their students the freedom to choose a topic and sometimes occasionally teachers who determines the topics that will be discussed for the group task. Blank (Bas, 2011: 2) stated that in project-based learning, the students plan, implement, and evaluate the projects that have real-world applications outside the classroom.

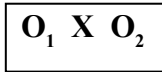
Project-based learning model provides a real context where children were assisted in developing various kinds of social knowledge, social skills, traits and social feelings of interpersonal personality. (Andarbaeni and Elisabeth, 2013: 287). With the project method is expected that children that do not have social interaction skills to be able to adjust with the school environment.

Considering the importance of early development of social interaction, which can be developed through a process of learning in kindergarten, researchers are trying to do research about children's social interaction development through project-based learning model in D/h/ arma Wanita Bumimulyo kindergarten Batangan

District, Pati Regency.

RESEARCH METHODS

This research included a quantitative study with the kind of pre-experimental design type of one-group pretest-posttest. Measurements in this research was done 2 times ie before and after the experiment. The difference between O1 and O2 is assumed as the effects of treatment or experiment. The design is described as follows:



Explanation:

O_1 : pre test value (The first measurement before the treatment was measured by using a social interaction scale)

X : the provision of treatment to the subject research through project-based learning

O_2 : post test value (the second measurement after the treatment using social interaction scale)

The dependent variable in this research is the social interaction skills of children aged 5-6 years, while the independent variables is the implementation of project-based learning model. The population in this study is children aged 5-6 years in group B from 10 Dharma Wanita kindergarten in Batangan District Pati Regency. The sampling technique used in this research is purposive sampling. Purposive sampling technique is Sampling is done by taking the subject not based on strata, random or region but based on existence of particular purpose (Arikunto, 2010 : 183). Researchers took samples from children aged 5-6 years in group B Dharma Wanita Bumimulyo kindergarten, with the total sample of 30 children.

The instrument used to measure the social interaction skills variables of children aged 5-6 years in this research is by using a likert scale. The use of likert scale is made in the form checklist. The scale compiled based aspects of children social interaction skills according to Hurlock (1980: 118), Yusuf (2011: 171), based on Permendiknas No. 58 on 2009 about Standards of Early Childhood Education, and Permendikbud No. 146 on 2014 about Curriculum 2013 Early childhood education.

Good instrument have to fulfill two important requirements, which valid and reliable (Sugiyono, 2010: 173). Researchers tested the valid-

ity of the instrument using the Pearson product moment correlation (Arikunto, 2010: 213) and analyzed using analysis program of SPSS 16.0 for window with a significant level $0,05 = 0,361$, with the test criteria, if r_{xy} count $>$ r table the instrument is said to be valid and if r_{xy} count $<$ r table the instrument is said to be invalid. Based on the validity test results on the instrument, it is known that from 52 items statement filed, obtained 39 item valid statement.

The instrument reliability in this research is calculated using Alpha analysis. The calculation of research instrument reliability using analysis program SPSS 16.0 for Windows, with the test criteria if the Cronbach's Alpha value getting closer to 1 so the instrument is reliable.

Table 1. The Reliability Test Results in Testing Instrument

Reliability Statistics	
Cronbach's	
Alpha	N of Items
.950	40

Based on the table above it can be seen that the Cronbach's Alpha value amounted to 0,950. At significance level 0,05 with $N=30$ (number of samples = 30 children), then obtained r table amounted to 0,361. In conclusion, Cronbach's Alpha $>$ r table or approximately 1, that is $0,950 > 0,361$, it means the instrument is reliable and can be used as a measurement tool to collect the data.

RESULTS AND DISCUSSION

The research on the implementation of project-based learning model in improving social interaction skills of children aged 5-6 years in Dharma Wanita Bumimulyo Kindergarten Batangan District, Pati Regency in the first semester of 2016. The pretest performed before treatment in order to determine early childhood's social interaction ability, after that they are given treatment in the form based learning model for 12 times treatment. The posttest conducted with the intention to determine the ability of the child's social interaction after being treated.

After obtained the pretest and posttest results data, then the data were analyzed using Paired Sample t-Test, with the help of analysis program SPSS 16.0 for Windows. The result of Paired Sample t-Test can be seen in the following table.1

Table 2. Paired Sample t Test Results Experimental Group Hypothesis Testing

		Paired Samples Test							
		Paired Differences							
Pair 1	Pretest – Posttest	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
		-27.767	6.867	1.254	-30.331	-25.203	-22.148	29	.000

From the table above obtained value amounted to -22,148 with sig value (2-tailed) $0,000 < 0,05$ which means there is a significant differences between the pretest and posttest value. Obtained mean amounted to -27,767, the minus sign indicates that the mean or average of the first group (data pretest) is smaller. So, it can be concluded H_a is accepted or there is a difference between before and after treatment with project-based learning model in the experimental group.

The results of this research can not be separated from the concept that the project learning model is an effective approach to education. Project learning model focuses on creativity thinking, problem solving, and the development of social skills various kinds, and social feelings on interpersonal personality so it suitable to be implemented to increase the children social interaction skills (Andarbaeni and Elisabeth, 2013: 287). The results of this research also consistent with the theory of Moursund (Wena, 2009: 147) which stated that some advantages that can be gained from the implementation of project-based learning, such as increase the motivation to learn, improve problem solving skills, enhance students' skills in searching and getting information, improve communication skills and children cooperation, and teach children to have the ability to allocate the right time to complete the task.

CONCLUSION

Based on the discussion of the research, experimental research on the application of project-based learning model in improving social interaction skills of children aged 5-6 years in Dharma Wanita kindergarten Batangan District, Pati Regency have resulted in the conclusion that there are differences in social interaction skills of children aged 5-6 years after being given treatment with the implementation of project-based learning model. The ability of social interaction skills of children aged 5-6 years that given the treatment by the implementation of project-based

learning model is higher compared with the pretest or before being given the treatment

Based on the conclusion of the research that has been obtained, it can put forward some suggestions, such as kindergarten institutions are expected to provide stimulation and appropriate learning way in developing the social interaction skills of children by implementing appropriate learning models. Teachers also have to be more creative in choosing a good and innovative learning models and create an interesting learning atmosphere which fun for the children. so it can increase the student's social interaction skills. Parents as the primary educators have to understand the achievement level of each child's development, especially when the children start to learn to interact socially with people around him.

REFERENCES

- Ahmadi, A. (2009). *Psikologi Sosial*. Jakarta: Rineka Cipta.
- Anapratwi, D. (2013). HUBUNGAN ANTARA KELEKATAN ANAK PADA IBU DENGAN KEMAMPUAN SOSIALISASI ANAK USIA 4-5 TAHUN (STUDI PADA RA SINAR PELANGI DAN RA AL IMAN KECAMATAN GUNUNGPATI, SEMARANG). *Indonesian Journal Of Early Childhood Education Studies*, 2(2). doi:10.15294/ijeces.v2i2.9237
- Andarbeni, S. L., & Christiana, E. (2013). Studi Tentang Tentang Kemampuan Interaksi Sosial Anak Kelompok A Dalam Kegiatan Metode Proyek di TK Plus Al-Falah Pungging Mojokerto. *Jurnal BK Unesa*, 4(1).
- Arikunto, S. (2010). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Baş, G. (2011). Investigating the effects of project-based learning on students' academic achievement and attitudes towards English lesson. *The Online Journal Of New Horizons In Education*, 1(4). Available at: (<http://www.tojned.net/journals/tojned/articles/v01i04/v01i04-01.pdf>) Date accessed: 14 March 2016.
- Diana. (2013). *Model-Model Pembelajaran Anak Usia Dini*. Yogyakarta: Deepublish.
- Hurlock, E. B. (1978). *Perkembangan Anak*. Jakarta: Erlangga.
- Hurlock, E. B. (1980). *Psikologi Perkembangan*. Jakarta: Erlangga.
- Latifah, U & Anita C. D. S.. (2015). Upaya Meningkatkan Interaksi Sosial Melalui Permainan Tradisional Jamuran Pada Anak Kelompok B TK Kuncup Sari Semarang Tahun Pelajaran 2014/2015. *Jurnal Penelitian PAUDIA*. 112-132.
- Mauladin, D. (2013). The Effects of Learning Methods and Environmental Knowledge on Age 5-6 Naturalistic Intelligence (Experiment at AR-Ridho Nature Kindergarten Group B Tembalang Semarang). *Asia Pacific Journal of Multidisci-*

- plinary Research, 1(1).*
- Sugiyono. (2010). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Wena, M. (2009). *Strategi Pembelajaran Inovatif Kontemporer: Suatu Tinjauan Konseptual Operasional*. Jakarta: Bumi Aksara.
- Wiyani, N. A. (2014). *Psikologi Perkembangan Anak Usia Dini*. Yogyakarta: Gava Media.
- Yusuf, S. (2011). *Psikologi Perkembangan Anak dan Remaja*. Bandung: Remaja Rosdakarya.
- Permendikbud No. 146 Tahun 2014 tentang Kurikulum 2013 Pendidikan Anak Usia Dini.
- Permendiknas No. 58 tahun 2009 tentang Standar Pendidikan Anak Usia Dini.