APEC ICER

THE 12th APEC-KHON KAEN INTERNATIONAL SYMPOSIUM

"Innovation of Mathematics Education through Lesson Study
Textbook Development for SDGs,STEM, and Energy by Cross-border Education"

THE 10th INTERNATIONAL CONFERENCE ON EDUCATIONAL RESEARCH

"Challenging Education for Future Change"

FACULTY OF EDUCATION

KHON KAEN UNIVERSITY | THAILAND

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Rationale

People around the world inevitably face the influence of globalization. Their value and the way of life would be challenged. Education could be one solution for providing citizens to survive with knowledge and skills so that they are able to adjust appropriately to the changing world. To ensure the anticipated outcomes, challenging education and sustainable development seems to be a promising approach. Educators and stake holders, who involved in human resources development, may be enhanced learning community and challenging education for future change.

The goals of the ICER 2017 are to give international educators the opportunity to share ideas and form networks while working together on *challenging education for future change*. It is anticipated that the exchange of ideas and research findings will contribute greatly to future generations.

Sub-themes

1. Teacher Education and Professional Development
2. Curriculum and Instruction, Learning in classroom contexts
3. Educational Measurement and Evaluation
4. Educational Climate: *cultural and social context*
5. Educational management: *planning, policy implementation and assessment*
6. Lifelong Education: *non-formal and informal learning*
7. Education for Diversities: *gender, underprivileged, marginal groups, special needs*

Message from the Host

Greeting to all participants and welcome to Khon Kaen University

The International Conference on Educational Research (ICER) 2017 is the 10th annual conference to celebrate the 49th anniversary of the establishment of the Faculty of Education, Khon Kaen University (KKU). It is jointly organized by **Khon Kaen University** of Thailand, the **Education University of Hong Kong** of China, **State University of Surabaya** of Indonesia, **Mindanao State University-Iligan Institute of Technology** of Philippines, **Thailand Education Deans Council**, and the **Consortium of Sixteen Education Deans** of Thailand (Group 16). This year we are pleased to have the **Central University of Technology, Free State** of South Africa to join co-hosting the conference as our new university partner.

The goals of the ICER 2017 are to give international educators the opportunity to share ideas and form networks while working together on ***challenging education for future change***. It is anticipated that the exchange of ideas and research findings will contribute greatly to future generations.

During the ICER 2017 event, the APEC-Khon Kaen International Symposium 2017 with its theme "*Innovation of Mathematics Education through Lesson Study Textbook Development for SDGs, STEM, and Energy by Cross-border Education*", in collaboration with the **University of Tsukuba** of Japan and sponsored by the **Office of the Higher Education Commission** of Thailand, is also held at KKU starting from September 9 to September 12, 2017. So the two events will share the plenary sessions during the first two days of APEC symposium.

On behalf of the Faculty of Education, KKU, I would like to express my gratitude and my sincere appreciation to our co-host institutions, the guest speakers and the organizing committees for their efforts. I also would like to thank all delegations and participants who come from afar to join this event.

Associate Professor Maitree Inprasitha, Ph.D.
Dean, Faculty of Education
Director, Institute for Research and Development in Teaching Profession for ASEAN
Director, Center for Research in Mathematics Education
Khon Kaen University
Thailand

Message from Co-host

The Faculty of Education and Human Development is young faculty that aspires to contribute in meaningful ways to education development in the Asia Pacific Region. It is an integral part of The Education University of Hong Kong - a multidisciplinary education focussed institution with a strong research emphasis. The University has a growing international reputation for excellence in preparing globally aware professional educators, providing culturally enriched educational experiences, and producing research of distinction. Central to the University's values is a commitment to developing international and regional networks that will facilitate the integration of intercultural and global dimensions into its teaching, learning, and research.

At EdUHK we particularly value collaborative research with international partners. We seek to understand better the contexts that influence people in the Asia Pacific region and to identify ways of improving social outcomes for all. We see international partnerships as important opportunities for enhancing the impact of our research.

EdUHK is proud to join with Khon Kaen University to co-host the 2017 International Conference on Educational Research.

Professor Allan Walker
Joseph Lau Chair Professor of International Educational Leadership
Dean, Faculty of Education and Human Development
The Education University of Hong Kong
HONG KONG SAR
People's Republic of China

Message from Co-host

The College of Education of Mindanao State University-Iligan Institute of Technology (MSU-IIT) has been a partner of Khon Kaen University, Thailand in sponsoring the International Conference on Educational Research (ICER) in the recent years. In this 10th ICER on September 9-10, 2017, we renew such commitment to collaborate with Khon Kaen University in promoting educational research as instrument to disseminate scientific knowledge and competencies in the field of teaching and learning.

Nowadays, change in culture and technology happens constantly. These are challenging times for the educational institutions to be at the forefront of the changing socio-cultural landscape to guide peoples and communities towards a wholesome, productive and sustainable future. Collaboration as key to its attainment can be enhanced through an international gathering such as the ICER.

I am hopeful that in this yearly conference, the country delegates can attain deeper understanding of the 21st century educational thrusts. May they gain the greater passion to apply in various contexts the wisdom shared and learned in the sessions. Let me congratulate the Faculty of Education of Khon Kaen University for spearheading this conference. To the organizers, resource persons, facilitators, and paper presenters, may your presence inspire friendship with everyone.

Associate Professor Josefina M. Tabudlong, Ph.D.
Dean, College of Education
Mindanao State University-Iligan Institute of Technology
Mindanao, Philippines

Message from Co-host

Welcome to the International Conference on Educational Research (ICER) 2017: Challenging Education for Future Change which will be held during September 9 – 10, 2017 in Faculty of Education Khon Kaen University.

The ICER 2017 is the 10th annual conference with aims to provide an opportunity for both stakeholders, lecturers, students, and teachers to expand and enhance their knowledge and their vision for creating better education practice in each country. As education is a fundamental human right and is indispensable for each generation. Besides, through this conference wider networks will be formed, so it will ensure that each of us can contribute optimally for sustainable education in the future. Moreover, this is also in line with the vision of Universitas Negeri Surabaya which is excellent in education and strong in science.

As a co host of the International Conference on Educational Research (ICER) 2017, that the success of the conference depends ultimately to all of us who have supported our members of university to join the conference. In particular, we thank to Khon Khaen University in organizing the technical program; the Program Committee for their thorough and timely reviewing of the papers, and all committee who have helped us to for all participants. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and seminar. Admittedly, thank you to the partners who jointly organize this great and extraordinary event.

Thank you to all participants of ICER 2017 who have spread as well as shared idea, insight and cooperation concern with a better world civilization through education. I believe by this conference togeteher we can create foundation of life with education and take part in realizing sustainable development goals (SDG) especially for quality education. So that we expect to get technical insight and tremendous opportunities for formal and informal networking which will be useful for every aspect of life.

Sujarwanto
Dean, Education Faculty
Universitas Negeri Surabaya
Indonesia

Message from Co-host

The Central University of Technology Vision 2020 statement is*: "By 2020, Central University of Technology, Free State shall be an engaged university that focuses on producing quality social and technological innovations for socio-economic development, primarily in the Central Region of South Africa"*. In other words, by 2020, CUT will be a centre of knowledge, innovation and excellence producing a critical mass of innovators that directly contributes to prosperity-creation.

In fulfilling the above said Vision, Central University of Technology (CUT), South Africa has realised that it's needs to strengthen its relations with international partners, especially institutions of higher learning, who not only share similar values and strategic objectives as CUT, but institutions who are committed in responding to international demands and challenges through the application of quality academic programme programmes, a knowledgeable teaching staff, cutting edge research, collaborative research initiatives, responsive community engagement projects, cultural exchange and regional and international partnership developmental endeavours.

We at CUT are therefore extremely proud to be a co-host to the 10th International Conference on Educational Research (ICER) 2017: *Challenging Education for Future Change*, which will be held during September 9-10, 2017 in the Faculty of Education, Khon Kaen University, Thailand. The Faculty of Humanities at CUT is further committed to support and strengthen MoU activities between Khon Kaen University and the Central University of Technology.

CUT further expresses its utmost gratitude to the ICER Local Organising Committee members, under the leadership of Prof. Dr Maitree Inprasitha for planning and overseeing the duties, arrangements and logistics for the upcoming event. I have no doubt that the other partner universities, attending ICER will also pledge their full support and commitment to the success of this international landmark event.

Professor Wendy Setlalentoa
Acting Dean, Faculty of Humanities
Central University of Technology
South Africa

The Implementation of Project Method Toward the Cooperation Behavior of Autism Children

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Abstract

This research was conducted because of the importance of social behavior to be developed to autism children since early age. One of the social behavior aspects which needed to be developed was cooperation behavior. It seemed to the autism children's behavior which was very individualist and closed in finishing everything. Through project method autism children were directed to finish the class picket duty with cooperating together with classmates. This research had purpose to prove the influence of project method toward cooperation behavior to autism children of group B in Kindergarten Insani Mandiri Sidoarjo. This research used quantitative approach with *experiment* kind with *single subject research* and the research arrangement was A-B-A. The subject was all autism children of group B in Insani Mandiri Sidoarjo numbering one child whose social behavior of cooperation aspect needed to be developed. The data collection technique used observation. The data analysis technique used descriptive statistic with visual analysis in condition and visual analysis among condition.The research result indicated that project method could decrease cooperation refusal behavior to autism children of group B in Kindergarten Insani Mandiri with the average frequency to baseline phase (A1) 3,5, intervention phase (B) 0 and repeating baseline observation phase (A2) 2,5. From the overlap data it indicated that the small percentage value was 20% which meant project method influenced toward cooperation refusal behavior to autism children of group B in Kindergarten Insani Mandiri Sidoarjo.

Keywords: *Autism Children, Cooperation Behavior, Project Method*

Introduction

Each child had the opportunity to have their role in society, the social behavior, especially for the cooperation behavior in children need to be stimulated as early as possible in order to achieve the expected social behavior in society. Benefits of cooperation for early childhood is to foster a sense of togetherness, liveliness and courage (Hidayati 2014: 18) In early childhood need to be given a solid foundation in order to avoid emotional or personality disorders.

According to Anita (2011: 54) in early childhood normal social behaviors that can be developed maximally are : tolerance towards others, cooperate with friends, easy to mingle or interact with others, can communicate with people who are known, imitate the activities Adults, willing to share, help, be able to follow the game, be able to obey the rules, be able to focus, be able to control the emotions, appreciate the work of others, show the natural emotion and so on. In contrast to early childhood autism, social behavior of early childhood

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autism does not show such behavior, autism children show high anti-social behavior in various aspects, one of which is refuses to cooperate in various activities carried out daily.

Bonny (2003: 25) states that social behavior of autism children is different from normal children in general. Children with autism have excessive behaviors or deficient behaviors. Excessive Behaviors on autism children for example is tantrums, while deficient behaviors is improper social behavior. Inappropriate social behavior can be described by anti-social behavior.

Based on preliminary observation in December 5, 2015 it was found that there are two autism childrens who show anti-social behavior in the Insan Mandiri School Sidoarjo City Indonesia. The anti-social behaviors including : the lack of cooperation behavior carrying out all activities. This is happens due to absence of stimulus that encourages children to become social individuals.

There needs to teaching methods that can stimulate social behavior of autism children in school. Learning method is an effort made to implement the lesson plan that has been prepared. In this research, using project methods. The project method is one of the methods used to train children's ability to solve problems experienced in daily life. This method can move the child to cooperate whole heartedly. Cooperation was done in an integrated manner to achieve society goals (Isjoni 2010: 92).

Implementation of the project method in this research is by confronting autism children on a simple problem which should be solved together with classmates. Problems to be solved are class picket activities that will be modified to reduce the cooperation rejection behavior of autism children. Owned social behavior autistic children are different from normal children in general. Children with autism have excessive behaviors (excessive) a tau needy behavior (deficient).

Previous research by Widiastuti (2011) on " Project Learning Based on Local Culture to Stimulate Multiple Intelligences of Early Childhood", in the display have been presented stating that the project method gives children the opportunity to explore the five senses and their body in certain activities with fun. Based on this research it can be concluded that there is an influence of project learning to increase multiple intelligences of early childhood.

This is in accordance with the intent of the researcher is to optimize the intrapersonal intelligence of autism children which is the social behavior, with aspects of cooperatio. The different between the previous research with this research that now apart from the research subject, research place and research aspects the previous research used project learning to stimulate multiple intelligences of early childhood whereas this research has a purpose to improve the social behavior of autism children. Based on the description above, this research focused on the subject of social behavior problem autism children. That’s why its necessary to held a research on "the implementation of project method thoward cooperation behavior of autism children.

Literature Review

Cooperation is an effort or a variety of actions that humans do to produce behavior which related to life and social interaction. In social life, behavioral patterns that are sensitive to social stimuli, especially the pressures and demands of community life and learning to mingle with the social environment is the pattern of behavior expected by society. A good pattern of social behavior is reflected in each individual's actions in accordance with the prevailing norms or not.

But autism children showed the failure of interpersonal relationships characterized by the lack of response toward people around them, treat others without individual differences showing lack of inability to foster cooperative game or have a friend with children of his age, experience a disruption in communication skills both verbal and non-verbal, experienced aphasia nominations, which is make them uable to give names to the objects around them.

Moeslichatoen (2004: 142) declare that the benefits of implementing project method for early childhood autism is to develop healthy and realistic personal which has characteristics of independence, self-confident and able to adapt, to develop interpersonal exchange and willing to accept the reality, the project method emphasizes responsibility shifted from teacher to children, it can be used to develop and foster an attitude of cooperation and social interaction among children involved in learning with project method, to be able to complete their task in togetherness effectively and harmoniously. Each of children will learn to take responsibility for their task.

Method

This research use ABA Design. ABA design shows a causal relationship between dependent variable and independent variable. The ABA design implementation can be initiated by continuously measure the target behavior at baseline conditions (A1) with a certain time period after the intervention condition (B) after the measurement in the intervention condition (B) measurement at the second baseline conditions (A2) is given. The addition of the second baseline condition (A2) is intended as a control for the intervention phase making it possible to draw conclusions about the functional relationship between dependent variable and independent variable.

According to Sunanto, et al., (2005: 62) explains that there are some things that need to be considered to improve the validity of research by using ABA design including :

1. Defines the target behavior as a measurable behavior
2. Measure and collect data at baseline condition (A1) continuously at least 3 or 5 or trend and data level becomes stable
3. Provide intervention after data trend of baseline is stable
4. Measure and collect data at the intervention phase (B) with a certain period of time until the data becomes stable
5. After data and data rate trends in the intervention phase (B) are stable repeat the baseline phase (A2)

The research design can be seen in figure 1 bellow :

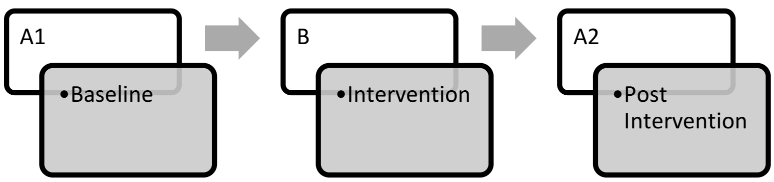

Figure 1 : Research Design (Sunanto, J 2005)

Baseline (A1) is a condition in which the target behavior is carried out in a natural condition prior to any intervention. Measurements are made to determine the social behavior of children. Intervention (B) is experimental conditions in which an intervention has been provided and the target behavior measured under those conditions. Subjects are given treatment through project method in an effort to improve social behavior through class picket activities that will be done with friends. While post intervention is the measurement after the given treatment. The intervening phase makes it possible to draw the conclusions of functional relationships between dependent and independent variable.

Subject of this research is one autism student in the Special School Insan Mandiri Sidoarjo. Based on the previous observation autism children have impaired social behavior which is the lack of cooperation behavior. While the cognitive abilities of the students is same as normal students in general.

Independent variable is a variable that affect or cause changes in dependent variable. In this research which project method is the independent variable. Project method according to Moeslichatoen (2004: 137) is one way of giving a learning experience by bringing together children with everyday problems that must be solved in groups.

Dependent variable is a variable that is affected by the independent variable. Dependent variable in this research is the cooperation behavior of autism children. Autism children's cooperation behavior can be demonstrated by failure to build and start activities related to others including cooperation. This not only becomes a difficulty for autism children but a complex problem for them because the cooperation involves social interaction in groups and have the same goals with each other, so that becomes a special problem for autism children.

Findings / Analysis

Based on the research result shows that project method has an influence on the cooperation behavior of autism children. Therefore, the description of research activities before and after implementing the project method is as follows:

1. Observations Result About Autism Children Cooperation Behavior on Baseline Phase (A1)

At the baseline phase (A1), four sessions were observed to measure children rejection to cooperate without intervention. Observation is done by counting how many times the child refused to be invited to work together in cleaning the classroom within a previously determined time.

2. Observations Result About Autism Children Cooperation Behavior on Intervention Phase (B)

In continuous observation phase during five sessions by giving intervention in the form of class picket activities. Observation is done by counting how many times the child refuses to be invited to work together in cleaning the class.

3. Impelementation Result About Autism Children Cooperation Behavior on Second Baseline Phase (A2)

In the post-intervention phase observation is not done directly after the intervention, there is a need for a pause for the updated treatment. The researcher gave the time lag for 7 days. Observations were made during 4 sessions, by counting the number of times the child refused to be cooperated in cleaning the classroom.

All of these result can be seen in Table 1 bellow :

Table 1. Observation Results of Autism Children's Cooperation Rejection Behavior

Phase	Sessions	Frequency Um
Observation (A1)	1	4
	2	4
	3	3
	4	3
Intervention (B)	5	0
	6	0
	7	0
	8	0
	9	0
Observation (A2)	10	3
	11	3
	12	2
	13	2

Based on the above table above it can be seen that in the baseline phase (A1) observation was conducted for four sessions, intervention (B) was done during five sessions and baseline (A2) post intervention conducted during four sessions. At each baseline observation session (A1), Intervention (B) and baseline (A2) post-intervention observing the cooperation behavior of autism children by impementing project method in classroom picket can be shown in this several table.

4. Results of Visual Analysis in Social Behavior of Autism Children

If all six components of visual analysis are included in the summary format, the results are in the table 2 bellow :

Table 2

Recapitulation of Visual Analysis Results

No.	**Condition**	**A1 / 1**	**B / 1**	**A2 / 1**
1.	Length of condition	4	5	4
2.	Estimation of tendency direction	(-)	(=)	(-)
3.	Stability trends	Stable 100%	Variebel 0%	Stable 100%
4.	Estimated data traces	(-)	(=)	(-)
5.	Stability level and range	Stable (3-4)	Variable (0-0)	Stable (2-3)
6.	Level of change	(4-3) + 1	(0-0) = 0	(3-2) + 1

The results of the analysis in conditions of autism children's cooperation rejection behavior (A1) show that the length of the condition is four sessions, the tendency of stability shows that data results are stable with a percentage of 100%, the line on the estimated of tendency direction and the estimated data traces has the same meaning that is in the phase observation (A1) direction of the trend decline, the level of stability and range shows stable data in the range of 3-4, and observation phase-change level (A1) indicates the sign (+) which means autism children's cooperation rejection behavior experience positive change.

The results of the analysis in conditions of autism children's cooperation rejection behavior (B) shows that the length of conditions is five sessions, the tendency of stability shows the results of the data is not stable with the percentage of 0%, the line on the estimated of tendency direction and the estimated trace data has the same meaning that the intervention phase (B) the direction of the trend is static, the level of stability and range indicates the data is variable or unstable with a range of 0-0, and the level of change in phase intervention (B) shows signs (=) which means that the autism children social behavior in the aspect of cooperation is not change.

The results of the analysis in conditions of autism children's cooperation rejection behavior (A2) shows that the length of the condition is four sessions, the tendency of stability shows the results of the data that is stable with a percentage of 100%, the line on the estimated of tendency direction and the estimated trace data has the same meaning that is the phase of observation (A2) direction of the trend decline, the level of stability and range data shows stable with the range of 3-2, and the level of change in baseline phase (A2) indicates the sign (+) which means that the autism children social behavior in the aspect of cooperation have a positive change.

5.Result of Inter Condition Visual Analysis
Inter condition visual analysis include five components that can be seen in table 3 bellow :

No	Comparison of Conditions	B1 / A1	B1 / A2
1.	Number of variables changed	1	1
2.	Changes in trend direction and its effects	(-) (=)	(=) (-)
3.	Changes in the tendency of stability	Stable to Variebel	Variable to Stable
4.	Level change	3 - 0 = 3	3 - 1 = 2
5.	Percentage overlap	$\frac{4}{5}$ x 100% = 20%	$\frac{4}{5}$ x100% =20%

The result of visual analysis between observation phase (A1) with intervention phase (B) in autism children's cooperation rejection behavior baseline indicates that the number of variables in this study is one, changes in direction tendency show a decrease, stability trends change shows stable data to variable, level changes show data (+) which means positive, and the percentage of data overlap shows 20% which means that the intervention program affect the target behavior which is the autism children's cooperation rejection behavior.

The results of inter-condition visual analysis of autism children's cooperation rejection behavior between the intervention phase (B) with a baseline observation phase (A2) showed that the number of variables in this study is one, changes in direction tendency show a decrease, stability trends change shows variable data to stable, level changes show data (+) which means positive, and the percentage of data overlap shows 20% which means that the intervention program affect the target behavior which is cooperation rejection behavior.

6.Results of Data Analysis in the Bar Chart

The results of the data analyst in a bar chart can be determined by comparing each subject's ability then searched accumulated average frequency in each phase for each subject as shown in figure 2 bellow :

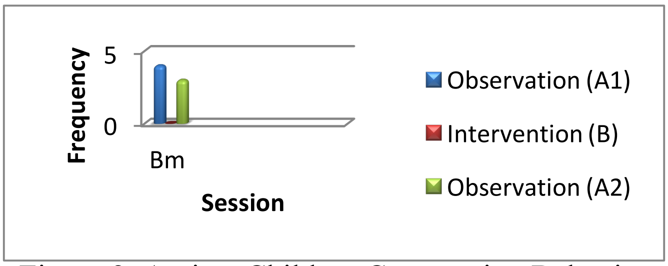

Figure 2. Autism Children Cooperation Behavior

Based figure 2 above it can be seen that social behavior of autism children does not show significant data difference. Shown with the results of all subjects having an average of nearly the same frequency as data reduction from the baseline observation phase (A1) to the second baseline observation phase (A2). This suggests that the outcomes of interventions that have been performed have an influence in autism children's cooperation rejection behavior although not significantly.

After analyzing the comparison of the subjects, it can be concluded that the autism children's cooperation rejection behavior shows the decrease of data from the baseline observation phase (A1) to intervention (B) and from the intervention phase to baseline observation (A2), these three things show that there is an influence of class picket project method toward autism children's cooperation rejection behavior although not significant.

Based on the data analysis and hypothesis testing about the influence of the project method toward autism children's cooperation rejection behavior showed a decrease in the cooperation rejection among autism children with one another by using the class picket project method as an intervention. The benefits of cooperation for early childhood is to cultivate a sense of togetherness, liveliness and courage (Hidayati 2014: 18). This is in accordance with the opinion of Moeslichatoen (2004: 142) who stated that is to develop healthy and realistic personal which has characteristics of independence, self-confident and able to adapt, to develop interpersonal exchange and willing to accept the reality, the project method emphasizes responsibility shifted from teacher to children, it can be used to develop and foster an attitude of cooperation and social interaction among children involved in learning with project method.

In the baseline phase (A1), autism children have social behavioral barriers, namely the lack of cooperative behavior between one another. This is in accordance with the opinion of Safaria (in Mudjito, 2013: 27), who says that children with autism showed the failure of interpersonal relationships characterized by the lack of response toward people around, treat others without individual differences, showing lack of inability to foster cooperative game (cooperation) in accordance with the opinion. This is evidenced by the results of baseline phase (A1) testing, which still has an high average of rejection.

In the intervention phase (B) using the project method shows a decrease in the refusal to cooperate in the implementation of class picket. The intervention was given intensively for five sessions , all the preparation of the project has been prepared by the researcher to support the maximal implementation of the class picket. The implementation of the project method is more easily understood by the child because the intervention is given in a simple way by confronting the child in a dirty classroom situation then the child is directed to clean the classroom by working together. This is in accordance with the opinion of Siegel (in Nawawi et al, 2009: 12) who states that individuals with autism are easier to obtain visual information of two or three-dimensional than the auditory stimulus.

Based on the results of the baseline (A1) phase, the intervention phase (B) and baseline (A2) were conducted to test the effectiveness of the project method. In social behavior of autism children aspect of cooperation of subject has the highest rejection rate at baseline phase (A1) that is four at phase of intervention (B) that is 0 and at baseline phase (A2) that is three. Based on average data acquisition above can be concluded that the project method has an influence on the social behavior of children with autism which is decreased rejection after being given intervention so that it can be seen that the project method has an influence on the autism children's cooperation rejection behavior in Special School Insani Mandiri Sidoarjo. Implication of the project method to children with early autism beside to reduce the cooperation rejection behavior but also can optimize the social behavior of other aspects. The project method can also be used as a method to optimize cognitive aspects in early childhood. Based on the research that has been done to answer the research problem that there is influence on the autism children's cooperation rejection behavior of autism children in the Special School Insan Mandiri Sidoarjo. This is because through the project method given to the child through the class picket activities give full responsibility to the child to optimize the social interaction

Recommendation

Based on the result of the research, it can be concluded that the project method can decrease the rejection behavior of the autism children with the average frequency in the baseline phase (A1) 3,5 followed by the intervention phase (B) 0 and the second baseline observation (A2) 2.5. From both of overlap data showed small percentage value that is 20% which means project method influence autism children's cooperation rejection behavior.

References

Arikunto, Suharsimi. 2013. *Research Procedure A Practical Approach.* Jakarta: Rineka Cipta

Bekti, Ardiana. 2014. *Effect of Parachute Play Against Social Behavior Development of Autistic Children.* Study Program of Special Education, Faculty of Education UNESA. Unpublished thesis.Surabaya: UNESA

Danuatmaja, Bonny. 2003. *Treatment of Autism Children At Home.* Jakarta: Puspa Swara.

Hurlock, Elizabeth. 2013. *Development of Children.* Jakarta: Erland

Mudjito, et al. *Autism Children Education.* Jakarta: Ministry of National Education Directorate General of Primary and Secondary Education Directorate of Education.

Moeslichatoen. 2004. *Teaching in Kindergarten.* Jakarta: Rineka Cipta.

American Psychiatric Association. 2013. *Diagnostic and Statistical Manual Of Mental Disorder, Fifth Edition, DSM-5, APA*. Washington DC, London, England.

Minartin. 2013. *Improving Children Through Social Behavior Group Work Method In* *kindergarten Aisyiyah Bustanulatfal Toboli.* Student of PG PAUD Study Program. University of Tadulako.

Nawaduddin, Nawaflaty. 2012. *Effect Puzzle Play Against Child Social Behavior Group B Harvard Pre-School Kindergarten Kebomas Gresk.* Study Program PG-PAUD, Faculty of Education UNESA. Unpublished thesis. Surabaya: UNESA.

Nugraha, Ali. 2008. *Methods of Social Emotional Development.* Jakarta: Open University and Ministry of National Education.

Suparno. Suhartini Endang and Purwandari. 2010. *Development of Social Behavior Modification Model Through Media with Concept of Convergence Materials for Autism Children,* Vol 40, No. 2, November 2010, p 201-214.

Sugiyono. 2013. *Quantitative Research Methods, Qualitative, and R & D.* Bandung: Alfabeta.

Sunanto, Juang. 2005. *Introduction to Research With Single subject.* Center for Research on International Cooperation in Educational Development (CRICED). University Of Tsukuba.

Sugiyono. 2013. *Statistics For Research.* Bandung: Alfabeta

Sugiyono. 2015. *Methods of Education.* Bandung: Alfabeta

2014. Team *Thesis Writing Guidelines. Surabaya:* Unesa University Press