The Effectiveness of Project-based Learning Approach to Social Development of Early Childhood

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Abstract—**The social development becomes one important factor in childhood development especially in the society. This study is conducted to find out the effectiveness of Project-based Learning for childhood social development. The project-based learning approach is an active learning centered in children with several characteristics, such as prioritize children dependency, constructive investigation, determination of purposes, cooperations, communications, and practices. This study uses post-test only control design. There are tow random classes selected and each class consists of 33 students. The control group continue their common learning activity while another group uses project-based learning approach. The study results that the project-based learning approach can significantly improved the social development and becomes more active in the classroom using project-based learning approach. For further result the project-based learning approach is not only use to stimulate cognitive side but also stimulate social development in early childhood education.**

Keywords—project-based learning approach 1. social development, early childhood.

I. INTRODUCTION

Social development becomes one important factor in children development, especially in their society. Nowadays, in ealy childhood curriculum becomes more focus and prioritizes for developing children cognitive skill. However it has a lack of attention in developing social skill, indeed in school training, the development of cognitive side has more attention, meanwhile maintaining emotion and able to have positive social interaction and cooperation in the classroom become one factor in preparing children to go for further education level. The social skill must be internalized since an early childhood, such as how they behave (for example, fight, patient, and solutive). How they interact with other people, especially for people around them (such as parent, teachers, and friends). The social skills includes: developing communicative skill, maintain emotion and problem solving, having emphaty, doing positive interaction and cooperating, and children ability to make a decision and adapting with the norms. The children those are delayed in social development skill shows academic and behavior problem [1].

All efforts to behave children start from ealy childhood stage. The effort can be started through schools with proper education. Early childhood education is a basic education for children. In this stage, children learn how to socialize with their friends or adults. This is a gold stage for children. This stage eases them to gain information. The given stimulation in this stage influences the development for further stage. The learning process must be fun. One of suggested learning in this early childhood stage uses project-based learning approach. The approach gives students to explore and communicate to solving problem and causes effective and meaningful learning activity.

Several studies about early childhood education with proect based learning approach show positive results. Therefore, the hyphotesis of the study that project-based learning approach can be effective way to develop early childhood social skill. In ealy steps of preparing project will be based on the students' development, students' interest, and lesson theme. Then, observing the student when they are working together in the project, because this approach emphasizes on the social interaction established among groups.

This study proves that project-based learning approach has positive influence for children social skill. Therefore this approach can be implemented in teaching early childhood to enhance their social skill.

The rest of this paper is organized as follow: Section II describes the basic notion of P project-based learning and social development. Section III presents literature review. Section IV describes the proposed methodology. Section V presents the obtained results and following by discussion. Finally, Section VI concludes this work.

II. RUDIMENTARY

A. Project-based Learning

A project-based learning approach explores deeply about one problem, theme, and then present what been found as a final product. The skill established in this approach is solving problems, critical thinking, collaboration, self-management, and communication used in the approach. As argue by Jonassen in [2], says that the nature learning does not happen in regulations but in groups cooperate in problem solving. Therefore, it provides a collaborative learning environment for children to establish the knowledge. Children must be forced to collaborate with other people in developing their knowledge process. The project-based learning approach aims to support and describe children thoughts. The thoughts in this context are not only knowledge, concept, and learning, but also understanding and social, emotional, ethics, and esthetics awareness. This approach supports children social development and emotional development, and the successful during the project implementing strength positive self awareness, such as self-confidence. Besides, the education project-based learing develops independency, knowledge, and thinking skills needed by the children to help them processing

learning for future [3]. The project-based learning approach give a positive contribution in children social development, academic prestige, enhancing their social quality, maintaining children behavior, and support cognitive skill. The project-based learning approach also gives positive contribution in language. Furthermore, this approach suits to all of children development field.

The project-based learning approach can be usesd in all level of education, from early childhood education until higher education. The implementation of childhood education based on the childhood characteristics, such as exploring and finding out something because their curiousity. This approach involves the children in direct observation and in direct situation, with support and teachers' guidance which plans to strengthen lesson of childhood interest. Teachers and students are key factors in the approach successful [4]. In the first stage, teachers choose topic based on learning feedback as what they want and help students to leadthie observation. The second satge, the students are working in a small group for one project. The last stage is showing the project result conducted in a group [5].

The project learning based approach is flexible and gives meaningful learning for children. This approach aims for children by giving them opportunity to explore deeper and integrate science, such as math, science, art, and language. Through this approach, it is possible for children to gain all skills knowledge of social and communication [6]. This approach helps children gain social skill. Since they finished their project, they involve in many activities, such as preparing concept, discussing, consulting with expert, and others. Therefore, children gain many different skill because of the approach used. Beside, the children can express their ideas, have responsibilities, and as the most important thins, they can learn many things by doing and experiencing [7].

The project-based learning approach has three constructive principles: learning is specific-context, children as students are involved actively in the learning activity and they achieve their purpose through social interaction, and sharing knowledge and definition [8]. The learning focus for children is achieving the purposes by collaboration. The project-based learning approach probably the students to meet their vital skills, such as cognitive and self-maintanance, behavior, and develop cooperation [9]. In general, it can be concluded that the project-based learning approach gives students opportunity to learn thorugh experience, explore, and investigation. The learning approach which centered in students also gives students opportunity to select topics regarding to their interest.

Children learn differently. Therefore, it is important to the teachers to develop and implement the approach. The project-based learning approach is not limited on the knowledge or information, but though teachers' helps, students are provided chances to enhance their knowledge and social skills during learning activities. Nowdays, learning through reading is not enough, it still needs more effort to get knowledge and skills, such as in problem solving, collaboration, and innovative which are being developed in the 21st century. Therefore, the project-based learning approach is an effective learning model for the process of teaching, such as solving problems, makin decision, and cooperation.

B. Social Development

Social development is a level of interaction between children and other people, such as parents, siblings, friends, and general people [10]. The children are developing social skills in many aspects, especially in the involvement of playing. Children learn to control their emotion and enhance their understanding about social norms and expectation when they are engaging in playing around. It shows when children are given chances in pra-school environment, it helps them to enhance their social skill and they can understand how to establish the relationship among their friend and become an open minded person for new ideas [11].

Social development can be defined as a learning of adaptation process toward the norms of groups, moral and tradition, unity, and communicative with people and cooperation [12]. Children social development can be achieved through opportunities and experiences among people around. It shows indirectly about the interaction with people, such as playing together with friends, cooperating in group or teacher teaches a good relationship, for instance in being friendship and cooperation which is believed can be one way of nature process to children social skill development.

Training children social skill must be done by parent is let the children to socialize around and guide the, how to do well socialize [13]. The social skill competency for children must be placed in regulation in which children are interacting. Besides, children have to be given necessary materials and facilitations to be invoved in developing social interaction of children. When their social interaction are watching by the teachers or adults, it can be increased if the adult or teachers give them more opportunities to share, negotiate, and cooperation. Mostly, children learn from imitation what they seen and what they heard from people around and do it [14] also in social skill, children learn from imitating their social environment.

Social emotional learning is a way to show the development of thought, feeling, behavior, and it makes children enhance their level of understanding [15]. When children develop social and emotional skill, they get self-confidence and ability to establish the relationship, problem solving, and control the emotion [16]. In conclusion, social development is maturness in social relationship gained from interaction, making friend, socialize in behavior or communication with other people, such as parents

Social development of ealy childhood can be characterized through several activities shows to their parents, for examples (1) there is an interest to see other children and try to interact with them, (2) start playing with friends (3) try join and cooperate when playing, 4 prefer to work together with two or three children choosen by themselves [17]. Several things can be done to enhanve social development of early childhood are (1) providing them opportunities to follow physics and mental activities which includes problem solving and social activity with other people. (2) Teaching and modeling how to making friends and maintaining friendship. (3) Modeling social respons and positive emotional. (4) Tell the story how to be a leader in project and activity. (5) telling the expectation about behavior and discuss with your students [18].

III. LITERATURE REVIEW

Previous study was conducted by Fatma Kimsesiz and friends used project-based learning approach for teaching vocabulary for childhood students. The aims of this study was to investiage the teaching vocabulary effectiveness for preschool children through project-based learning approach. There was 28 students which grouped randomly into experiements and control groups. Experiment group used project-based learning approach while control group used traditional learning. The study result showed that (1) project-based learning approach was rarely implemented in the classroom, (2) project-based learning approach increases learing vocabularies compare with general method, and (3) the students were more active in classroom with project-based learning approach.

However the project-based learning approach is proven as useful approach in teaching vocabulary, the finding from survey in the study showed that project-based learning approach was less liked in early childhood school curriculum. This is because teachers have to allocate time longer if they used this approach. Therefore, the researcher wants to do further investigation about the effectiveness of the implementation regarding project-based learning approach for early childhood education with similar research approach, is quantitative post-test only control design. This study focuses on the users of project-based learning approach to children social development.

Several other studies show positive using project-based learning approach for early childhood education. The research result by Sermin Metin *et al* show that project-based learning approach causes the significant differences among groups in terms of visual perception skill. The group with project-based learning approach implementation show higher visual perception skill. As showed by Mitchell, *et al.* in [5] about project-based learning approach that it can help children to fulfill their needs, form their good self-conception, and motivate them to investigate authentic problems. The research by Rahman, *et al.* in [6] found that project-based learning approach benefits to social learning and children cognitive. However project-based learning approach relates usually to cognitive, science, and problem solving and mostly used in learning for training, but in this study, project-based learning approach is used to stimulate social development. Project-based learning approach can be integrated in learning for early childhood education. Therefore, in this study, we investigate project-based learning approach for stimulating children social development.

IV. PROPOSED METHOD

This section presents the proposed method.

A. Data

Sample has been taking randomly. There are 66 students whose similar characteristics, about 5-6 years old, taking part in this research. The children are distinguished into two classes, are control and experiment with consist of 33 children. Obesevration and research instruments are used as data collection method. The research instrument is specially made to observe the social skill of early childhood. The data have been observed and distributed normally. The analysis used Independent Samples *T*-Test with α = 0.05.

B. Method

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C. Table of Research Instrument

A similar research instrument is used for collecting data in control class and experiment class. The research instrument used is an observational checklist which appropriate to enhancement of social skills checklist that consists of basic competencies of social skills for children in 5-6 years old. Shown in Table I below:

TABLE I. OF RESEARCH INSTRUMENT

Variabel	Indikator	Descriptor	Assessment Scale			
			1	2	3	4
1. Social development	Cooperative	• Working on groups • Playing with friends • Doing group assignment				
	Tolerance	• Wharing with friends • Borrowing him for his friend • Helping friends				
	Knowing manners and politeness based on social and tradition values	• Greeting • Talking without shouting • Asking and answering questions				
	Respect to others strength	• Praising friend/ people • Respect to people work • 3. happy when seeing friends' works				

V. RESULT AND DISCUSSION

After data getting the requirements of normality and homogenity, then the hyphotesis is examined through *T*-test. In this study, it is conducted by examining difference of final observation scores of control class and experiment class. The *T*-test results are described in the Table II below:

TABLE II. T-TEST CONCLUSION

No	Data	Average	T$_{observe}$	t$_{table}$	Conclusion
1	Observation of experiment class	11.12	11.20	1.671	There is a significant difference
2	Observation of control class	7.87			

From the statistic calculation, it has *T*-observe = 11.20. and the score compared to *T*-table (*dk* =(*n*1+*n*2)−2=64; *α*=0.05). The Ttable with *N* score= 64 get 1.671. Therefore it obtained *T*-observe > *T*-table (11.20>1.671). According to the statistics, it is found the significant correlation of using project-based learning approach toward social development of children. Children will be more often having discussion in the learning process and it enhances the cooperative ability.

The finding in this study shows that the use of project-based learning approach makes teachers and students to be more creative and active in the classroom. The students become more active in PBL class setting compares to traditional classroom condition. The silent and unactive students seems being motivated and enthusiastic in following the activities given by teachers, and it makes them want to do together collaboratively to meet their common purposes.

Through project-based learning approach, the assessment conducted by the teachers becomes more objective and learning result becomes better. The project-based learning approach prefers to evaluate cognitive and social-emotional skills rather than traditional approach which only evaluate a cognitive side. Children become cooperative, communicative, and use their critical thinking as reflected from the teachers' guidance by using project-based learning approach [19].

VI.   CONCLUSION

This research is conducted aims to explore and evaluate the effct of using project-based learning approach to enhance children social development compare with traditional approach. The result found that project-based learning approach has positive influence on children social skill development. The project-based learning approach also enhances cooperation among children. The project-based learning approach is a meaningful approach for any educational levels. It provides active process for children to work together and motivate them in the activity provided. Therefore, for further research, the project-based learning approach can be implemented to stimulate any developing aspects of children. It is not only for social aspect but also to stimulate other aspects because the project-based learning approach establishes many skills such as cooperation, problem solving, investigation, and interaction.

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