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The Development of Fourth Grade Primary School Science Learning Material Based on Local Wisdom at SDN Kesongo 01 Kabupaten Semarang

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Abstract

Based on the result of 2015 PISA (Programme for International Students Assessment) in term of science, Indonesia ranked 64th from 72 countries. Meanwhile based on the result of TIMSS (Trends in International Mathematics and Science Study), Indonesian ranked 45th from 48 countries. Those results showed that Indonesia still have low quality in science. This problem also happened in SDN Kesongo 01. It was known that students had low science learning outcome because learning material had not yet developed. In order to solve this problem, researcher developed an innovative learning material based on local wisdom. This research aimed to know the feasibility, students and teacher responses, and the effectiveness of 4th grade Primary School Science learning material based on local wisdom. This research was research and development (R&D). Main subject of this research was students of class IV SDN Kesongo 01. Data analysis were percentage descriptive statistic, normality test, t-test and gain test. The results showed that 4th grade primary school science learning material based on local wisdom was developed by integrating the lesson material with the contents of local wisdom, feasible to be used, and effectively improved student learning outcome with moderate criteria. Showed by the result of gain test 0,6 and t test 0.00. The conclusions of this research were 4th grade primary school science learning material based on local wisdom was very feasible, obtained very positive responses, and effectively improved student learning outcome. Suggestion from this research was 4th grade primary school science learning material based on local wisdom can be used as an alternative learning material in science lesson in the accordance with the guideline.

Keywords: development, learning material, local wisdom, science.

1. INTRODUCTION

Law of the Republic of Indonesia number 20 year 2003 about national education system stated that education is a conscious and planned effort to create an atmosphere of learning and learning process so that learners could actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, and skill, which are needed by theirselves, society, nation and state.

Government regulation number 32 year 2013 as an amendment of government regulation number 19 year 2005 about national standard of education stated that the curriculum of primary education or the equivalent eduaction must include science (IPA). Based on the regulation, science learning must be given to students of primary and secondary education. According to the regulation of the minister of education number 22 year 2006 about standard of content, the Standard of competency (SK) and Basic Competency (KD) of science in primary school are the minimum standard which must be nationally achieved by learners and become a reference in curriculum development in each educational unit. Science is an important content in primary school curriculum.

According to Samatowa (2016:3) science discussed about natural phenomena which was arranged systematically based on experimental result and observation made by humans. Furthermore, Cain and Evans (1990: 4) divide four basic characteristics of science, namely; (1) scence as product; (2) science as process; (3) science as attitude; and (4) science as technology. Science education is expected to be a tool for learners to learn about themselves and environment, as well as a prospect for further development in applying it in daily life.

Problem was still found in science learning activity in Indonesia. Organization for Economic Cooperation & Development (OECD) conducted a three-year survey for 15 year old students around the world known as Programme for International Students Assessment (PISA). PISA is a study focusing in the assessment on the core subjects of science, literacy, reading and math. According to the result of the 2015 PISA in the term of science Indonesia ranked 64th of 72 countries. The results of the study showed the average score obtained by Indonesian students was 403. While the average OECD score was 493. Although Indonesia rose by 6 levels, the average score for Indonesia was still below the average of OECD score (OECD, 2016: 5). Meanwhile, according to the results of Trends in International Mathematics and Science Study or TIMSS, a study initiated by the International Association for the Evaluation of Educational

Achievement (IEA) in order to compare the achievement of mathematic and science students of 8th grade and 4th grade in several countries around the world which was conducted every 4 years showed the average score obtained by Indonesian students in the term of science was 397. From the result, Indonesia occupied the position of 45th out of 48 countries which were participated (Research and Development Agency, 2017: 1).

Science lesson in its implementation in primary school has not been in accordance with the goals set by the government which was described in the regulation of the Minister of National Education No. 22 year 2006. This fact was supported by the data obtained by the researcher. Through interview, observation and data collection which were conducted at SDN Kesongo 01 in Semarang Regency, reserchер found that teacher has not yet developed learning material. This problem resulted in low science learning outcome of 4th grade students of SDN Kesongo 01. It was proved by three times of daily test which only 21.7% score was above minimum completeness criteria (KKM) and 78.3% score was under the minimum completeness criteria (KKM) with the KKM for science was 72.

One of the component in science learning was learning material. Learning material as one of the component of learning science, was defined by Prastowo (2016:17) as all materials (both information, tool, and text) which are arranged systematically, displaying the complete figure of competence to be mastered by learners and used in the learning process with the purpose of planning and reviewing the implementation of learning process. Teaching materials could not be used directly, thus teaching material need to be developed by considering the needs of students which was in the accordance with the characteristic and setting of student social environment (Warso, 2016: 21). The characteristic and setting of student social environment could be in the form of local wisdom in student real life. Wisdom means (1) wise and (2) intellect. Based on the meaning of the Great Indonesian dictionary, the meaning of the word 'wisdom' was related to two things, namely (1) character or personality (emotion) and (2) intelligence (cognitive). The values of local wisdom need to be preserved, because local wisdom becomes the characteristic of a place, beside learning local wisdom had a strategic position in education (Rahyono, 2015: 10).

Based on the problem which occurred, researcher developed a 4th grade primary school science learning material based on local wisdom to improve the quality of science learning in order to encourage student to involve in learning and simplify students in remembering the science material which was being taught. The purpose of this research was to know the characteristic of learning materials which previously used at SDN Kesongo 01, to develop, to examine the feasibility, to know the student and techer responses, and to examine the effectiveness of 4th grade primary school science learning material based on local wisdom.

2. RESEARCH METHOD

This research was research and development. This research used research and development model from sugiyono adaptation (2010: 409). The steps in this research were: (1) potential and problem; (2) data collection; (3) product designing; (4) product validation; (5) product revision; (6) product testing; (7) product revision; (8) operasional testing; (9) product revision; (10) mass production. The experimental design to know the effectiveness of the product was pre-experimental model one group pretest-posttest design (Sugiyono, 2015:110-111). This model compared the prestest score (before using 4th grade primary school science learning material based on local wisdom) with posttest score (after using 4th grade primary school science learning material based on local wisdom). The main subject of this research was students of grade IVB SDN Kesongo 01, which consist of 20 students. The sampling technique was saturated sampling technique because all members of population were being used as a sample, since the population was relatively small. Data collection techniques used observation, interview, docu-mentation, questionnaire and test.

3. RESEARCH RESULT AND DISCUSSION

3.1 The Characteristics of 4th Grade Teaching Material Used in SDN Kesongo 01

Learning material is one of the component that must exist in science learning. The definition of learning material according to Hamdani (2011: 120) is any form of material which was arranged systematically used to help teachers or instructors in carrying out teaching and learning activities that create an environment or atmosphere that allow students to learn. Science learning material in SDN Kesongo 01 has not yet developed according to the characteristic and setting of student social environment. Books that student used as a learning material contain material lesson which was still common and did not related to student daily life. As a consequent, science lesson which was created was less meaningful because students were not familiar with the material discussed in the book. In addition, the books have not accommodated students to participate in learning activities as a form of science as a process.

According to Minister of National Education Regulation no. 22 year 2006, science examines natural phenomena come from daily life. It was explained that learning process emphasized the provision of hands-on experience to develop competency to explore and understand the natural world scientifically. This problem resulted in low science learning outcome of 4th grade students of SDN Kesongo 01. According to Warso (2016: 19) learning material need to be developed considering there are number of reasons including the demand for solving learning problem. To overcome this difficulty, researcher developed a 4th grade primary school science learning material based on local wisdom.

3.2 The Development of 4th Grade Primary School Science Learning Material Based on Local Wisdom

According to Ausubel's meaningful learning theory (in Wisudawati and Sulistyowati, 2014: 43) students learn by associating their understanding with what they already have. In learning process, it would be more meaningful if students build their own concept by doing an association process toward experience, phenomena which they encounter, and new fact into the understanding which they already owned. Meanwhile, according to constructivism learning theory, knowledge construction process is more meaningful if students encountered it through the phenomenon that occurs.

Followed up on this theory, teaching material as a component that must exist in science learning need to be developed to create meaningful learning. The learning material was developed based on local wisdom in order to make learning material more meaningful for the students.

Table 1. The Presentage of The Assessment of Foutth Grade Primary School Science Learning Material Based on Local Wisdom on Each Aspect.

No	Aspect of Feasibility	Score	Maximum Score	Persentage	Criteris
1	Graphical	64	70	92%	Very Valid
2	Serving	45	50	90%	Very Valid
3	Content	39	45	87%	Very Valid
4	Languange	32	35	91%	Very Valid
5	Assessment of local wisdom	22	25	88%	Very Valid

Fourth grade primary school science learning material based on local wisdom helped students to understand and remember science material lesson. The 4th grade primary school science learning material based on local wisdom was integrated with content of local wisdom around student's environment. As a result, the material was more meaningful because it could be encountered by students in their daily life. This solution was supported by theory by Rahyono (2015: 10) about the factors which made learning local wisdom has strategic position. These factors were: (1) local wisdom is an inherent form of identity since birth; (2) local wisdom wis not strange to the owner; (3) there is a strong community's emotional involve in the appreciation of local wisdom; (4) learn a local wisdom do not require imple-mentation; (5) local wisdom is capable to develop self-esteem and self-confidence; and (6) local wisdom could enhance the dignity of the nation and state.

The main characteristic of 4th grade primary school science learning material based on local wisdom resided in the material which was in accordance with the characteristic and setting of social environment of students. It was integrated with local wisdom which was contained in their daily life. The material contained the contents/ dimensions of local wisdom, namely: (1) local knowledge; (2) local culture; (3) local skill; (4) local source; and (5) local social process.

3.3 The Feasibility of 4th Grade Primary School Science Learning Material Based On Local Wisdom

The feasibility of 4th grade primary school science learning material based on local wisdom was obtained from the validation process done by two expert which were media expert and material expert as well as one teacher. The validation was done to the aspect of the learning material feasibility according to BSNP (2008: 8) including graphical feasibility, serving feasibility, content feasibility, language feasibility, and assessment of local wisdom.

Based on the percentage of the assessment of 4th grade primary school science learning material based on local wisdom on each aspect in table 1 showed that each feasibility aspect got >84% score which was belong into very valid category. From the result, it could be concluded that 4th grade primary school science learning material based on local wisdom was very feasible to be used.

3.4 Students and Teacher's Responses toward 4th Grade Primary School Science Learning Material Based on Local Wisdom

According to Prastowo (2015:18) if learning material is made by educators, then learning would become more interesting and memorable for students. Questi-onnaire response was given to students and teacher to know their responses toward 4th grade primary school science learning material based on local wisdom. Students and teacher's

responses were categorized into very positive, positive, quite positive, less positive and non-positive criteria. Here is the result of recapitulation of students and teacher responses on every aspect toward 4th grade primary school science learning material based on local wisdom.

Table 2. Recapitulation of Students and Teacher's Responses Questionaire

Response	Classical Presentage	Criteria
Students	93,5%	Very positive
Teacher	92,7%	Very positive

Based on the recapitulation of the result of students and teacher questionnaires in table 2 showed that the percentage of student response was 93.5% (very positive) and the percentage of teacher response was 92.7% (very positive). Those result indicated that 4th grade primary school science learning material based on local wisdom got very positive responses from both students and teacher.

3.5 The Effectiveness of 4th Grade Primary School Science Learning Material Based on Local Wisdom

The effectiveness of the use of 4th grade primary school science learning material based on local wisdom was seen from student's cognitive learning outcomes in science with natural resource as subject lesson. Student's cognitive learning outcomes consist of pretest and posttest score. The score of pretest and posttest learning outcomes were presented in the following table.

Table 3. The Recapitulation of Student Learning Outcome (Pretest and Postest)

Step	Higher Score	Lower Score	Average Score	Number of Student's Completness	Learning Completness (%)
Pretest	80	54	65,7	5	25%
Posttest	97	74	86,3	20	100%

Based on the recapitulation of student learning outcome showed that there was a difference between students learning outcomes at prerest and posttest. Pretest average score was 65,7 meanwhile posttest average score was 86,3. In addition, the learning completeness at pretest and posttest also showed there was a difference. Number of students's learning completeness during pretest was 5 students (25%) meanwhile number of student's learning completeness during posttest was 20 students (100%).

Fourth grade primary school science learning material based on local wisdom could be said as an effective learning material based on the significant average score difference between pretest and posttest results. The result of t-test which was conducted before and after the use of 4th grade primary school science learning material based on local wisdom was presented in the following table.

Table 4. The Result of T-test of Students Pretest and Postest Score

Sig.	Alpha	Interpretation
0,00	0.05	Hypothesis was accepted

Based on the result of t-test of students pretest and posttest in table 4 showed that there was a significant value 0.00 > Sig 0.05. From those result, it could be concluded that there was a difirence of students learning outcome at class IV SDN Kesongo 01 before and after the use of 4th grade primary school science learning material based on local wisdom.

Gain test was used to know the increase of the students average learning outcomes score before and after using 4th grade primary school science learning material based on local wisdom. The result of gain test was presented in the following table.

Table 5. The Result of Gain Test

Category	Nilai
Pretest average score	65,7
Posttes average score	86,3
Difference average score	20,6
Gain score	0,6
Criteria	Moderate

Based on the result of gain test in table 5 showed that gain test of pretest and posttest average score was 0,6 with the difference average score was 20,6. Those result belong to moderate criteria.

Based on the explanation, the use of 4th grade primary school science learning material based on local wisdom affecting student sciene learning outcomes, thus it could be used as an alternative learning material in science. This result was the same as the early research conducted by Farida Nur Kumala and Prihatin that showed the use of learning material based on local wisdom could effectively increase student learning outcome and activity.

4. CONCLUSION

Based on the result, expalantion, and data analysis, it could be concluded that learning material that previously used by student has not been developed according to the characteristic and setting or student social environment, 4th grade primary school science learning material based on local

wisdom was developed by integrating the material with the contents of local wisdom in student daily life, feasible/decent to be used, obtained an assessment score with very valid criteria, obtained students and teacher responses with very positive criteria, and effective to increase student science learning outcome with moderate criteria.

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The Empowerment of Grade VI Elementary School Students in Having Compulsory Prayer by Implementing The Strategy of Modeling The Way (Action Research in SD Negeri Sidorejo Kidul 02, Tingkir District, Salatiga Regency, Central Java Province)

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Abstract

This research can be a knowledge or theoretical review for the next researches to deal with students' learning difficulties through The Way model and can give contribution to the science and technology development, especially in religion education and can be a new theory about the improvements of the grade VI students' active in improving the skills to do the compulsory prayer movement. The research result gained is influenced by two main factors, which are from the students themselves, especially on the owned skills and factor from outside of the students or environmental factor, like learning motivation and attention, attitude and learning habit, diligence, economical social, physical factor and others. The discussion results in this research included 3 things; they were action, activity, and students' skill in doing compulsory prayers. At the beginning condition, teaching of compulsory prayers in grade VI students in IV SD Negeri Sidorejo Kidul 02 did not use the strategy of modeling the way. In cycle I used the strategy of modeling the way without guideline from the teacher. Then, continued by cycle II used the strategy of modeling the way with the teacher's guideline. It was aimed at combining the method used to make the students more understand.

Key words: religion education, modeling the way method, compulsory prayers

1. INTRODUCTION

The ability to do prayer movement, especially compulsory prayers in appropriate way have to be owned by the students as the study result in prayer materials in grade VI elementary school students. Therefore, this prayer education becomes the concern of teachers and students by more focusing it on the practical ability. To gain that purpose, it is chosen the strategy of modeling the way. The strategy chosen of modeling the way, according to Hisyam Zaini, (2008:76) help the students and teachers to gain the planned purposes by giving the opportunity for the students to practice specific skills which are learnt in the class through demonstration.

Based on the basic competence stated in syllabus of Muslim education, most of the grade VI elementary school students cannot do compulsory prayer movement appropriately. This case reflects from the observation result of prayer practice which is done by the grade VI students in SD Negeri Sidorejo Kidul 02. It is shown that there are many students cannot do the prayer movement appropriately. Even, from the teaching experience it can be evaluated that the students who pass from elementary school or high school cannot do the prayer movement appropriately, where as the prayer is the compulsory thing which has to be done by every Muslim. It is stated in Qur'an surah Al-Baqarah 43 "and does the prayer, have the zakat and please ruku' together with them who ruku'.

The background of this research is how to improve the learning activity and skill in practicing compulsory prayer movement of the grade VI students in SD Negeri Sidorejo Kidul 02. Based on the explanation above, the problem faced "can the strategy of modeling the way improve the students' activity and skill in doing compulsory prayer movement in grade VI of SD Negeri Sidorejo Kidul 02?"

2. PURPOSE AND OBJECTIVES OF THE RESEARCH

The purpose of this action research is to improve the activity and skill to do compulsory prayer through the strategy of modeling the way of the grade VI students in SD Negeri Sidorejo Kidul 02. It is hoped that this research can be a knowledge or theoretical review for the next researches to deal with students' learning difficulties through The Way model and can give contribution to the science and technology development, especially in religion education and can be a new theory about the improvements of the grade VI students' active in improving the skills to do the compulsory prayer movement.

For the students, the objective of this research is to improve the activity and skill in doing the compulsory prayer movement and help the teacher to improve the teaching method, especially in the lesson of Muslim education. In general, this research is hoped to give positive contribution about the education method of Muslim in grade VI of elementary school. By using this strategy of modeling the way, it is hoped that the students can be motivated to join the Muslim education lesson, especially for the prayer material. For the teachers, this research can help the teacher to improve the method of Muslim education lesson, which can be used to improve the students' motivation and concern to the Muslim education lesson and to improve he teachers' confidence in the process of Muslim education lesson in the grade VI of elementary school. For the school, this research can be used to anticipate the Muslim education lesson difficulties in grade VI of elementary school, create the good and conducive relationship between the teachers as the researcher and school to give the Muslim education lesson.

3. THEORETICAL REVIEWS

3.1 Learning Activity

The learning activity is an activity which involves all five bodies sensory which make all body and mind work to be applied in the learning process (Sardiman, 2004: 39). Activity has important role in learning, because basically, learning is the changing on attitude which relatively state and done intentionally (Slameto, 2003: 45).

Learning activity is activity which is done by the students related to the learning materials. There is no learning without activity. Without activity, the teaching and learning activity cannot be run well. Making the students active, basically, is the way to optimize the students' learning activity in the students' learning process.

The view from psychology science, the students is the blank white paper which is ready to be written. The outer part which writes it down is the teacher (Sardiman, 2007: 98). In this case, the teacher gives and organizes, so that the teacher activity is higher than students' activity. Meanwhile, the students tend to be more passive because the teacher dominates the activity in teaching and learning process. The students who tend to be passive will disturb the learning process, because it cannot make the students be more active in thinking and having activities.

3.2 Learning Result

Learning result is the results gained by the students who have followed the teaching and learning process. Basically, the learning result is something gained from learning activity through a process included the attitude change toward the good individual on the aspects of skills and attitudes. The research result is also a term which is used to show the level of success gained by someone after doing an effort. The learning result is the result gained by the students in such lesson after following the teaching and learning process. The research result gained is influenced by two main factors, which are from the students themselves, especially on the owned skills and factor from outside of the students or environmental factor, like learning motivation and attention, attitude and learning habit, diligence, economical social, physical factor and others.

3.3 Muslim Religion Education in Elementary School

The Muslim religion education can be defined as "systematical and pragmatic efforts to help the students to live which is based on the Muslim rules" (Zuhaitani, 1983: 27). Most of the Muslim religion education is to improve the mental attitude which will gain in the good acts to themselves and others. Religion education can be defined as efforts to actualize perfection attitudes which are blessed by Allah SWT to human which is done without profit and just to pray to Allah (Bawani, 1993: 65). The purposes of religion education are divided into two as follow: 1) the main objective of Muslim religion education is to gain the quality stated in Al Qur'an and hadiths, while the function of national education is to develop skills and create characteristics and prestigious nation in the aim of educating nation to develop the potency of the students to be human who have faith and piety to the only one God, have good attitudes, healthy, educated, skillful, creative, independent, and be democratic citizen and be responsible. 2) The specific purpose of education religion is the purposed which is based on the students' growth and development.

3.4 Compulsory Prayers

Prayer is a religion activity to communicate and get close with Allah in the form of speech and action which is started by takbir and finished by salam and based on the syara' rules. Prayers which are compulsory for Muslim are compulsory prayers of five time prayers. Meanwhile, there is also a sunnah rule for prayers beside compulsory.

Compulsory prayers consisted of five times. The time decisions are follow: (1) zhuhur, the time is when the sun passed midday and when the shadow is as tall as the thing, (2) ashar, the time is started from the end of zhuhur up to the sun sets, (3) maghrib, the time is started from the sun sets up to the end of syafaq (the beginning of evening), (4)

isya', the time is started from syafaq (the beginning of evening) up to the rises of fajar sidiq, and (5) subuh, the time is from the rises of fajar sidiq up to the sun rises.

The prayer pillars are: (1) willingness, (2) stand if they can, (3) takbiratulihram, (4) read surah Al-Fatihah, (5) rukuk with tuma'ninah, (6) sit between two sujud with tuma'ninah, (7) sit in last tasyahud with tuma'ninah, (8) read the last tasyahud, (9) read shalawat of Muhammad prophet in the last tasyahud, (10) read the first greet, and (13) discipline or do them in a good order. The sunnah of prayer are: (1) lift two hands when takbiratulihram, (2) lift two hands when we want to rukuk, after rukuk, and stand from first tasyahud, (3) place two hands on the chest, (4) the look is on the sujud place, (5) read tasbih when rukuk and sujud, and (6) read the second greets.

The prayer valid requirements are: (1) holy body, clothes and place from najis, (2) holy from small and big hadas, (3) close the aurat, (4) face the kiblat, (5) have entered the time for prayer, and (6) do the prayer pillars. Meanwhile, the must requirements of prayer are: (1) Muslim, (2) healthy or intelligence, and (3) baligh (adult).

3.5 Strategy of Modeling The Way

The method of modeling the way is a teaching method which done by giving scenario or sub topic to be demonstrate in front of the class, to gain the skill and ability and professionalism (DepDikBud, 1993: 219). The strengths of this method are: 1) educate the students to be able to solve their own faced social problems; 2) enrich the students' knowledge and experiences; 3) educate the students to be able to use good language and explain their mind and feeling clearly and appropriately; 4) able to accept and respect to others' opinion; and 5) develop the students' creativity development. The method's weaknesses are: 1) the problem solving made by the students may not match on the condition in society, 2) because of the limited time, the opportunity to have roles is also limited, and 3) the shyness and fear affect the abnormal in playing the roles, so that the result cannot also meet the expectation (Sriyono dkk, 1992: 118).

4. ACTION HYPOTHESIS

The hypothesis formula of this research is the strategy of modeling the way can improve the activity and skills in doing compulsory prayers in grade VI elementary students of SD Negeri Sidorejo Kidul 02. This hypothesis is formulated based on the theoretical review and conceptual framework in the research.

5. RESEARCH METHOD

5.1 Research Subject

This research subject was activity and skill in doing compulsory prayers of the grade VI elementary school students in SD Negeri Sidorejo Kidul 02. The total students as the subject of this research were 23 students.

5.2 Data Collecting Technique and Instruments

The data collecting technique in this research was the data from the test and non test. The data collecting instruments were documents, tests, and observations. Documents were used to get data about doing compulsory prayers before the research in the form of score/scoring report, calculation and analysis. Meanwhile, the test was used to get data about the students' skill in doing compulsory prayers in the form of list of questions.

5.3 Validity and Data Analysis

To have valid data about activity and skill in doing compulsory prayer in the grade VI elementary school students in SD Negeri Sidorejo Kidul 02, they were: 1) learning activity (observation) validate through source triangulation, they were the data from students, teachers, and collaborators which were the qualitative data. Then, they were analyzed using descriptive qualitative analysis based on the observation and reflection by comparing the beginning process condition, cycle I, and cycle II. 2) The learning result in the form of test score validated were the test instrument in the form of questions with content validity needed some question lattices. The data in the form of numbers (quantitative data) were analyzed using comparative descriptive analysis which was comparing the test result in the beginning of the research, test score after cycle I, and test score after cycle II, and they were reflected.

6. RESULT AND DISCUSSION

The discussion results in this research included 3 things; they were action, activity, and students' skill in doing compulsory prayers. At the beginning condition, teaching of compulsory prayers in grade VI students in IV SD Negeri Sidorejo Kidul 02 did not use the strategy of modeling the way. In cycle I used the strategy of modeling the way without guideline from the teacher. Then, continued by cycle II used the strategy of modeling the way with the teacher's guideline. It was aimed at combining the method used to make the students more understand.

In students' learning activity in cycle I to cycle II, there were some progresses, they were: aspect of reading prayer pillars (the average score increased 1,1; the percentage increased 21,8% from good category to very good), aspect of prayer requirement (the average score increased 0,7; the percentage increased 14,8%; from good category to very good); aspect of things which brake the prayer (the average score increased 0,7; the percentage increased 15,7%; from good category to very good), and aspect of prayer practice (the average score increased 0,9; the percentage increased 18,3%; from good category to very good). The learning result at the beginning of cycle II also increased. There were 7 students (30%) who passed the grade up to 23 students (100%). There was improvement on 16 students (70%) and the class average score from 60,2 up to 85,0 which increased 24,8.

7. CONCLUSION

From all research result, it could be concluded that through the strategy of modeling the way could improve activity and skill to do compulsory prayers in the grade VI students of SD Negeri Sidorejo Kidul 02. The learning activity from cycle I to cycle II increased, they were: aspect of reading prayer pillars (the average score increased 1,1; the percentage increased 21,8% from good category to very good), aspect of prayer requirement (the average score increased 0,7; the percentage increased 14,8%; from good category to very good); aspect of things which brake the prayer (the average score increased 0,7; the percentage increased 15,7%; from good category to very good), and aspect of prayer practice (the average score increased 0,9; the percentage increased 18,3%; from good category to very good). The learning result at the beginning of cycle II also increased. There were 7 students (30%) who passed the grade up to 23 students (100%). There was improvement on 16 students (70%) and the class average score from 60,2 up to 85,0 which increased 24,8.

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Problems and Remedies of Teaching of English to Students

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Abstract

Because of the social and cultural backgroundof the students, a teacher/lecturer of English faces a lot of problems while teaching English to Indonesian students, especially Unnes students (Semarang State University). There are many reasons for this. The first and the most important reason is that Indonesian students have no knowledge of even basic English although they are taught English in Schools. Perhaps the school teachers/lecturers do not pay proper attention towards the teaching of English. Whatever may be the reason for this but the teacher/lecturer who teache s those students in higher classes suffers the most and faces a lot of problems while teaching them a prescribed book or course in higher classes. On the other hand students look towards their teacher/lecturer with great hope. They consider the teacher/lecturer the most competent and think that their teacher/lecturer would make them learn English very soon, thus a teacher/lecturer's responsibility towards his students is doubled. As a result many English teachers/lecturers are made up and disappointed and so leave the assignment in the middle of their contract. But if the teacher/lecturer has a little patient and is competent and intelligent he would handle the situation easily and achieve his goal. The plans, strategies and methods of teaching English to the students have been discussed in details in the main research paper.

Keywords: EFL, ESL IE (Integrated English), Practical Approaches, Direct Method.

1. INTRODUCTION

Teaching a second language is not easy. But it can be taught effectively with patience and hard labour with the help of self-invented methodologies suitable for one's students. For this a teacher/lecturer has to, first of all, study the problems and difficulties faced by his students in the process of learning English. Once the problems and difficulties are found out, the task of teaching becomes easy for an intelligent teacher. A competent, intelligent, hard working and cooperative teacher is necessary for learning a second language. A learner is lucky if he gets a competent teacher while learning a second language. When he starts learning a second or foreign language, a student faces a lot of problems. At this stage his teacher/lecturer comes for his rescue. He tries to understand his student's problems, solves them and saves the students from depression. He frames curriculum suitable for his students, selects reading materials for them and creates a suitable environment for learning English in the classroom. While learning a second language, a student faces a many fold problems like sociocultural problems, unfamiliarity with the subject, different style of writing from his mother tongue, pronunciation problem, problem in recognizing the alphabets, etc. The sociocultural background of a student plays a vital role in learning the second language. His culture is totally different from the culture of the language which he is learning.

This unawareness of the culture confuses the student. At this crucial stage his teacher comes for his help. The teacher/lecturer tells him something about the culture, the way of the living of the people, and the linguistic nature and style of the second language. He also makes his student familiar with the subject through the classroom practice. He teaches alphabets, words and finally gives short familiar topics to write on and to read the selected passages, in order to improve students' linguistic knowledge.

2. PROCESS OF LEARNING

It is true that learning a language is a long process but it is not tiresome. It is enjoyable but the condition is that there should be a highly qualified and competent teacher. So, while appointing a teacher to teach EFL, the appointing authority should be careful.

They must be choosy in appointing a teacher because the learning of EFL totally depends efficiency and competency of the teacher. If a teacher is found incompetent he should immediately be replaced by a competent teacher. It does not mean that there should be any restriction on the teacher. In fact a teacher should be free in adopting a style of teaching in the classroom.

Every teacher has a different style of teaching in the classroom. If a student fails in learning or improving his linguistic knowledge, it does not mean that his teacher is not good or incompetent. We can, utmost, blame his style of teaching, not the teacher himself.

3. TASKS OF AN EFL TEACHER

There is a number of methodologies for teaching of English. These methodologies keep on changing with the passage of time. For some one method of teaching may be fashionable while for other the same may be out of date. So it is up to the teacher to choose a methodology of teaching according to the need of his students. The main aim of a teacher should be to develop the linguistic knowledge of his students. To achieve this goal, a teacher has to take the following steps:

a) A teacher should encourage students to learn new vocabularies and their usages.
b) He must tell them how to consult a dictionary.
c) He must teach students the parts of speech. It means that students must know either the words, which they are learning, are verb, noun, adjective, or adverb.
d) The teacher should make students use the words in sentences. The sentences should be small, simple and of daily uses.
e) If, in the beginning, students use translation method in framing sentences, it is not bad. They should not be discouraged. It means if they think in their mother tongue and then translate into English, it is not bad but after some times this method should be discarded and direct method should be applied.
f) To make the correct sentences, students should be taught structural patterns. It means they should know which parts of speech should come first, second, third and so on so forth. For this students should be given a structure and asked to frame a sentence based on the structure. For example:
   - Subject + Verb + Object
     He reads a book.
   - Subject + Verb + adverb
     He walks slowly
   - Subject + verb + adjective + noun
     She is a beautiful girl

To learn the structures takes time but it makes students perfect in writing. Unless students learn structure they will not be able to write correctly. Once they acquire the knowledge of parts of speech and grammatical structure, they would start enjoying their learning of English language. In the classroom students become bored and do not take interest in learning language due the following reasons: (1) they do not know the basics of the language taught, (2) they do not have sufficient vocabulary power to express themselves in English, (3) they do not know the grammatical structural pattern.

Because of all the above mentioned reasons students feel shy in learning the language and so, gradually, lose interest in the language. Therefore, it is the foremost duty of an EFL teacher to create interest among his students to learn the language. The teacher can easily achieve his goal by enriching students' vocabulary power, teaching them the structural patterns and encouraging them to use new words in their sentences.

4. BACKGROUND OF THE STUDENTS:

The EFL teaching is always affected by sociocultural factors. Many Indonesian students, attending the EFL classes, come from the background where English is unknown. Of course they are taught English in their primary and secondary schools, but they are taught English only as a formality. Teachers as well as students take EFL lightly. They only need marks to pass the examination and they even pass the EFL examination by memorizing the answers without learning any English. Consequently they spend their valuable years in schools without learning anything of English language. But when they come to college or university or take admission professional courses like medical, nursing, computer science, engineering etc, they need English language because they have to study everything in English. At this stage English becomes a problems for them.

At this problematic stage only an intelligent and competent teacher may come for their rescue. If, unfortunately, a student does not get a competent teacher, his interest in learning English will disappear forever.

5. TEACHER'S ACTIVITIES IN THE CLASSROOM:

An EFL teacher should not be afraid of handling of these students in the classroom. If he handles these students carefully and patiently, he can achieve his goal. Actually to teach English to students who do not have any English is a very difficult task. The teacher who teaches such students, has great courage and patience. In a class of 25 or 30 students, if 75% of students do not know English or have no interest in English, the following things happen:

a) The students do not understand anything what the teacher says or teaches.
b) They lose their interest in EFL class.
c) They think that it is the wastage of time.

d) So, they do not respect the teacher.
e) They start talking among themselves and even making noise during the class.
f) Finally the teacher is fade up and gives up teaching. It means he surrenders which is not good for his profession.

A teacher can overcome all these problems and handle the class successfully if he takes the following points into consideration:

1. Forget that you are teaching a higher class.
2. Step down from your level.
3. Start teaching the students from the lower level, even from A B C D……and go to high level step by step.
4. Teach something about the basics of English grammar and language.
5. Ask short and simple questions on what you taught them.
6. Encourage them to learn new words by explaining the meaning of the words or even by translating the meaning of the words into their language, if possible.
7. Tell them to use the words in their own sentences.

These methods will be the most effective in the case of the above mentioned students. Within a fortnight the result will be before you, 80% of your students will imbibe interest in learning English and start attending the classes regularly with interest. You will become the most respected and sought after teacher for them. If you are successful in imparting knowledge to your students, you will become their ideal.

6. LANGUAGE SKILLS

When we say language teaching or language learning, we are concerned with the four language skills: reading, writing, speaking, and listening. All these four skills are very important and so all of them should be taught with equal emphasis. All the four skills are related with one another. We cannot say that one particular skill is more important than others. In fact we cannot separate them from one another. Of course the method and the style of teaching of all the four skills are different.

7. TEACHING OF READING

To teach Reading skill for an Indonesia student, a teacher should apply the following methods:

1. Forget the prescribed syllabus for sometimes, say one or two weeks and teach students whatever you think necessary for your students.
2. Make them revise the alphabets of English. Teach them capital and small letters and then jingle words.
3. Dictate and encourage them to write words.
4. Tell them to read, first silently and then loudly, what they have written.
5. Collect all the papers from students and then distribute them among the students tell them to correct the paper of their classmates.
6. Finally, collect all the papers and correct them and indicate their mistake.
7. After words, make them write small sentences and gradually move towards longer and complex sentences. Apply the above mentioned method in reading and correcting the sentences.

In this way students will be encouraged to read and write. This systematic way of teaching will create interest in them to learn English. As a teacher it is our foremost duty to make the subject easy and interesting for students. If we apply all these methods in classroom teaching, our subject will become easy for students and they will have a zeal to learn English.

8. TEACHING OF ENGLISH WRITING

Teaching English Writing to EFL students is not easy. It is a challenging job. While teaching an EFL a teacher faces a lot of problems. More than 50% of students do not know how to write English. Most of them are unaware of the cursive writing. To solve the problems we have to take practical approaches while teaching an EFL class. Before you start teaching of English writing you should do the following things:

1. Teach them how to use the right stroke while writing anything in English. Wrong strokes make the writing slow and ugly.
2. Make them learn cursive writing. Most of Indonesia students do not know cursive writing. Two or three lectures should be devoted to this task.
3. Dictate them to write sentences---simple, short and then long sentences.
4. Dictate some words and tell students to use them in their own sentences.
5. Encourage them to learn more and more words with correct spelling.
6. Students should be given a lot of classwork as well as home work on writing because practice makes the students good writer.

9. TEACHING OF SPEAKING

In the process of teaching of speaking, a teacher is very important because he is a model for his students. It is from him that students directly listen the spoken English. Many of the students do not find opportunity to hear English from the mouth of a native speaker. It is the teacher who directly speaks to his students in English. This is the first-hand experience of spoken English for students. So a teacher, automatically, becomes a model for his students. What and how he speaks becomes the final word for students. So, a teacher should really try to be a real model for students. For this a teacher has to do something to improve his ability as an English teacher so that he may become a really good model for his students. Thus, we see that a teacher has double duty. One is how to teach spoken English to his students and the other is how to improve his own speaking ability.

While teaching Spoken English, a teacher should do the following things:

1. Have confidence in your speaking ability
2. Have confidence that whatever you are teaching is good English.
3. You must have a spirit of self improvement.
4. Always be ready to correct the mistakes made by your students.
5. Give special attention towards the pronunciation of a word by students.
6. Try to expose your students to other sources of spoken English. For this make them listen to radio, tape recorder, show them CD on TV and also bring other people to the classroom who can speak English before the students and discuss with them.
7. Give a topic and tell your students to prepare a representation. Tell them to speak on the topic one by one before the class. It should be followed by a question-answer session and discussion. This will improve the speaking power as well as listening ability of the students. This program should be held twice and thrice in a week.
8. Check the students' speed of speaking. If they are speaking slowly, it means they are lacking confidence. Make them confident and train them to speak fast without caring any grammatical or any other mistakes. Once they gain confidence, they will start speaking better.

10. TEACHING OF LISTENING

Listening is another important skill in the process of EFL. It is a controlled action. We listen to something for meaning and to understand it. To teach and improve listening skill of students, a teacher must do the following two things:

1. He must provide his students models of good pronunciation. Good pronunciation is very important for learning listening skill.
2. He must make a special effort to expose his class to as many different accent as he can.

While learning listening it is necessary to listen carefully. So, make it habit of your students to listen everything carefully. You may do this by repeated practice. There are also a plenty of methods which can be used by a teacher in the classroom to improve listening power like dictation, aural comprehension, note taking etc.

The most important element in learning to listen effectively in a second or foreign language is confidence, which comes from practice. The role of a teacher is to provide as much as positive practice as possible by speaking to learners in English, by exposing them to a range of listening materials in the classroom, and by encouraging them to use whatever resources are available in their institution or community.

All the above mentioned four skills are very important. It is true that learning reading and writing skills make students pass the examination but in their practical lives, speaking and listening are equally important. But this division of the language is not natural. We divide this only for our convenience. As teachers, we divide the language into four skills only to divide and share our teaching loads. To say that Mr. X is an expert in writing skill and Mr. Y is an expert in speaking or listening skill is not proper. Language should not be divided like that. It should be taught as an integrated course. We should not forget that all the four skills are related to one another and teaching of all the four skills is very important for the students. So, instead of teaching four or five classes, one teacher should teach all the four skills to one class so that he will be well aware of the overall progress of his students. Making sure that all the four skills are taught by one teacher and that they are taught so that they support each other is all part of the concept of Integrated English, which you may have come across.

11. Methods of Teaching

While teaching EFL a teacher uses a lot of methods, techniques and styles. This usage of different techniques is called methodology. Methodology means the way of teaching. There are many methods of teaching which are used by the teacher according to the need of students. Students of different levels need different methods. Beginners need different methods of teaching from those students who have been learning EFL for a long time. Those who need the language as a

medium of instruction have to be taught differently from those who only need as a subject. The teaching of English, perhaps, has the largest number of different methodologies. Moreover, methodologies have also kept changing over the years. Some methods have become fashionable, whereas others have become out dated.

Out of the largest number of different methods of teaching English language, there are three universally recognized methods:

1. Grammar Translation Method.
2. The Communicative Method.
3. Direct Method.

11.1 Grammar Translation Method

This is the oldest method of teaching English language. For many years English was taught by the use of rules of grammar and by the lists of vocabulary. The students had to memorize the rules of grammar and a long list of vocabulary. Then they were asked to translate the sentences or passages from one language into the other. This method is called Grammar and Translate Method. This was very difficult, but it gave a good knowledge of the language. But this knowledge was only bookish. Moreover, some of the rules taught to students were not applicable in modern English because they were the rules of the dead languages like Greek and Latin. It is surprising that this method remained in practice for a long time. It may be due to the limited aim of teaching English. At that time English was taught to students who wanted to learn only how to read and write the language. Speaking was not necessary for them. They were not supposed to meet the natives to converse with them. The second reason may be the unavailability of tape recorders, cassettes, films etc.

11.2 Communicative Method

This is the recent method used in English language teaching, In this method spoken English is given more weight than the reading or writing English. In this method it is emphasized that student can communicate easily in English. This method has some shortcomings. Through this method students do not learn English properly. It provides shallow knowledge to students. They do not learn to read or write. They also do not have sufficient knowledge of grammar. But the communicative English also has some advantages. It gives students the satisfaction of being able to achieve something of the language. This feeling is very important in learning a language.

In Communicative Method students are taught how to greet, how to ask ordinary questions, to understand the answer and to talk about the things of our daily life. This method useful for the students in their daily lives. This method works the best when students have opportunity to use English outside the classroom in their public lives.

11.3 Direct Method

This is the most recent English teaching method. In this method students are taught through English medium. The teacher does not speak any other language in the classroom. This is called the direct method. It is easy to use Direct Method in the class but it needs a careful plan before teaching in the classroom. A teacher has to make a plan about what and which lesson he must teach first. For instance if a teacher is teaching vocabulary he has to plan which words should he introduce first. In this method, we also use audiovisual equipment such as audio cassettes, slides and videos.

12. CONCLUSION

Thus we see that there are many different methods to teach the four skills of English language. Which skill, out of the four, is the most important depends on the purpose of the learners. But from the technical point of view, reading and writing skills are the most important. So the emphasis should be on reading and writing. If a student learns how to read words or sentences, he would automatically become able to write and speak English. If he does not know how to read, listening words would fall flat on his ears. He will not understand anything because he is not acquainted with words or sentences in English. So, first of all, a student of EFL should be trained in reading the English alphabets, words and sentences. To teach EFL a teacher must have patience. In Indonesia (especially at PGSD Unnes) there is no environment of English language. Here English is not a serious subject. Students as well as Indonesian teachers take it lightly. Students are not taught English in a proper way in their schools. After passing school when they come universities to study professional courses, all of them have to study everything in English and so suddenly English becomes very important for them. It is at this stage that students are frustrated. They want to learn English but they are helpless because they do not know how to read and write English properly. Consequently, they loose interest in English language and consider it the most difficult subject. At this stage a teacher plays a vital role. If a teacher is dedicated, competent, intelligent and understands the psychology of students, he rescues his students from their frustration. Only a competent teacher can be helpful for these students. To teach grammar and composition to students having the knowledge of English language is very easy but to prepare students for English language

is the most difficult task. The progress of these students in learning English language totally depends on the competent teachers and the curriculum they are taught.

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Language Skills Enhancement of Elementary School Student by Application of Integrated Learning

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Abstract

The purpose of this study, to improve the quality of Indonesian language learning through integrated learning approach based contextual. This type of research uses classroom action research stages of planning, implementation, observation and reflection. The experiment was conducted in two cycles, each cycle two meetings. The subject of research in the form of teachers and students of fifth grade elementary school in Ngaliyan Karanganyar subdistrict, Semarang. The results showed an increase in the quality of Indonesian language learning through integrated learning approach. This was evidenced acquisition mean the observation of teachers skills have increased the percentage of the cycle I obtained a score of 3, increasing to 3.7 in the second cycle, the activity of students in the first cycle obtained an average score of 24.36 increased to 32.27 in the second cycle, Indonesian learning outcomes aspects of reading comprehension Civics material on the first cycle 62% students pass the study, and 89% in the second cycle, aspects of the material makes social studies interview questions about the economy in first cycle, 57% students pass the study, in the second cycle to 84%. Assessment of speaking aspect in the first cycle 63% students pass the study, the second cycle to 89%. Assessment of learning outcomes aspects of writing a summary of the interview on the first cycle 57% students pass the study and 84% in the second cycle.

Keywords: Integrated Learning, contextual, Indonesian, Elementary School

1. INTRODUCTION

Advances in science and technology very rapidly lead to changes in all areas of life. These advances would give effect to the educational institutions, so that these institutions are required to optimally organize educational process to improve the quality and the quality of education itself. Improved quality and a good quality of education is expected to give birth to graduates who have high competitiveness to face the advancement of knowledge. For that improvements in education, especially in the areas of learning must continue to be implemented in order to achieve the quality and the quality of learning in line with expectations. Efforts to make improvements in the field of education is the responsibility of all parties, one of which is the teacher. Teachers are responsible conduct educational activities at school in terms of providing guidance and instruction to students. Teachers should be able to do some innovations concerning his duties as an educator associated with teaching duties. The innovations that teachers in his duty as educators is expected to improve student achievement. Given that teachers are also influences on student achievement. Therefore, changes related to the teaching duties of teachers must be improved, as well as learning the Indonesian language.

As we know that the Indonesian language has a central role in developing the knowledge of primary school students, for elementary school students understanding of the language can support the success of the study subjects - other subjects. Therefore the Indonesian language learning in primary schools should be developed in a systematic, active, effective, and efficient. Indonesian successful learning in school greatly influenced the success of teachers in creating learning activities. But unfortunately the Indonesian language learning in primary school, until today is still conventional classroom activities, look monotonous, students are less given adequate time and space to practice and use what they learned Indonesian. They generally only answer and tasks language in bits and pieces. Learning management seemed static. As a result, many students underestimate the Indonesian language teaching. They were less seriously follow the lessons. In fact, often encountered students who are antipathetic.

In the view of the whole language, the language is easy to learn if it is presented as a whole and in the context of the natural, therefore, that cohesion is a key principle for the development of language and learning through language. Curriculum 2013, which will be carried out also using an integrated approach to the theme as a binder or pemadunya, so it is common with a thematic approach. In terms of the document, the current curriculum is already contained the ideas of integration by using active learning approaches to foster diverse competencies in self-learners. The approach is required in any implementation of this curriculum is the integration with active learning approach.

An integrated approach in language learning begins opinions Godman (1986) about the curriculum, that the teaching of languages and other subjects, (which is carried out with the language as a medium of presentation) is a curriculum that is double, meaning in language teaching and the contents of other subjects collectively the same part of the curriculum intact. Godman see that teachers should optimize the opportunity the students to actively use both written and spoken language. Godman in his views on language learning also stated that listening, speaking. reading and writing is not seen as a separate component to be taught separately. The facts show that all four language skills that students use in all learning activities, both in learning the language as well as other fields of study.

Integrated learning also make learning relevant, and contextual so meaningful for students. Integrated learning, believed to be a practice-oriented approach to learning according to need. And the development of students. (developmentally Appropriate practice.) When compared with conventional learning integrated approach seems to be more emphasis on student engagement in learning. Students made actively involved in the learning process and make a decision. The integrated approach as a concept can be regarded as a learning approach that involves various aspects or areas of study to provide a meaningful experience to the students. Is said to be significant because of the integrated approach students will understand the concepts or aspects of language skills learned through direct experience and authentic and connect with other concepts that have been understood.

If you pay attention to the task of teachers in primary schools are also very solid on the side as a classroom teacher is obliged to teach all subjects except religion, and sports, classroom teachers also act as a homeroom. While there are many other tasks that require the attention of an elementary school teacher, for example, the drafting of teaching all subjects taught, completing the administrative class, completion reports, not to mention dealing with students who are stubborn and lazy. Rationally Could the class teacher handle and manage learning optimally? Integrated learning actually is the right solution, to implement a more efficient learning. Problems facing the current elementary school teachers Indonesian language learning teachers have implemented an integrated, so that less active, effective and meaningful. Learning to listen, speak, read, and write executed separately. In addition, teachers also have limitations learning model that can enable students, teachers in conventional teaching.

From interviews with teachers at the school, in the information that teachers can never implement integrated learning in high grade, only low-grade teacher is class 1, 2, and 3 are implementing the thematic approach. Learning listening, speaking reading and writing carried out separately, so it is less meaningful to students. Therefore, never carry out, then when prompted to do so they have difficulty. To overcome these collaborative discussions held between lecturers of Elementary School Teacher Education Department with the teachers in primary schools, with the aim to find a way out of the problem. The results of the discussion agreed to conduct action research to determine the learning outcomes of students in Indonesian by using an integrated approach.

The problem this research is how the use of an integrated approach to improve the quality of Indonesian language learning in primary school. The purpose of this research is to improve the activity and student learning outcomes through the implementation of integrated learning in learning Indonesian.

Integrated learning is an application of a learning strategy based on an integrated curriculum approach that aims to create or make the learning process in relevant and meaningful for children Atkinson, (1989: 9). He also explained that in an integrated learning approach is based on the inquiry, which involves students from planning, to explore and brainstorming of students. With an integrated approach encourages students to work in groups and learn from the results of his own experience. Collins and Dixon (1991: 6) states on integrated learning as follows: integrated learning authentic Occurs when an event or exploration of a topic in the driving force in the curriculum. He also explained that in practice the child can be encouraged to participate actively in exploring a topic or event, students learn the process and content (matter) more than one area of study at the same time.

Integrated learning very attentive to the needs of children in accordance with the holistic development by engaging actively in the learning process both physical and emotional. For the activities provided include an active search, explore, and discover scientific concepts and principles of holistic, meaningful, and authentic so that students can apply the acquisition learn to solve real problems in daily life. This is in accordance with the program DAP expressed Bredekamp (1992: 7) in the adult learning process should provide a variety of activities and materials are rich and offer options for students so that students can choose for small group activities as well as independent and provide opportunities for students to own initiative, conduct skills on their own initiative as an activity chosen. Integrated learning also emphasizes the integration of various activities to explore the object, topic or theme that is the events, facts, and events are authentic.

Implementation of the integrated learning curriculum is basically that it is meaningful for children. This meant that the teaching materials are

not used in isolation, but it is a unity intact materials and learning appropriate to the developmental needs of students.

Form of implementation of integrated learning in elementary school there are several forms. Judging from the material properties which are incorporated among which there are two forms of implementation of integrated learning, namely intra-integrated learning and integrated learning subject areas between fields of study. Said intra-integrated learning if the combined field of study is materials (basic materials / sub topic, concept / sub concepts, skills or values) in a single field of study. A material that combines the learning of reading, listening, speaking, and writing is called intra-integrated learning areas of study, for example, learning that combines the fields of Indonesian studies, science, social studies and mathematics.

Judging from how to integrate the material, integrated learning can be implemented by taking into account explicitly the limits of the field of study with another. But sometimes the boundaries between subjects with each other boundaries are very faint, almost invisible barriers that limit. In practice, if a theme has been set, then teachers fellow students examine the theme from the perspective of their respective fields of study. Based on this theme, the teacher with the students determine the elements of a field of study that can be learned without any overlap with other fields of study.

If a theme has been set, for example, the environment, students are invited to learn the language aspect, the aspect of science, social studies of the environment. In line with the Wilson et al., (1991: 2), states that the integration can be done through the integration of the curriculum in which teachers plan learning the language for the students at the same time they also learn something else such as science, social studies and mathematics. It was also explained that the integrated learning is intended to develop the ability of the child's understanding of their physical and social environment that they can take part in which children learn together and learn the language. So in this case some children have focused talk and learn together, and to develop the understanding of each. They learn in groups. In their group issued free argument. In connection with this alignment, Forgarty (1991: 4-5) suggests ten integrated learning model. The models are: a) Model Fragmented. This model is implemented in a separate study that is only focused on one discipline subjects, for example, mathematics, science, social studies, English, and so on are taught separately. b) Linked Model (Connected). Model connectedness is an integrated learning model that deliberately sought to link the topic with other topics in the fields of study, for example, to connect concepts with kosep writing in Indonesian subjects. c) Nested Models. Integrated learning nested models is an integrated learning model that is rich with the draft by the ability of teachers. d) Model sequenced, namely integrated learning model in which when teachers teach a subject he can rearrange the order of the topic of a subject and the inclusion of the topic of other subjects into the teaching sequence, of course in the same subject or relevant. At the core of the subjects brought along other subjects. e) a shared model that integrated learning model in which the development of an overarching discipline of cross curriculum, for example, mathematics and science to be aligned as a science. Literature and History combined on the label of humanity, art, music, dance and drama under the umbrella of the principal arts, computer technology and home industries as art that needs to be practiced. (f) Webbed model namely integrated learning model that uses a thematic approach. This approach to development begins with determining a specific theme, for example, transportation. Themes can be determined by negotiation between teachers and students, but can also be a way of discussion among teachers. Once the theme is agreed upon, then the sub-theme is developed with the linkages with other fields of study. Of sub-themes developed learning activities undertaken by students. g) Threaded model is a model approach is like looking through binoculars at which point of view (focus) can be started from the closest distance to the farthest point from the eye to eye. h) Integrated Model: is a learning model that uses an approach to the field of study. This model sought by combining field studies by setting curricular priorities and find the skills, concepts, principles, and attitudes overlap. i) Immersed models, these models are intended to filter out of the entire content of the curriculum by using a certain way. For example, someone combines all the data from a variety of disciplines (subjects) and then display it through something he's interested in an idea. j) Networked Model: is an integrated learning model related from outside sources as input and all the new increase and expand ideas or develop ideas. For example, an architect adapt the technology to design a network with engineering programs and broaden the knowledge base as she has traditionally worked with the designer inside the room.

2. METHODS

Subjects were teachers and students of fifth grade in Karanganyar 02 Semarang in first semester, a total of 41 students (21 male and 20 female). Obviously-enforcing the applied learning for all students, but based on discussions with the class teacher and reviewing the assessment test scores, determined the subject of observation focused on 11 students who perform work on the problems of errors. This classroom action research conducted by 2 cycles, each cycle consisting of two meetings with the four stages in conducting action research,

according to Kemmis and Taggart (1988), namely: 1) planning, 2) action, 3) observation and 4) reflection. The variables studied were the skills of teachers, student activities, and student learning outcomes in Indonesian learning

3. RESULTS AND DISCUSSION

The research resulted in the learning device in the form of lesson plans that incorporate an integrated learning Indonesian field of study that includes listening, speaking, reading, and writing with a field of study civics and social studies. The RPP includes components of learning objectives, teaching materials, the media used, learning scenarios, and evaluation.

Student activity data, in the first cycle is not optimal, because students are less accustomed to learning by inviting resource persons from outside. Based on reflection a team of researchers carried out the revision: 1) students must have the courage to ask, and answer questions put by anyone, because students are hesitant to answer the question of resource persons who have to come from the outside and was impressed afraid.

In the second cycle students showed activity criteria, students are not afraid anymore, answered dn asked the teacher and speaker. Cooperation of students in the discussion is also getting better.

Preliminary data on the teachers' skills in implementing unified Indonesian learning in fifth grade elementary arithmetic average result of 2.7 with sufficient criteria. These results were obtained from observations before the first cycle of therapy action. From the preliminary data shows that the teachers in implementing the learning did not pay attention to the initial activity. Teachers used to start learning directly on the core activities that lead to a new material that will be taught.

Based on the research team then learning input in the first cycle of learning with a teacher already carrying out preliminary activities covering preceded conditioning students, apperception, explain the purpose, explaining the scope of material and explanations; the lessons that will be students. The mean score obtained in the first cycle, 3. In the second cycle the observation of teachers' skills in managing an integrated learning Indonesian, the teacher obtained a score of 3.7. From the data observation, teachers had students with good mental condition, conducting preliminary well. At the core activities of teachers showing mastery of learning, linking the material with other relevant knowledge, presenting the material clearly, in accordance with the hierarchy learn some vital lessons and student characteristics. Teachers already Integrating listening, speaking, reading, and writing with learning social studies and civics.

In this study, assessment of learning outcomes assessment covers reading comprehension discourse Civics conversation with the material, the skill to make inquiries, speaking skills, skills to understand the content of the interview with resource persons (sosial studies) skills to rewrite the content of the interview with the resource.

Assessment of learning outcomes Indonesian Civics material aspects of reading comprehension preliminary data that there is the highest value of 90 the lowest value of 45, the average is 67.4 students learning outcomes thoroughly studied 27%. In the first cycle, the average is 71,54, the highest value is 92 and the lowest value is 56, 62% of students pass the study, being on the second cycle average of 78.2 the highest value is 94, the lowest score is 60 and 89% students pass the study.

Assessment of learning outcomes makes the material of sosial studies interview questions about the economy, preliminary data that there is a mean value is 66.48, the highest score is 89, the lowest score is 48, 44% students pass the study. In the first cycle the average value is 70.37 the highest value is 89 and the lowest value is 52, 57% students pass the study, in the second cycle, the mean value is 75.43 the highest value is 92 lowest value is 58 and 84% students pass the study.

Assessment of learning outcomes sosial studies material aspects of reading comprehension preliminary data the highest value is 90 and the lowest value is 50 and the average is 68.89, and 43% of students pass the study. In the first cycle get 92 as highest score and 57 as lowest score, the average is 73.27, 62% of students pass the study. In second cycle the highest value is 92 and the lowest value is 58, the mean value of 78.10, 89% of students pass the study.

Assessment of learning outcomes learning outcomes aspects of speaking skills to preliminary data lowest value is 50 and the highest value is 90 averages 70.62 students completed study results 57% in the first cycle of the highest value of 92, the lowest score 55 and the mean of learning outcomes is 75.05, 63% students pass the study, second cycles mean value of 77.64, the highest value of 95, the lowest score of 60, and 89% of students pass the study.

Indonesian learning outcomes assessment aspects of writing is to write a summary of the interview preliminary data the highest value of 85, the lowest score of 50, the mean value of 65.67 and 59% student unfinished their task. In the first cycle of the highest value of 85, the lowest value of 54 and 57% students pass the study. In the second cycle data showed the highest value is 85, the lowest value is 55 and with the mean 73.05 and student learning outcomes thoroughly studied is 84%.

4. CONCLUSION

The results of the application of the approach to integrated learning on the subjects of Indonesian

subject of interviews with informants, subjects Civics on the organizational structure and social studies about the types of business and economic activities in Indonesia, showed that the application of learning approach based integrated contextual may improve the quality of learning Indonesian. It can be seen from the observation skills of teachers manage learning shows that cycle 1 received an average score of 3.3 and at a two cycle increased to 3.6 score indicates that the skills of teachers to manage learning show good category.

In addition, the results of student learning that includes reading comprehension skills of students, making inquiries for interviews, questioning skills of students, as well as the ability to write back the results of the interview to get a score improved significantly in each cycle.

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The Effectivenss Of Teams Games Tournament Model To The 5th Grade Students' Learning Outcomes On Social Science

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Abstract

This research's background is the problem in the low number of learning outcomes in the social studies subject of 5th GRADE students of SDN Gugus Melati Semarang. The purpose of this study is to test whether or not the TGT learning model is effective on the learning outcomes of 5th GRADE students of SDN Gugus Melati Semarang on social science subject. This research is an experimental research with quasi experiment design in the form of nonequivalent control group design. The population of this study is the students of grade 5 at SDN Gugus Melati Semarang. The technique used in data analysis are normality test, homogeneity test, equality test average, hypothesis test, and n gain test. The result of hypothesis test shows that tcount is 7,104 while ttable value with dr = 67 is 1,996. The data indicates that tcount > ttable then Ha is accepted. The conclusion of this research is the TGT model is effective to the learning outcomes on social science subject of 5th GRADE students of SDN Gugus Melati Semarang.

Keywords: students' learning outcomes; social science; teams games tournament model

1. INTRODUCTION

Education is an important part of human life to ensure their life survival. Through education, people can have knowledge, ability, and a high quality human resources (HR) that can advance a nation and its citizens. In the law of Republic of Indonesia number 20 of 2003 about the national education system, in article 1 it is mentioned that education basically is a conscious effort to improve the competence of students by encouraging and facilitating the learning process in order to make learners actively develop their competences to have spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. In line with the law of Republic of Indonesia number 20 of 2003 article 37 paragraph 1 (2016: 20), the curriculum of elementary schools and junior high schools should teach some subjects which one of them is social science.

The problem that occur in the fifth grade of SDN Gugus Melati Semarang is the low learning outcomes in social science subject. There are four public elementary schools (SDN) in Garang Melati Semarang. In SDN Purwoyoso 03, 18 students of 36 students (50%) have not reached minimal mastery criteria (KKM) that is 65, while 18 students (50%) have reached it. In SDN Purwoyoso 04, 32 of 36 students (89%) have not reached KKM and 4 students (11%) have reached it. In SDN Kalipancur 01, 2 of 38 students (5.3%) have not reached KKM while 36 students (94,7%) have reached KKM. In SDN Kalipancur 02, there are 8 of 35 students (23%) have not reached KKM while 22 others (77%) have reached KKM. Based on observations and interviews done by the researchers, there are some problems found in SDN Gugus Melati Semarang. The teachers there have no variation in using learning models. The limited number of learning media to support learning activities in the classroom affects to students' concentration during the lesson, the reading interest of students is very low in social science subject, and students' social science learning outcomes is far from reaching KKM. Based on these problems, the need for a renewal in the learning method which one of them is by applying innovative learning model.

One innovative learning model that fits the problems is the Teams Games Tournament (TGT) model. The TGT model is chosen because this instructional model provides tournament games containing the question cards as well as awards for the group that gets the highest score. The TGT model is a cooperative learning type consisting of 3 to 6 heterogeneous group members in which each member actively represents his group to compete against other group members in an academic tournament in order to get the highest score. The TGT model includes an academic tournament, quizzes and an individual progress scoring system. The students compete each other as team representatives with other team members with equivalent academic performance previously

(Slavin, 2015). The TGT model makes not only smart students to be more prominent in class, but also makes students with lower academic ability active and have important role in the group. The TGT model can foster a sense of togetherness and mutual respect among members of the group, enable the students to be more enthusiastic in following the lesson because the teacher promises an award for the best students or group, and make the students become happier in following the lesson because there is a tournament game activity (Shoimin, 2014).

The use of the TGT model will ease the students to understand the materials. In the TGT model, students are divided into several groups with five to six heterogenous students and each student represents his/her group in competition or tournament. The TGT learning model makes the students active because the learning model is a fun tournament game. The use of a tournament card ease the students to understand learning materials. When the scores are collected, the teacher will give rewards to the winning group with several categories.

There are some previous studies strengthening this research. The first is a research by Micheal M. van Wyk in 2011 under a title "The Effects of Teams-Games-Tournaments on Achievement, Retention, and Attitudes of Economics Education Students". The results showed that the TGT group was better than the control group. The experimental group showed students had a positive attitude towards TGT as a teaching model for economic education.

The second is a research by Abdus Salam, Anwar Hossain, and Shahidur Rahman in 2015 entitled "Effects of Using Teams Games Tournaments (TGT) Cooperative Technique for Learning Mathematics in Secondary Schools of Bangladesh". The result of this research showed the application of TGT to the experimental group students in achieving significant learning outcomes compared to the control group students.

The third is a research by Syahrir in 2011 under the title "Effects of the Jigsaw and Teams Games Tournament (TGT) of Cooperative Learning on the Learning Motivation and Mathematical Skills of Junior High School Students". The result of the research showed that TGT and Jigsaw learning model were effective to improve mathematics skill and motivation to learn mathematics, and there was different effectiveness of TGT and Jigsaw learning model in improving mathematics skill and motivation to learn mathematics.

The fourth is a research by Subin Khrueakaew in 2015 entitled "Student's Achievement and Attitude in Mathematics of Grade 11 Students by Using Cooperative Learning (TGT)". The results of this study showed a higher mathematics learning achievement after TGT model was applied.

The fifth is a research by Lestari, A. Widiyatmoko, S. Alimah, and I. Juliyani in 2015 entitled "Sounds Learning using Teams Games Tournament with Flash Card as Media at 13th Junior High School of Magelang". The result of this research showed that TGT model on student achievement was effective.

The sixth is a research by Shoimatun Febriyani, Wiwi Isnaeni, and Andin Irsadi in 2016 under the title "Pengaruh Penerapan Strategi Bioedutainment Model Teams Games Tournament pada Pembelajaran Materi Alat Indra Manusia terhadap Keaktifan dan Hasil belajar Siswa". The result of this research showed the application of bioedutainment strategy of TGT model on the learning of the human senses had some effectiveness on the activity and the students' learning outcomes.

The seventh is a research by Ahmad Munif Nugroho, Hardi Suyitno, Mashuri in 2014 entitled "Keefektifan Model Pembelajaran Teams Games Tournament terhadap Kemampuan Pemecahan Masalah". The result of this research is TGT learning model is effective in improving students' mathematics problem solving ability of class VII of SMP N 8 Batang on fractions subject materials.

The eight is a research by Abid Khoirul Ismail, Sugiman and Putriaji Hendikawati in 2013 entitled "Efektivitas Model Pembelajaran Teams Group Tournament (TGT) dengan Menggunakan Media "3 In 1" dalam Pembelajaran Matematika". The result of this research showed that TGT learning model using "3 In 1" media is effective to the students' learning outcomes.

The ninth is a research by Endang Herawan in 2013 with the title "Pengaruh Model Pembelajaran Kooperatif Tipe Teams Games Tournament (TGT) terhadap Hasil Belajar Siswadi SMP Negeri 2 Plumbon Kabupaten Cirebon". The result of this research showed that the use of TGT model on student learning outcomes in SMP N 2 Plumbon, Cirebon is effective.

The tenth is a research by I Kd. Handayana, I Wyn. Rinda Suardika, and Ni Wyn. Suniasih in 2014 entitled "Pengaruh Model Pembelajaran Kooperatif Tipe Teams Games Tournaments terhadap Hasil Belajar IPA Siswa Kelas V SD Gugus VIII Suwat, Gianyar". The result of this research showed that the application of cooperative learning model type TGT gave effects on the learning outcome of science learning of grade V in SD Suwat VIII, Gianyar.

The eleventh is a research by Destaria Sudirman, Fenny Agustina, and Pikal Candra in 2014 entitled "Pengaruh Penggunaan Model Pembelajaran Kooperatif Tipe TGT (Team Game Tournament) terhadap Hasil Belajar Siswa Kelas VII pada Materi Fotosintesis di SMP N 31 Batam". The result of this research showed that the use of cooperative learning model TGT type (Team Game Tournament) is effective to the students' learning outcomes.

The twelfth is a research by Mukaromah, Sugiharto, and Sulistyo Saputro in 2014 entitled "Efektivitas Pemberian Problem Posing pada Model Pembelajaran TGT (Teams Games Tournaments) terhadap Hasil Belajar Kimia pada Materi Pokok Kelarutan dan Hasil Kali Kelarutan Kelas XI Semester 2 SMA Negeri 4 Surakarta Tahun Pelajaran 2013/2014". The result of this research showed that TGT model is more effective than informative discussion method to the students learning outcomes.

The thirteenth is a research by Putu Enny Rusmawati, I Made Candiasa and I Made Kirna in 2013 under the title "Pengaruh Model Pembelajaran Kooperatif TGT terhadap Prestasi Belajar Matematika Ditinjau dari Motivasi Berprestasi Siswa Kelas VIII SMP Negeri 2 Semarapura Tahun Pelajaran 2012/2013". The result of this research showed that TGT learning model is very influential on the learning achievement on mathematics.

The fourteenth is a research by Denta Oki Sari Artha Galuh Astrissi, JS. Sukardjo, and Budi Hastuti in 2014 under the title "Efektivitas Model Pembelajaran Teams Games Tournament (TGT) disertai Media Teka Teki Silang terhadap Prestasi Belajar pada Materi Minyak Bumi Siswa Kelas X SMA Negeri 3 Sukoharjo Tahun Pelajaran 2012/2013". The results of this study showed that the use of TGT model with TTS media is effective in improving students' learning achievement.

The fifteenth is a research by I Kt. Agus Budiastawa Putra, Ni Nym. Kusmariyatni, and I Md. Citra Wibawa in 2014 entitled "Pengaruh Model Pembelajaran Kooperatif Tipe TGT terhadap Hasil Belajar IPA pada Siswa Kelas IV di Gugus VIII Kecamatan Kubutambahan". The result of this research showed that the TGT model on the natural science subject learning outcomes is effective, and there are differences of natural science subject learning outcomes between students taught with TGT learning model and students taught by using conventional learning model.

In accordance with the backgrounds above, the researcher examines the problem through "The Effectivenss of Teams Games Tournament Model to the 5th GRADE Students' Learning Outcomes on Social Science Subject". The purposes of this study were (1) to test whether or not the TGT learning model is effective to the learning outcomes of 5 grade SD N Gugus Melati Semarang on social science subject; (2) to describe the increase of students' activity using TGT model on social science learning of 5 grade of SD N Gugus Melati Semarang; (3) to test whether or not the learning outcomes of TGT model with NHT model on social science learning are different in 5 grade of SD N Gugus Melati Semarang.

2. RESEARCH METHODOLOGY

This research is an experimental research with quasi experimental design in the form of nonequivalent control group desain. The population of this research is the 5th grade students of SD N Gugus Melati Semarang. The technique of collecting the samples uses cluster random sampling and SD N Purwoyoso 03 is chosen to be the experimental group, SD N Purwoyoso 04 as control group. The technique of collecting data is done by test, interview, observation, and documentation.

The research was started by doing pre-research in SD N Gugus Melati Semarang by doing interview with class teachers there and documenting the 5th grade students' scores in final test (UAS) of semester 2. The next step was the researcher decided the research sample of experimental group and control group. Then, the researcher compiled a prediction of test questions and tryout questions. The questions are then given to 5th grade students of SD N Kalipancur 01. The researcher then analyzed the result of tryout test including validity test, reliability test, difficulty level test, and questions' appropriateness test. After the questions are valid and reliable, the researcher tests the questions' difficulty level to measure the difficulty level of every question. Then, the researcher tests the questions' appropriateness to measure how a question differentiate the level of students' ability.

The researcher held a pretest to measure the students' initial ability in the experimental group and control group to collect data before a treatment done by the researcher. Both groups had same initial ability and the next step was the researcher gave different treatments. The experimental group got TGT model treatment, while the control group got NHT model treatment.

The technique of data analysis included the normality test using Kolomogorov-Smirnov test, homogeneity test, and average sameness test using independent sample t-test. In the final data analysis that was done by normality test, the researcher used Kolomogorov-Smirnov test, homogeneity test, and hypothesis test using independent sample t-test, and N-gain test to see the increase of students' learning outcomes. In the initial data analysis and the final data analysis, the researcher used Statistical Product and Service solution (SPSS) version 16 computer application.

3. FINDINGS AND DISCUSSION

3.1 Initial Data Analysis

Normality Test

The research initial data is the students' scores in pretest dealing with the independence day's proclamation of The Republic Indonesia materials. The normality test is to measure whether or not the data that would be analyzed is normal (Sugiyono, 2010). The normality test was done in kolmogorov smirnov formula in SPSS version 16 application. The data was clarified normally distributed if the significance is > 0,05 (Priyatno, 2016). Based on the calculation using SPSS, the significance of experimental group was 0,070 and control group was 0,102. The significance of both group was more than 0,05 (> 0,05), so the data was normal.

Homogeneity Test

The homogeneity test was done by using t-test sample independent test. If the significance score was > 0,05, the data was homogen (Priyatno, 2016). Based on the calculation of homogeneity test results using SPSS version 16, it was obtained that 0,263 > 0,05 which meant the pretest score of both data from the experimental group and control group have same variant or homogeneous.

Average Sameness Test

The average sameness test was done by independent sample t-test by the following hypothesis:

H_0= there is no average difference

H_a= there is average difference

The rule of the test is as follows:

If tcount < ttable, H_0 is accepted.

If tcount > ttable, H_o is rejected.

Data is claimed to have average sameness if $t_{count} < t_{table}$ (Ho is accepted). Based on t-test for equality of means table, the score of tcount = 0,375 while ttable = 1,996 with df = 67 and tcount = 0,375 which means that there is no average sameness or the experimental group and control group have the same ability.

3.2 Final Data Analysis

Normality Test

The final data of the research was obtained from posttest scores. The posttest scores of experimental group and control group was obtained by doing normality test using kolmogorov smirnov formula in SPSS version 16. The data is normally distributed if the significance > 0,05 (Priyatno, 2016). By doing this step, the significance result of both groups was obtained: experimental group 0,59 and control group 0,107 which means the data was normally distributed.

Homogeneity Test

The homogeneity test was done by independent sample t-test by comparing the significance score with 0,05 as significance level. If the significance score > 0,05, the data was homogeneous (Priyatno, 2016). The significance result shows that the data of the experimental group and the control group have the same variant or homogeneous because the signification score is 0,214 which is greater than 0,05 (0,214>0,05).

Hypothesis Test

The hypothesis test is to test the hypothesis' validity. The hypothesis test is done by using difference test of 2 averages with one right side test. The hypothesis test is done by using t-test (independent sample t-test) to measure the hypothesis' validity, whether the hypothesis is rejected or accepted. The test rule of t-test was done by the following formula: if tcount > ttable, Ha is accepted (Priyatno, 2016). The hypothesis used is:

H_a = TGT Model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject.

The rule of the test is listed as follows:

If tcount < ttable, Ha is rejected

If tcount > ttable, Ha is accepted

In accordance with the results of SPSS version 16 calculation, tcount value = 7,104 is greater than ttable value = 1,996 (7,104 > 1,996) with significance (0,000 < 0,05) which means that Ha is accepted and Ho is rejected. It can be concluded that TGT model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject.

N-gain Test

N-gain test was used to measure the increase of the students' learning outcomes (pretest and posttest) before and after the treatment was given. Based on the calculation done using Microsoft Excel 2007, it was shown that the obtained n-gain from the experimental group was 0,61 which was in medium category (0,3 < g < 0,7), while the obtained n-gain from the control group was 0,2 which was in low category (g < 0,3), so the increase of pretest to posttest score of the experimental group was greater than the control group.

The Experimental Group Activity

The observation on the students' activity was done in the research as supporting data of TGT model evaluated through observation sheet. The percentage value of students' activity in the first meeting was 48%, increased to 56% in the second

meeting, increased to 67% in the third meeting, and increased to 71% in the fourth meeting. The average of percentage value in the experimental group increased in every meeting which proves that TGT model can increase the activity of SD N Gugus Melati Semarang students in social science learning.

The Students' Learning Outcomes

The average of students' learning outcome on social science subject in the experimental group is 83, 06, while in the control group is 64,55. The average between the experimental group and the control group proves that there is a difference of learning outcomes on social science subject of both groups.

4. CONCLUSION

In line with the results of findings and discussion of this research entitled "The Effectiveness of Teams Games Tournament Model to the 5th Grade Students' Learning Outcomes on Social Science Subject", it can be concluded that TGT Model is effective to the learning outcomes of the 5th grade students of SD N Gugus Melati Semarang on social science subject dealing with independence day proclamation of the Republic of Indonesia. This conclusion is also based on the average difference test with tcount value = 7,104 which is greater than ttable = 1,996 (7,104 > 1,996), so Ha is accepted.

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Developing an Edutainment-Based Probing-Prompting Learning Model for Teaching Civic Education Subject to Fifth Graders

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Abstract

This study was conducted based on the problem found in the teaching and learning process of civic education subject that has not used various learning model yet. In fact, this phenomenon caused the low achievement of students in this subject. Further, this study was intended to develop an edutainment-based probing-prompting learning model for teaching civic education subject. For more, the research and development design was employed to purse this objective. Meanwhile, the data collection techniques used were questionnaire, observation, interview, tests, and documentation. Accordingly, the result showed that: (1) the learning model was developed regarding learning model components as well as teachers and students' needs; (2) the material experts gave 85% score (feasible), while the experts of learning model gave 81.25% score (feasible); (3) there found cognitive learning achievement average with t-test value as many as -6.298 and also improvement of 0.48 with fair criterion. The developed model also gave effective result on the affective and psychomotor learning achievement with the averages of 88.49 and 91.27. Therefore, this study concludes that the edutainment-based probing-prompting learning model is feasible and effective for teaching civic education subject. Also, this study suggests that this product is used by teachers to improve students' learning achievement.

1. INTRODUCTION

Education is an important component of the nation's progress. Education is useful for humans to develop their potential in order to be able to face the changes that occur due to the development of science. Therefore, in order to realize a good quality of national education system in accordance with the national education objectives in Law No. 20 Year 2003 on National Education System, then one of the necessary elements is the preparation of the curriculum. Government Regulation No. 32 of 2013 states that School Based Curriculum (KTSP) is an operational curriculum developed and implemented by each educational unit.

Based on the Standard Competency and Basic Competency of Elementary School (SD) / Islamic Elementary School (MI) in The Regulation of the Minister of National Education (Permendiknas) Number 22 Year 2006, the subject of civic education (PKn) or Civics is one of the subjects that must be included in the learning curriculum in primary school. Civics focuses on the formation of citizens who understand and are able to realize their rights and responsibilities to become intelligent, skilled, and characterized Indonesian citizens as what is mandated by Pancasila and the 1945 Constitution.

The learning of civic education (PKn) in primary schools needs to consider the appropriate learning model. Soekamto in Shoimin (2014) states that learning model is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve certain learning goals, and serves as a guide in planning the activities of teaching and learning.

The success of Civics learning in elementary school can be seen from students' learning outcomes or learning achievement. Nawawi in Susanto (2013) states that learning achievement is the success rate of students in learning the subject matter in the school stated in the scores obtained from the test results of some subject matters.

Based on the preliminary research activities conducted at State Elementary School (SDN) Mangunsari Semarang city through document and interview data, there found problems that in the implementation of learning Civics, teacher has not used the varied learning model yet. The skills of teacher in carrying out Civics learning activities are also not yet maximal. This has an impact on low student learning activities supported by the low average data of student learning achievement of Civics subjects of 68.3. From 26 students, there were only 9 students (34.6%) whose scores were above 78 which is the passing grade score (KKM).

Based on these problems, the researcher wanted to develop an edutainment-based probing-prompting learning model to improve student's learning achievement of Civics subject. Suherman in Huda (2013) argues that probing-prompting learning is learning by presenting a series of questions (probing questions) that are guiding and exploring students' ideas so as to enhance thinking processes that can link students' knowledge and experiences with new knowledge being studied.

Edutainment comes from the word education and entertainment. Edutainment is a

learning process designed in such a way that educational and entertainment content can be harmoniously combined to create enjoyable learning (Hamid, 2011). Edutainment is a way to make learning fun, so students can easily capture the essence of learning itself without feeling that they are learning.

The edutainment-based probing-prompting learning model can alter a learning that closely relates to the questions which make students feel afraid and have a tense classroom in the beginning into a fun learning with full of knowledge. This learning model assists students in exploring the knowledge and experience that students already have through questions that guide the students to create a new knowledge packaged in a pleasant classroom setting.

Research conducted by Felice Corona, et al (2013) entitled "Information Technology and Edutainment: Education and Entertainment in the Age of Interactivity" suggests that there is a close relationship between education and entertainment as defined by edutainment as a continuous and innovative brain exercise which stimulates in an interactive way the ability to combine attention and motivation to explore and learn.

Based on the description, the researcher will conduct a research and development under the title "Developing an Edutainment-based Probing-prompting Learning Model for Teaching Civic Education Subject to Fifth Graders ". Moreover, the objectives of this research are: (1) developing an edutainment-based probing-prompting learning model; (2) examine the feasibility of the edutainment-based probing-prompting learning model; (3) test the effectiveness of the edutainment-based probing-prompting learning model to improve Civics subject learning achievement of the fifth grade students of SDN Mangunsari Semarang.

2. RESEARCH METHODOLOGY

This study used research and development (R & D) method. Research and development method is a research method developed to produce a particular product, and test the effectiveness of the model. The product aimed to develop in this research was an edutainment-based probing-prompting learning model. Further, the steps of this research were: (1) potential(s) and problem(s); (2) data collection; (3) product design; (4) design validation; (5) design revision; (6) product trial; (7) product revision; (8) trial use; (9) product revision; and (10) mass production (Sugiyono, 2015).

The research subjects in this study were the fifth graders of SDN Mangunsari, Semarang City in the academic year of 2016/2017 as many as 26 students, with 5 students selected for use in small-scale trials while 21 other students for large-scale trials. Their data were collected through: (1) interviews, in the form of interviewing the needs of teachers; (2) questionnaire, in the form of a questionnaire of the needs of teachers and students as well as questionnaire responses of teachers and students; (3) observation, in the form of learning model implementation observation and the observation of affective and psychomotor assessment; (4) tests; (5) documentation. The collected data were analyzed by using: (1) product feasibility analysis using descriptive test; (2) initial data analysis using normality test; (3) final data analysis using t-test and N-gain test.

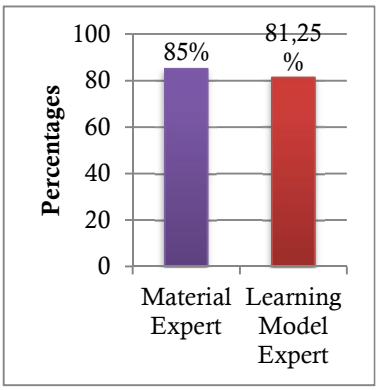
3. RESULTS AND DISCUSSION

The edutainment-based probing-prompting learning model was designed based on the analysis of the students 'and teachers' needs by taking into account the components of the learning model such as syntax, social system, reaction principle, supporting system and impact (instructional and accompanist impacts). Accordingly, the syntax of the edutainment-based probing-prompting learning model were: (1) the teacher faces students in new situations through video containing problems related to the material to be studied; (2) the students provide opinions or responses based on the problems of the video provided by the teacher; (3) the teacher uses music as a signal; (4) the teacher asks questions to the students according to the TPK or indicators; (5) the teacher provides an opportunity for the students to formulate answers or conduct small discussions to formulate them; (6) the teacher appoints the students to answer questions randomly using student's cards; (7) if the student answered correctly, the teacher asks the other students for answers to ensure that all students are involved in the learning activities. However, if the students experience a gridlock in answering, the teacher asks another question whose answer is a walkthrough of the answer, followed by a question that requires students to think at a higher level as indicated; (8) the teacher inserts humor in learning activities; (9) the teacher forms students into heterogenous groups; (10) the students do student's worksheet (LKS) in groups (accompanied by music); (11) the students deliver the results of the group discussion in front of the class; (12) the teacher provides brief explanations and reinforcement of learning materials; (13) the teacher asks the final question given in the form of a bingo game.

In the social system, the teacher maintains control over students' intellectual structures and form environments that support students' self-esteem. In the principle of reaction, the teacher can act as a facilitator in learning activity and the students must play an active role. On the support system, there lies the plan of learning implementation, learning videos, student's identity cards, music and bingo game sheets. In the

instructional impact, there is a construction of knowledge and mastery of the material by the students, while the impact of the companion can form the attitudes of respect and appreciation, courage and responsibility as well as the skills of students in asking, expressing opinions and cooperation.

The result of the developed product was then validated by the material and learning model experts. Therefore, the validation results are presented in the following graph



Graph 1. The Feasibility Assessment Results by Experts

The above graph shows that the developed edutainment-based probing-prompting learning model has met the eligible criteria. As a result, this eligible and feasible learning model was tested to the fifth grade students of SDN Mangunsari Semarang to know its effectiveness.

The cognitive learning achievements of the students using the edutainment-based probing-prompting learning model are presented in the following table.

Table 1. The Results of Students' Cognitive Learning

	Average	Total Students	Total Complete Students	Completeness Percentages
Pretest	69,76	21	9	42,86%
Posttest	83,81	21	17	80,95%

In relation to cognitive learning achievement, the researcher also observed the results of affective and psychomotor learning of the students. Moreover, the students' affective and psychomotor learning achievements are presented in the following table.

Table 2. The Results of Student Affective and Psychomotor Learning

Aspects	Average
Affective	88,49
Psychomotor	91,27

Meanwhile, in dealing with the data of learning achievement, the researcher collected data through questionnaire responses of teachers and students to the edutainment-based probing-prompting learning model as well as the application of this learning model on product testing. The results of the questionnaire and observations are presented in the following table.

Table 3. The Results of Questionnaire Response Teachers and Students and Model Observation Sheets Observation

Instrument	Percentages	Criteria
Students' questionnaire response	94,05%	Very good
Teacher's questionnaire response	100%	Very good
Model implementation observation sheet	100%	Very good

To test the effectiveness of the edutainment-based probing-prompting learning model, it was necessary to perform several tests, including: (1) normality test; (2) t-test; and (3) the N-gain test. The normality test used Kolmogorov Smirnov (K-S) test with the help of SPSS. In Kolmogorov Smirnov test, if Kolmo-gorov Smirnov> 0,05 then the data are normally distributed, whereas if Kolmogorov Smirnov <0,05 then the data are not normally distributed. The results of the normality test of students on a large scale conducted on 21 students of the fifth grade level of SDN Mangunsari city Semarang are presented in the following table.

Table 4. Kolmogorov Smirnov Normality Test

	Statistic	Df	Sig.
Pretest	0,130	21	,200
Posttest	0,166	21	,135

The results of Kolmogorov Smirnov's test showed that Kolmogorov Smirnov values for pretest and posttest data were greater than 0.05, so it was concluded that pretest and posttest data were

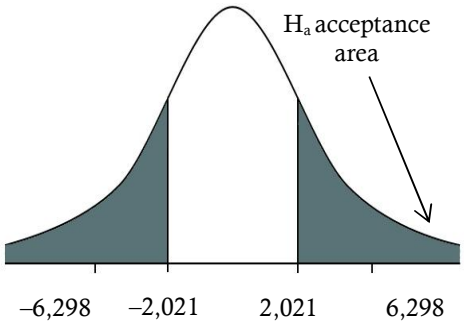
normally distributed so that data could be analyzed using parametric statistics.

Differential tests were conducted to see if there were differences in the average of learning achievement before and after the use of the developed learning model. Alternatively, the differential test results are showed in the following table.

Table 5. The Analysis of t-test Result

Categories	Scores
Pretest average	68,57
Posttest average	83,81
Standard deviation of *pretest*	15,42
Standard deviation of *posttest*	10,36
Pretest dan *posttest* Correlation	0,693
t-test	**– 6,298**

Based on the table, it was known that the t-test value of pretest and posttest results of the fifth graders of SDN Mangunsari was - 6,298. At "α = 5%" with dk "21 + 21-2 = 40", so the value of t table was 2.021.



Graph 2. Two-tailed Test

Based on the above graph of the two-tailed test, the value of t arithmetic was in the area of acceptance of Ha, so it could be concluded that there was a difference between the learning achievement before and after the use of the edutainment-based probing-prompting learning model. This showed that the edutainment-based probing-prompting learning model was effective to increase Civics learning achievement of the fifth graders of SDN Mangunsari Semarang. Ulya, et al (2012) states that in the learning model of probing-prompting, students independently find the concepts learned through directed questions given by the teacher so that students' understanding of the teaching materials will be better and student learning outcomes also increase.

The N-gain test was performed to see the average increase in student learning outcomes before and after using the developed learning model. The results of the average increase of pretest and posttest are presented in the following table.

Table 6. N-gain Test Results

Categories	Scores
Pretest average	68,57
Posttest average	83,81
Difference of *pretest* dan *posttest*	15,24
Maximum score	100
N-gain	**0,48**
***Gain* index interpretation criterion**	**Fair**

Based on the table, it was known that the average increase of pretest and posttest data was 0.48 in the fair category.

4. CONCLUSION

The development of the edutainment-based probing-prompting learning model has fulfilled the components of the learning model and has met the criteria deserved by the material and learning model experts. Based on the questionnaire of teacher and student responses and observation sheets, it is found that the use of the edutainment-based probing-prompting learning model fulfilled the criteria very well. There is an average difference in cognitive learning achievement with a t-test value of -6.298 and an increase of 0.48 with fair criteria. In addition, the use of the developed learning models is also effective against affective and psychomotor learning outcomes with a median of 88.49 and 91.27, respectively.

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The Effort to Teach PGSD Students in Developing Geometry Learning Method Based on Van Hiele's Theory

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Abstract

The purposes of this study are 1). To describe the activities of lecturers in improving the PGSD Unnes students' ability to design the learning of geometry based on Van Hiele's theory. 2). To describe the activities of students in improving the ability to design the learning of geometry based on Van Hiele's theory 3). To know the students' learning outcomes in developing learning activity of elementary geometry by implementing Van Hiele's theory on PGSD students UNNES. This research is a classroom action research conducted in two cycles and each cycle consists of two meetings. Each cycle consists of planning, execution, observation, and evaluation. The subjects of this study are lecturers of geometry and students who take geometry course. The technique in collecting data is using test and non-test techniques. The data analysis is done in quantitative and qualitative descriptive analysis. The result shows that all students can achieve mastery learning. It is suggested that a set of task bills so that prerequisites have been owned by the students. Structured tasks should be given to see the students' ability.

Keywords: geometry, van hiele's theory, elementary school, Unnes

1. INTRODUCTION

In accordance with three obligations of higher education (tridharma), lecturers have three main obligations which are related to each other. The first obligation is related to education and teaching. The second obligation is doing research. The third obligation is doing community service. Education and teaching is the main obligation of lecturers although other two obligations cannot be left.

In the law of Republic of Indonesia number 20 of 2003 about the national education system, in article 1 it is mentioned that education basically is a conscious effort to improve the competence of students by encouraging and facilitating the learning process. The effort to improve the university students includes some factors such as curriculum and learning method which are the vital components that can lead the learning process to be effective and in accordance to the objectives of the study made. One of the characteristics of mathematics learning nowadays is the presentation which is based on the learning psychology. Understanding the learning theory from the psychologists is very important to the success of mathematics learning process in the class. By understanding the available learning theory, lecturers are expected to be able to design and execute the learning process in their class well by referring to the learning theories (Shadiq, 2011). In accordance with the importance of mathematics learning theory in the learning process in the class, it is a must to adjust the learning theory asserted by educational experts to every learning method. It is important not only to make sure the level of concept substance given to the students but also to adjust to their competences, so is its teaching method. The lecturers should understand the students' level of improvement and how the teaching should be done according to the right steps. The students of PGDS are prospective teachers, so that it is important for them to design the mathematics learning including geometry by implementing the theory by Van Hiele, the figure of geometrical learning theory.

Geometry is a branch of mathematics which is taught in every level of education, from elementary level to higher education level. Geometry is a branch of mathematics which is very near to students' daily life since almost every single visual object around them is geometrical object. Freudenthal (Afgani, 2011) asserted that geometry is room of kids. In that room, kids should learn to know, explore, conquer, plan and manage in order to live, breathe, and do something better. Usiskin (1982) gave some reasons why geometry is important to be taught. The first reason is geometry is the only branch of mathematics which relates mathematics to physical form in the real world. The second, geometry is the only branch of mathematics which is possible to visualize the mathematical ideas. The third, geometry can provide a non-singular example of a mathematical system. In the process of learning geometry, the students will have some sequenced stages of thinking.

In 1959 in Netherland, Piere van Hiele and his wife Dieke van Hiele Geldof asserted a theory about the process of growth experienced by students in learning geometry. Sequenced stages of thinking experienced by the students in learning geometry according to Van Hiele are as follows:

Stage 0 (visualization): this stage is also called cognitive stage. In this stage, the students see a geometrical figure as a whole. In this stage, they have not focused on the components of every geometrical figure.

Stage 1 (analysis): this stage is known as descriptive stage. In this stage, the students have known geometrical figures based on their characteristics. In other words, in this stage the students have accustomed to analyze parts of a figure and observe characteristics of those elements.

Stage 2 (informal deduction): this stage is also called sorting stage or relational stage. In this stage, the students have been able to understand the relation between one characteristic to other characteristics of a figure.

Stage 3 (deduction): In this stage, the students have understood the role of basic notions, definitions, axioms, and theorems in geometry. In this stage, they have been able to arrange the proofs formally.

Stage 4 (raigor): this stage is also called metamatic stage. In this stage, the students are able to reason formally about mathematical systems (including geometrical systems) without concrete models as references (Crowley, Mary L., 1987).

In improving a stage of thinking to another higher stage, Van Hiele asserted a learning process including 5 phases (steps). They are information, directed orientation, explication, free orientation, and integration.

1.1 Information Phase

This phase is the first phase to know the basic understanding of students about the topic to study with questions and answers between teacher and students about objects to study in analysis stage.

1.2 Directed Orientation Phase

This phase is the second phase done in the learning method based on the theory by Van Hiele. In this phase, the teacher directs the students in observing the special characteristics of the studied objects through tasks given by the teacher.

1.3 Explication Phase

In this phase, the students are directed to express their opinions about relation of geometrical concepts with their own ideas (for example about the characteristics of observed geometrical figures).

1.4 Free Orientation Phase

In this phase, the students face more complex tasks which can be done or solved by many ways and steps.

1.5 Integration Phase

In this phase, the students summarize and conclude the materials they have learned by making a relation among observed geometrical objects (Crowley, Mary L., 1987).

The fact in the field shows that the effort of PGSD students to have the precondition knowledge autonomously before the class is still low which also affects the learning outcomes. It can be seen that the PGSD students' ability in implementing the theory of Van Hiele on geometry is 70% less proficient, 30% proficient enough, and no one has reached proficient category. It can be seen that the students' lesson plan that should be made in every phase is less precise. It may be cause by the academic atmosphere they have not felt. It can be seen from 18 groups of students (91 students) in developing learning indicators and objectives that only 2 groups are correct. By doing observation and interview it is found that they have not read the needed literatures even they did the tasks based on their own opinion which is not referred to the materials in curriculum and learning theories. It can be seen that the students have less effort, less responsibility, and less hard work. According to this finding, it is important to build the character of academic culture to improve their ability in developing geometrical learning based on the theory of Van Hiele.

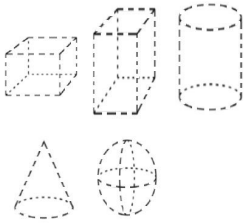
There are some conducted researches which support this research. The first research was conducted by Safrina, Ikhsan, and Ahmad (2014). They asserted that the ability to solve the geometrical problems based on the theory of Van Hiele shows that the experimental group is better than the control group. The second is a research conducted by Muhassanah, Suryadi, and Riyadi (2014) that found every student in a class has different levels of thinking and needs geometrical ability to solve geometrical problems.

This research aims to observe how to teach PGSD Unnes students in developing geometrical learning method based on the theory by Van Hiele.

2. RESEARCH METHODOLOGY

The subjects of this research were the lecturers of mathematics and the students take geometrical learning course and measurement which consist of

27 students. This research was conducted in PGSD Unnes. The procedures done in the research is

PHASES	INDICATORS	ACTIVITIES
Phase 1 (Information)	3.6.1 Mentioning the names of solids appropriate to the objects in the classroom and around the school.	The teacher provides some concrete media. For example:  The teacher asks the students to mention names of the solids from these things.
Phase 2 (Orientation)	3.6.2 Mentioning the names of things around them appropriate to solids.	The teacher asks the students to choose a solid, then the students write the names of objects around the classroom and the school according to the solids as much as possible. 
Phase 3 (Explication)	4.6.1 Presenting their findings about names of things around them that match to solids.	The students present their findings in previous activities. For example: beam-shaped object are books, erasers, cardboard shoes, cupboards, etc. The teacher provides various images of objects. Then, the students are required to group the objects in accordance with the specified plane. 
Phase 4 (Free Orientation)	4.6.2 Grouping some things that match to the names of predetermined solids 4.6.3 Thickening the dotted lines which form a certain solid.	The stud contains a picture of dotted lines, then they are asked to thicken the dotted line. 
Phase 5 (Integration)	4.6.4. Making a conclusion of grouping things activity.	The students present their result of the activity they have done. For example: - The things number (5), (7), (11), and (16) are spheres. - The things number (2), (3), (6), and (12) are tubes. - Etc.

classroom action research. In accord with Arikunto (2010), classroom action research is a scrutiny of learning activities in a form of a conscious effort and happens in class altogether. The recycle in this classroom action research is initiated with planning, action, observation and evaluation, and reflection, and so on until the expected improvement or increase is reached (successful criteria).

3. FINDINGS AND DISCUSSION

This classroom action research was done in 2 cycles of research which consists of 2 meetings. The followings are the research results including lecturers' activities, students' activities, and the geometrical learning outcomes of PGSD Unnes students.

In each cycle, before the class, the students are asked to review the elementary schools' curriculum about geometry. The students are divided into 6 groups. Group 1 reviews the geometrical curriculum for class 1, group 2 reviews class 2, group 3 reviews class 3, group 4 reviews class 4, group 5 reviews class 5, and group 6 reviews class 6. In cycle 1 meeting 1, group 1, 2, and 3 report their results of discussion on reviewing the elementary schools' curriculum. At the meeting 2, group 4, 5, and 6 report their results of discussion on reviewing the elementary schools' curriculum about geometry of class 1 to 6 of elementary school.

Based on the observation on the students' activities, it can be seen that from 6 observers, the average of students' learning motivation aspect and courage aspect is still in medium category with score 2. While their participation, interaction during the learning process, and mathematical communication are in good category. Based on the results of lecturers' activities observation, it can be seen that there is only one aspect in medium category for presented media in learning aspect with score 2 and assessment is in good category with score 3, and for creating supportive class atmosphere and in materials quality 9 of them are in very good category with score 4. Based on the last evaluation cycle 1, the students' learning outcome can be seen that 5 students can reach the learning completeness (75), and 22 students have not completed (<75).

The researchers team conduct an evaluation in finding the students' activities aspect which still needs to be improved. It is the learning motivation and courage of the students. The aspect which needs to be improved is students' participation, interaction, and mathematical communication.

While the result of lecturers' activities observation aspect that need to be improved is media quality. An aspect that need to be improved is students' learning readiness preparation and student learning motivation improvement, learning process, and assessment. Aspects that need to be maintained is creating an atmosphere of learning and the quality of the material presented. From the assessment results, it can be seen that 22 students have not

completed learning. Since all aspects are not in good category (does not meet the success indicators), an action needs to be continued in the next cycle.

In cycle 2, the materials assigned to be studied before the class is Van Hiele's theory and its implementation. The first cycle 2 group meeting of groups 1,2, and 3 is implementing the results of the discussion. Meeting 2, groups 4, 5, and 6 present the results of the discussion. Geometry learning process is done by implementing Van Hiele's theory by analyzing the basic competencies for geometry at which level according to Van Hiele's theory. From the result of basic competence analysis for the geometry in elementary school is at level 1 (introduction), 2 (analysis), and 3 (sorting) of Van Hiele's theory. Furthermore, the learning process was developed based on the phases of Van Hiele's theory. The following presents consecutively geometry learning level 1 (introduction), 2 (analysis), and 3 (sorting).

Geometry learning class 1 for the following basic competences (KD):

3.6 Recognizing solids and plane by using various concrete objects.

4.6 Grouping solids and plane based on certain characteristic using various concrete objects.

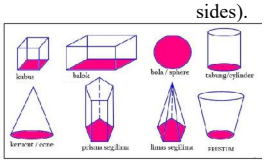
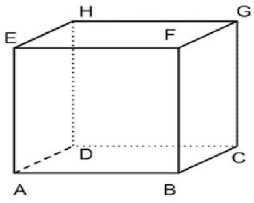
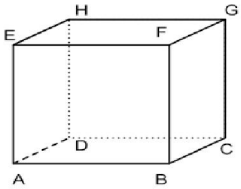
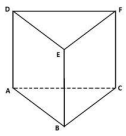
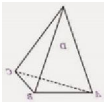
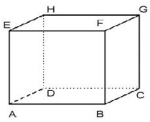
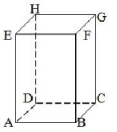
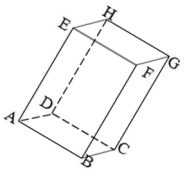
Those basic competences (KD) at the stage 1 is the level of introduction: at this stage, new students recognize solids They can choose and show the shape of cubes, beams, etc. They classify solids based on their form. The learning steps are based on the following phases of Van Hiele as follows:

Here are the learning steps for basic competences at level 2 of Van Hiele's theory.

Basic competences

3.8 Explaining the line segment using the concrete models of plane and solids.

4.8 Identifying the line segment using the concrete model of plane and solids.

PHASES	INDICATORS	ACTIVITIES
Phase 1 (Information)	3.8.1 Mentioning line segment that limits solids.	The teacher provides various shapes. Then, the students are guided by the teacher to know the line segment that limits the solids (by showing the sides). 
Phase 2 (Orientation)	3.8.2 Identifying the characteristics of line segments through the observation of concrete objects.	The students choose a form of geometrical frame, then observe the solids. Then they observe the solids and determine the characteristics of the line segment of the geometrical framework they choose.
Phase 3 (Explication)	3.8.3 Mentioning the number of segments in the triangle solids and rectangular through the concrete object.	 Through the framework of solids, students can mention many line segments that limit the solids.   The students look for similar forms with many segments. So, they are able to show line segments including side and not side.
Phase 4 (Free Orientation)	4.8.1 Grouping up solids based on the number of segments.	   
Phase 5 (Integration)	4.8.2 Shaping a solid image from many restrictive line segments.	The students with teacher guidance, draw the solids by connecting the available dots. 

Class 3 geometry learning for the basic competences which includes level 3 (sorting) van Hiele are:

Basic Competences

3.12 Analyzing the various planes based on the characteristics they have.

4.12 Grouping various planes based on the characteristics.

The learning steps are based on the following phases of Van Hiele's theory.

<table>
<tr><th>PHASES</th><th>INDICATORS</th><th>ACTIVITIES</th></tr>
<tr><td>Phase 1 (Information)</td><td>Mentioning the characteristics of planes.</td><td>The class is begun by questions and answers about the characteristics of planes (parallelogram, rectangle, split, square, trapezoid, and kite).
a. The students mention the characteristics of planes using the following table format. The students write down the characteristics of planes in the table below:<table><tr><td>Plane's Name</td><td>Characteristics</td></tr><tr><td>Square</td><td></td></tr><tr><td>Rectangle</td><td></td></tr></table>b. The students find the planes' names which their characteristics are determined using the following table format:<table><tr><td>Plane's Characteristic</td><td>Plane's Name</td></tr><tr><td>1. The opposite sides are the same and parallel.
2. The facing corners have the same size.</td><td></td></tr><tr><td>1. The opposite sides are equal and parallel.
2. The facing corners have the same size.
3. The four sides have the same length.</td><td></td></tr></table></td></tr>
<tr><td>Phase 2. (Orientation)</td><td>Finding the plane which its characteristic is determined.</td><td></td></tr>
<tr><td>Phase 3. (Explication)</td><td>Communicating the plane which its characteristic is determined.</td><td>The students display their findings about the planes' names which their characteristics are determined.
The students do the tasks to find:
a. The relation between the rhomb and parallelogram using the following table format:<table><tr><td>Plane's Name</td><td>Characteristic</td></tr><tr><td>Rhomb</td><td></td></tr><tr><td>Parallelogram</td><td></td></tr></table></td></tr>
<tr><td>Phase 4. (Free Orientation)</td><td>Finding the relation among planes.</td><td>The students write down the same characteristics between rhomb and parallelogram in the following table.<table><tr><td>Plane's Name</td><td>Rhombs</td><td>Parallelogram</td></tr><tr><td>Characteristic Sameness</td><td></td><td></td></tr></table>By observing the characteristic sameness between rhomb and parallelogram, the students are guided to find the relation between them.</td></tr>
<tr><td>Phase 5. (Integration)</td><td>Summarizing the names of planes that their characteristics are determined and making a chart related to the relation among planes.</td><td>The students with teacher's guidance make a summary about the planes' names which their determined characteristics and make a chart of relation among planes.</td></tr>
</table>

From the observation result, it can be seen that from six observers after the score's average is made, the students' participation aspect is in excellent category (scale 4), the students' interaction during learning, mathematics communication, motivation, and courage are in good category. The observation of lecturers' activity shows that there is one aspect in medium category (2) that is related to the presented media. The final evaluation result of cycle 2 shows that all students can achieve learning completeness and mastery.

4. CONCLUSION AND SUGGESTION

The conclusions of this research are presented as follows. The students' ability in designing geometry learning based on the theory of Van Hiele can be improved by increasing and adding students' activity, lecturers' activity, and students' learning outcomes.

The proposed suggestion is that in learning geometry, paying attention to the basic competencies to be taught at certain level in accordance with Van Hiele's theory is a very important thing. It is also

essential to design the learning plan through the phases of Van Hiele's theory.

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Developing of Monopoly Game Education Media: for Increase The Result of Social Science in Elementary School

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Abstract

The results of Kemendikbud (2014) revealed that there were problems in social science learning in elementary school so that there are still many students who have not reached the Minimum Score criteria determined. The problem also occured in SDN Pakintelan 01, that, social science learning was not optimal in using supporting media, so students did not find their own knowledge and social science learning outcome is still low which needs a solution to develop media in social science learning. This study aims to determine the effectiveness of monopoly game in improving social science learning outcomes.The research method is Research and Development with the population of this research is all students of grade V SDN Larasati and the samples are the students of grade V of SDN Pakintelan 01, SDN Pakintelan 03, and SDN Plalangan 04. Expert assessment result shows that the monopoly game deserves by media experts and material experts with a percentage of media eligibility assessment of 92.8% including very feasible criteria, material feasibility assessment of 91.6% including very feasible criteria. Monopoly game influenced cognitive outcomes as evidenced by the average difference of students' ability through the t test of 7.340 and the average increase atau N-gain of 0.46 with medium criteria.The conclusion of this research is a monopoly game worthy and effective used to improve the learning outcomes of social science of grade V elementary school especially history of Indonesia's struggle against invaders.

Keywords: learning outcomes, monopoly game, social science.

1. INTRODUCTION

Education is one of the determining factors in the development of the nation because education can improve and develop the quality of human resources. Based on Law No.20 of 2003 on National Education System states that education is a conscious and deliberate effort to create an atmosphere of learning and the learning process so that learners are actively developing the potential for him to have a religious spiritiual strength, self-control, personality, intelligence, noble character, as well as the skills needed him, society, nation and country. The role of the teacher as a facilitator in facilitating the students during the learning process required to master a variety of skills and expertise in order to optimize the learning process in schools.

But in reality there are still problems in learning in primary schools. From the results of pre-research conducted through interviews, observation and document student scores list shows that learning social studies class V students who performed not maximized. The problems caused by the still-centered learning social studies teacher. Learning that takes place is still dominated by skills memorizationthan the skills to process its own understanding of the material. Submission of learning is not accompanied by learning media so that there is effective communication between teachers and students. Low interest student reading and motivation to learn that less is also a factor IPS learning is still not optimal. In addition, the availability of instructional media in schools is still limited in the form of image maps and globes. According Hamalik in Arsyad (2011: 15) use of instructional media in teaching and learning can arouse desire and interest in the new, the motivation and stimulation of students.

It encourages researchers to develop learning media in the form of game media that is a monopoly game.According Nurhikmah (2016: 144) monopoly is a game board and games race to accumulate wealth through the implementation of the rules of the game. Gaming monopoly chosen because it is one of the games that are familiar and relatively favored especially elementary school children so it is easy to play. This concurs with Riva (2012: 8) that play is required activities especially for children. Through play children can develop the potential and creative. Monopoly game will be modified and adapted to caracter elementary students. Development monopoly game in social studies learning can assist teachers in presenting the subject matter, facilitate students in understanding the historical material, especially in Indonesia's struggle against the invaders as well. In addition, the learning more fun so the impact on the rise in interest and student learning outcomes.

Research support in solving this problem is research by Atma Hidayat (2015) with a study entitled "The Development of Monopoly Game For Learning Media Batik Class V SD Siti Aminah

Surabaya". The monopoly media development aimed at gaining insight into the art of batik culture so that the information and references about batik is not slow. The test results demonstrate the feasibility of the media experts percentage of 77.6% and the results of due diligence by subject matter experts show the percentage of 79%. The test results based on student learning outcomes before and after using the media monopoly game showed an increase of 54.4% completeness increased to 87.9%. In addition, the results of student activity during learning using media monopoly game also increased of 77% in the first meeting and 80% in the second meeting include increasing the student's attention when the teacher explains, the activeness of students in the classroom, students' interaction with colleagues, adherence of students to teachers, polite mannered student to teacher, and the students' interest towards the lesson.

Based on this background, the researchers examined through research and development under the title "Development Monopoly Game for Improved Learning Outcomes Student Class V SD IPS". This study aimed to test the effectiveness of the media monopoly of games in learning how to develop the IPS through the design and components that correspond to the historical material of Indonesia's struggle against colonizers in class V SD Cluster Larasati.

2. METHODS

This study is a Research and Development, which consists of 10 steps as follows: (1) the potential and problems; (2) data collection; (3) the design of the product; (4) design validation; (5) revision of the design; (6) product trials; (7) the revision of the product; (8) utility testing; (9) the revision of the product; (10) the mass production.

In this research, the sampling technique used is Porbability sampling by type of clustersampling.The research sample is SD N Plalangan 4 N Pakintelan SD 01 and SD N Pakintelan 03.Teknik Data collection is a test and non-test. The test is given to determine the learning outcome of the material that is taught in the learning usingthe media monopoly games in learningIPS. Non-test techniques such as observation sheets, questionnaires needs, questionnaire responses of students, teachers questionnaire responses, and documentation.

The variables measured in this study include the media monopoly of the game as the independent variable and the results of social studies classroom elementary school students on the material history of Indonesia's struggle against the invaders as the dependent variable.

3. RESULTS AND DISCUSSION

Use of the Media in Learning IPS

Based on interviews, observation and document RPP IPS Subjects in class V SDN Pakintelan 01, Pakintelan SDN 03 and SDN Plalangan 04 that the use of media in teaching social studies is not maximized. Analysis of the problems and needs of the media that was distributed to all students and teachers stated that the required media more interesting nature IPS learning the game in the form of media monopoly game.In accordance opinions of Ismail (2009: 2) is through play children can develop the potential and kreatfitasnya. Play as games is an activity carried out by someone in order to get pleasure and satisfaction of having the ability to outperform the opponent.

Media Monopoly Game Development in Learning Social

Media monopoly development process game carried out based on measures of research and development (Sugiyono, 2016: 54). Development of monopolymedia game obtained from problem identification, analysis of media needs of students and teachers, as well as the study of literature. Design development of the media monopoly of games in learning social studies historical materials of Indonesia's struggle against the invaders comprises (1) Board media monopoly game, (2) card questions, (3) Cards opportunities, (4) A smart card (5) card bonus points, (6) sheet points, (7) dice games, (8) user guide game.

Feasibility Media Monopoly Game in Learning Social

Media monopoly games that have been developed and then validated by experts. Product validation is done to determine the feasibility ofmedia gaming in learning. Media assessment was conducted on the feasibility and appropriateness of media material.

Table 1
Results of Validation Media Monopoly Game by Expert Media

No	Expert	Score	Percentage	Criterion
1	Expert 1	80	100%	Very decent
2	Expert 2	76	95%	Very decent
3	Expert 3	72	90%	Very decent
4	Expert 4	69	86%	Very decent
average		74.25	92.8%	Very decent

Based on table 1 indicates that a feasibility assessment of media monopoly game by media

expert assessment which includes three aspects, namely, the media aspect, the aspect of appearance and usage aspects of obtaining a positive response with a total score of 74.25 and a percentage of 92 , 8% including the criteria very decent.

Table 2
Results of Validation Media Monopoly Game by ExpertMatter

No.	Expert	Score	Percentage	Criteria
1	Expert 1	78	97%	Very decent
2	Expert 2	75	93.5%	Very decent
3	Expert 3	71	88%	Very decent
4	Expert 4	69	86%	Very decent
Average - rata		73.25	91.6%	Very decent

Based on table 2 indicate that the appraisalmonopoly media gaming by expertmaterial covering aspects such as conformity assessment material with Competency Standards and the Basic Competency, the material in accordance with the development of science for elementary, indicator, learning objectives, the use of media, instructions for use, question and answer key obtaining a positive response with a total score of 73.25 and a percentage of 91.6% including the criteria very decent. Here's aof monopoly media corrective input game from media experts and subject matter experts:

Table 3
ResultsMedia Design Revision Game Education

No.	Validator	Input	Revision
1	Expert Media	Design packaging media usage instructions tailored to the media flexibility. Create a packaging marketing and a logo for branding media	media application manual made into a small pocket book and make a *box* for packaging marketing as well as adding a logo for branding media
2	Expert material	Fixpoints on the card inquiries. Determination of points is determined by the level of difficulty about	Grouping of question cards based on the level of difficulty is: It is hard, right 20, wrong of 12 Medium, right 10, wrong 6 Easy, right 5, wrong 3

After repairs then proceed to the trial stage of the product. Product trials conducted by the class V SD N Sumurejo 01 with the participants as much as 5 students are aimed at testing the students' response to media monopoly game. Utility testing done in class V SDN Pakintelan 01, Pakintelan SDN 03 and SDN Sumurejo 01 with 384 student participants performed a total of 2 meetings. The first meeting was a pretest that before using the media monopoly game. The second meeting conducted posttest after using the media monopoly game.

Results Of Student Response

Based on thefifth grade elementary school student responses Sumurejo 01 trials of the product to the game of education of five students are 2 boys and 3 girls. The results of student responses and then converted into a percentage reached 86% and the results showed that themonopoly media gaming are in a very decent criteria. Results of teacher responses reaches 100% and show that the media monopoly of the game are in very good criteria so as to continue research on a large scale.

At the trial use, the development of media monopoly game rated because the percentage reached 97.97% and the results showed that themonopoly media gaming are in a very decent criteria. While the results of teacher feedback percentage reached 96.7% and the results showed that the gaming monopoly media are in a very decent criteria.

Student Results Realm Cognitive

Table 4
TestDifferences average value pretest and posttest

Paired Samples Test

Paired Differences					T	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			

Pair 1	pretest – posttest	16,1726	20,1950	2,2035	-20,55252	-11,79000	7,340	83	,000

Source: research results in 2017

Based on the calculations using formulas paired t-test.The results oflearning pretest and posttest class V SD Force Larasati Gunungpati District of Semarang there are differences in learning outcomes. Test calculation the average difference in the value of t is 7.340 with significant value 0,000 then Ha accepted for significance <0.05 then there are differences inlearning outcomes of pretest and posttest class V SD Force Larasati Gunungpati District of Semarang. The result of an increase in the averageof data pretest and posttest presented in the following table.

Table 5
Test Increasing average (N-gain)

Data	Rata-rata	Banyak Siswa	∑ *N-Gain* Individu	*N-Gain* kelas	Kriteria
Pretest	55,2	84	25,9	0,46	Sedang
Posttest	76,0				

Source: research results in 2017

the results of students of class V SD Force Larasati Gunungpati District of Semarang is known that there is an average increase(N-Gain)Data pretest and posttest 0,46 including the criteria for being with difference-ratat average pretest and posttest 20.8.

Affective domain

Affective domain this study included three attitudes or characters that measured students of tolerance, discipline, and honest. Total overall score of 1045 with an average score of 12.44, including criteria very well. Even so, there are still students who do not meet the descriptors of each indicator is expected. This is according to research conducted by Beautiful Setyorini (2016) that the observations of the cognitive aspects of learning outcomes of students also increased by an average score of 66.67% in the first cycle, the second cycle 72.22% and 91.66% in the third cycle , In addition, from the results also showed an increase in students' learning outcomes affective, and psychomotor student.

Psychomotor domain

Psychomotor learning results from the assessment rubric on every aspect that is enthusiastic, active, accuracy answering questions, communication, and cooperation within the group of students during the learning process using the media monopolyIPS. Game has a total score of 1126 with an average score of 13.40 included in the criteria very well. This is according to a statement Hamdani (2011: 22) that the study resulted in a change in those who learn. Such changes are integral, meaning that changes in cognitive, affective, and psychomotor separated from one another and the Beautiful Setyorini (2016) that the observations of the cognitive aspects of learning outcomes of students also increased. In addition, from the results also showed an increase in students' learning outcomes affective, and psychomotor student.

4. CONCLUSION

The use of media for social studies tend to use images and maps and game media types have not been used in teaching social studies that need to be developed in the form of media monopoly game media.

Media monopoly game in the history of social studies learning materials Indonesia's struggle against the occupiers has been developed based on the appraisal by experts meet eligibility criteria is very feasible in the media with a percentage of 92.8%, presentation of the material with a percentage of 91.6%.

The use of media monopolies games effectively use learningIPS historical materials of Indonesia's struggle against the occupiers indicated by the differences in learning outcomes. Test calculation the average difference in the value of t is 7.340 with significant value 0,000 then Ha accepted for significance <0.05 with an average increase of trials(N-Gain)Data pretest and posttest 0,46 including the criteria for being with the average difference of 20.8.

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Communication in Success Learning in School

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Abstract

Communication is an important part of human activity. Included in the learning process where teachers need students' understanding of what is delivered both science and good influence on their attitudes, behaviors, and ways of thinking. Unfortunately, that does not always work. There are many problems that occur in the field and in the communication process. Then there must be a chosen communication strategy to achieve students' understanding for the success of learning. All-way communication can be a solution to communication problems involving all students to interact with teachers as well as with their own. In addition, the selection of desired communication strategy with the character and the back.

Keywords: communication, learning, communication strategy, communication all directions, characteristics of students.

1. INTRODUCTION

Everett M. Rogers and Lawrence Kincaid (in Wiryanto, 2006) say that communication is a process whereby two or more people form or exchange information between each other which in turn takes place in deep understanding. Communication is giving information, messages, ideas, ideas, thoughts, feelings to others with the intention that others participate in the end information, messages, ideas, ideas, thoughts, and feelings belong together between communicators and communicants (Soeharto et al 1995) Communication is a transaction, a symbolic process that requires people to manage their environment by building relationships between people through exchange of information to strengthen the attitudes and behavior of others and try to change attitudes and behavior (Cangara, 2007). According to Ramly (2014) communication Simply can we mean as the process of someone conveying something meaningful and want the recipient to understand what it conveys. It can be concluded that communication is the interaction of two or more people to exchange information that is mutually understandable in life.

Learning process at school which is part of human activity also will not be apart from communication. Winkel (1991) conveying learning is a set of actions designed to support the learning process, taking into account external events that play a role in the sequence of internal events that take place within the learner. This communication will be the determinant of a teacher's success in teaching. It's not just about transferring knowledge to students but also about influencing both their attitudes, behaviors, and ways of thinking. Unfortunately, success is often not achieved well. the successful communication in the learning process is actually influenced by three things. Not only determined by the teacher but also the mental state of the child's readiness in the teaching and learning communication process, supported by the environmental conditioning and management of the school itself (Ramly, 2014).

2. COMMUNICATION ISSUES IN LEARNING

A study in the sub-district of Rumbio Jaya, Riau explains the low ability of students in mathematics subjects. Judging from the data Dispora Rumbio jaya sub-district there are still 5.7% of the 242 students did not pass on this subject. Most math problems for the National Exam focus more on understanding the concept especially on the story, while many students are difficult to understand the purpose of the problem to be solved. This may be due to lack of understanding of concepts in mathematics, students are less likely to communicate their difficulties so that they are not solved, or biased because when teachers teach, teachers have not used learning methods that can encourage students to think and involve students actively (Hidayat, 2014). Another study in SMP N 3 Grobogan found that the low learning outcomes of students in mathematics subjects where there are only 7 students from 24 students who are able to graduate from the minimum value of 65. Viewing student responses to questions from teachers (3 of 24 children) is low, then students who do group collaboration in learning there are only 6 out of 24 children. It showed student learning communication is still low (Zainuddin, 2013). A

factor of the poor student learning communication ability is the instructional strategy applied by the teacher that has not been right yet. Ahmadi (2004) states that learning methods that are not interesting can cause students to become passive, so students do not have learning activities. Less precise learning strategies will certainly affect the learning outcomes.

3. PATTERN OF COMMUNICATION IN LEARNING

Interactions in communication usually form patterns-patterns. This pattern is influenced by gender, age, social status, occupation, education level, residence area, and so forth (Harjono, 2009). Communication patterns also appear in the learning process involving teachers and students. According to Sudjana (1989) there are three communication patterns that occur are:

1. Communication as an action or one-way communication
Teachers in this case as an action giver and student recipients of the action. This pattern is often referred to as a lecture. Because teachers are more active in conveying information without feedback or feedback, students tend to be passive and less likely to encourage students to respond to lessons.

2. Communication as a interaction or two-way communication
This communication pattern involves teachers and students in two directions. Both can act as givers and recipients of action. This communication pattern is often seen in private lessons or Q & A sessions, where students also actively ask or respond to material presented by the teacher.

3. Communication as a transaction or multidirectional communication
This communication pattern involves teachers, and some students who interact with each other. Here has included both previous patterns where learning activities are filled with discussions and Q & A not only between teachers and students but also between students with one another. This allows students to more actively convey their ideas.

These patterns are studied to choose which patterns can be used by the teacher so that the communication process in learning can be effective. But in addition there are various ways that can be taken by teachers to achieve the purpose of communication. Ari (2013) conveyed in his research on teacher communication strategy in delivering Indonesian language subjects in grade 1 of elementary school, there are teachers using word repeating strategy or some words directly after they are spoken, requests for assistance and nonlinguistic means as a distraction so that students focus attention to teachers . The non-linguistic means in question is to create mimic, gesture, and imitation of sounds. The request assistance strategy is aimed at provoking student involvement in learning. As Indrawati (2009) points out, the early classroom learning involves students in the learning process so that students gain hands-on experience and are trained to find their own knowledge that is holistic, meaningful, authentic and active. No approach or communication strategy is most effective because in the learning process the delivery of the material must be tailored to the needs. There are times when teachers are seriously asked about the material presented, and then there are times when the teacher invites the students to discuss related topics, there are times when teachers interact with certain students interpersonally. All must be tailored to the characteristics of the students. Teachers must be able to understand the level of maturity and background of learners so that teachers can determine strategies that match the character of students. What should be underlined is how to choose a communication approach that can understand students on what is delivered.

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The Development of Domino Nusantara Conservation Media for Students IV Grade Elementary School of Purwoyoso 01 Semarang

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Abstract

This research is motivated because the result of student learning in sosial studies is lower than other lesson. It's happen because unoptimal to use learning media, then still centered on teachers, lack of model variation and methods in learning, low enthusiasm of student. The formulation of the problem in this research is how the development, feasibility and effectiveness of Donat Conservation as a learning media to improve the learning result of sosial studies in the cognitive domain in the fourth grade elementary school of Purwoyoso 01 Semarang. The research aims to develop learning media, know the feasibility of media, and to know the effectiveness of Donat Conservation media on the learning results of IPS in the cognitive domain for Cultural Diversity of Nations matter in the fourth grade elementary school of Purwoyoso 01 Semarang. This research type is Research and Development (R and D) with Borg and Gall model. Data analysis techniques, including product data analysis, preliminary data analysis and final data analysis. The results show that the percentage gained from material experts is 89% (very feasible) and the percentage gained by media experts is 84.7% (very feasible). Results of small group experiments have improved with the acquisition of understanding in moderate criteria. It is also shown on the average posttest result of large group, that is 88,67, compared to average pretest which only 69,67 with acquisition of understanding in medium criteria (N-Gain = 0,63). And the result of t test is 21,651 which means there is difference of learning result with positive response from student and teacher. So it can be concluded that Donat Conservation media is feasible to be used and effective to improve the result of sosial studies in cognitive domain.

Keywords: conservation, development, domino nusantara, media, grade IV.

1. INTRODUCTION

Education is an attempt to perform a learning process with regard to the knowledge, attitudes and skills through training, teaching or research that is usually accompanied by an educator or done by itself that directs a person to be human personality in accordance with the existing values. As described in Law No. 20 of 2003 on National Education System in article 1, paragraph 1 states that education is a conscious and deliberate effort to create an atmosphere of learning and the learning process so that students are actively developing the potential for him to have the spiritual power of religion, self-control, personality, intelligence, noble character, and skills needed him, society, nation and country

Learning is a process attempts by individuals to obtain a change in behavior that is new in its entirety, as a result of the experience of the individual in interaction with the environment (Slameto, 2013: 2). A learning process can be said to be successful if special instructional objectives (ICT) was achieved. So we need a good planning on doing the learning. The use of the medium used is also noteworthy. The media interpreted integral part of the learning process in order to achieve the goals of education in general and learning objectives in schools in particular (Arsyad, 2014: 2). Media can be used as tools and learning resources. In the media selection needs to consider several factors one of which is the target of the program (Djamarah, 2013: 121).

One medium that can be used in social studies is dominoes. Dominoes fall into graphic media types of visual media, namely instructional media that transmits a message via the senses of view / vision. The message conveyed poured in visual communication symbols (Sukiman, 2012; 85-87). Dominoes will be presented in a game so as to make students more interested. Dominoes is a game system has been recognized by the public. Dominoes is generally a card made of thick paper ordinary small-sized rectangular and on each card is divided into two parts of the field with each field has a value determined by the number of digits in the sphere. But the game of dominoes in this study is different from usual domino game. Domino game that used to have some variation by lifting elements UNNES conservation among sewage treatment, paperless policy and cultural conservation (Tim MKU UNNES, 2014: 40-41).

Initial observations conducted by researchers showed that learning social studies in grade IV SDN Purwoyoso 01 Semarang less optimal. In the implementation of learning, the absence of a supporting medium for conveying the material, less optimal utilization of available media, learning is

still centered on teachers and learning resources focusing only on the book. So that students are less enthusiastic in participating in lessons and can not understand the material very well. These problems result in lower social studies and the results were below the minimum completeness criteria (KKM) is 70. By archives value fourth grade students of Purwoyoso 01 Semarang indicate that IPS had a mean value of 67.76. Fourth grade students are 39 students. Values on the cognitive indicate as many as 20 students or 51.28% of the students are under the KKM.

Research conducted supported by previous studies such as research conducted by Farid Ahmadi in 2014 under the title"The Effect of jaritmatika Multimedia in Counting Ability of Children" which proves that the posttest learning implementation using "Jarimatika" multimedia-based learning more as high as the pretest. The study also reinforced by the relevant research ever undertaken Sri Muryaningsih 2015 under the title "Math Games Domino Effect On The Results Of The Learning Math fractions In Class IV SD Negeri 1 Kalikabong" which indicates that there is the influence of dominoes fractions on learning outcomes aspects cognitive and psychomotor. And the research by Lucky Dwi Larasati 2016 under the title "Development of Chemical Domino Card Games as the Creative Learning Media Elements for Students SMALB". The results showed that the card game Domino Chemistry fit for use as a medium of learning chemistry on the material elements for students SMALB.

Judging from some of the benefits of media use dominoes then it is appropriate to be used as a media dominoes in social studies materials Nation Cultural Diversity theme togetherness in the fourth grade. Based on this background, researchers interested in conducting research in the cognitive with the title "Development of instructional media Domino Nusantara (Donat) Conservation to improve cognitive learning outcomes of IPS". Case Study: Students of Class IV Purwoyoso 01 Semarang. This study aims to (1) develop Donat Conservation as a medium of learning to improve learning outcomes cognitive of IPS on material Nation Cultural Diversity fourth grade Elementary School of Purwoyoso 01 Semarang, (2) Examine the feasibility of Donat Conservation as a medium of learning to improve learning outcomes IPS cognitive matter Diversity Nation culture grade IV Elementary School of Purwoyoso 01 Semarang, (3) Testing the effectiveness of Donat Conservation of cognitive learning outcomes of IPS in Nation cultural Diversity material grade IV Elementary School of Purwoyoso 01 Semarang.

2. METHODS

This study included in this type of research and development. Research development is defined as a systematic review of how to make the design of a product, develop / produce the draft, and evaluate the performance of these products, with the purpose can be obtained data empirical that can be used as a basis for making the products, tools and models that can be used in teaching or non teaching. The steps in this research as shown in Figure 1 below, namely: (1) the potential and problems; (2) data collection; (3) the design of the product; (4) design validation; (5) revision of the design; (6) product trials; (7) the revision of the product; (8) utility testing; (9) the revision of the product; (10) mass production. Researchers adapted the Borg and Gall development models for each step in the research are translated accurately. So the researchers focused on conducting research and development to get the desired results in accordance with (Sugiyono, 2015: 409).

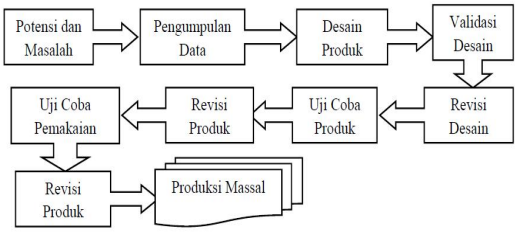

Figure 1. Steps Model Borg and Gall (Sugiyono, 2015: 409)

Subjects in this study consisted of students, teachers, specialists or experts and researchers. The technique of collecting data using interviews, documentation of data, questionnaire, and test. On Conservation Donat products do due diligence covering feasibility matter experts and media, as well as through the responses of teachers and students. Furthermore, for data analysis, including analysis of product data, data analysis beginning with normality test, and final data analysis to test N-gain and samples paired t-testaims to determine the effectiveness of media Donat Conservation of learning outcomes IPS (Social Studies) on material Nation Cultural Diversity.

3. RESULTS AND DISCUSSION

3.1 Product Design

Needs analysis questionnaire results showed that the desired learning method in teaching materials Nation Cultural diversity is lectures, discussions and games. To display the desired culture of pictures, drawings, writings, writings. Conservation Donat card size is 4x8 cm with a cartoon. Culture on the card Donat served more than three colors and colors background cards more than

2 colors. In the game there Conservation Donat card board game with a size of 32x48 cm and the base color of this game more than two colors. Conservation donut card usingletter Axis Komixa with a medium size (7). Dark colors in the picture captions culture. Conservation Donat card played by the rules that are fixed and for students who will be eligible for prizes, the students who lost will be punished. At the end of the lesson will be held evaluation with multiple choice questions.

The results of the needs analysis questionnaire given to teachers, show that teachers choose to use a variety of learning methods in between lectures, discussions and games. Views varied culture, ie images, drawings, text or otherwise, and writings. Furthermore, for teacher card sizes choose the size of 4x8 cm and with a cartoon. Culture in Conservation Donat card also expected to be presented with more than 3color and background cardsmore than two colors. For the teacher board size choose size 32x48 cm with attractive colors and diverse. The selected letter is Komixa Axis with a size 7 and a dark color. The game is also expected based on the needs analysis will be used as guidelines in making learning media. This is consistent with the explanation M. Taufiq in his journal, entitled "Development of Integrated Science Learning Media Environmental Care Character Themes Conservation Science-Edutainment" so that the media developed appropriate and well targeted. Conservation Donat media design includes cover design point of the game, game board design, business card design front, rear card design, the design of the card, and design guide books. Conservation Design nuanced nationalism Donat media, because the media relating to the material Nation Cultural Diversity. The design was then translated into a product in the form of conservation Donat media.

3.2 Results Products

Results for the product is the stage where the design is translated into a real learning media. Researchers made the Conservation Donat media design using Corel Draw X7. In addition to software, the researchers also need materials such as waste paper as a former printing place and the media suttlecock as a whole former Donat Conservation media. The following examples of products Donat Conservation.

Figure 2.Design and Products of Donat Conservation

Products that have been produced will then be tested the feasibility of the subject matter experts. Subject matter experts give a total score of 43. The results of the acquisition score then the score will be converted into a percentage. The percentage obtained by 89%. And the result falls within the criteria very feasible to use. Of subject matter experts to suggest improvements to the manuals, evaluation questions and multiple choice in the matter of evaluation. With the revision, the researchers make improvements to the evaluation questions. Furthermore, the evaluation questions are tested on students at the next level up. At the trial researchers enrolled students of class V Elementary School of Purwoyoso 01 Semarang. From the results of their work were then tested the validity, reliability, power and the level of difficulty depending matter. After the researchers chose questions that have met the criteria to be used in the evaluation of learning about the pretest and posttest.

Products that have been produced will also be tested the feasibility of the subject matter experts. Assessment of media experts give a total score of 78. The results of the acquisition of the score is the score will be converted into a percentage. The percentage obtained for 84.7%. And the result falls within the criteria very feasible to use. From media experts advise to make revisions on the back cover and guide books division Conservation Donat card series. Revised rear cover associated with the writing and thecolor background is less harmonious books that make writing less clear to read. While in the card series, with regard to the number of cards is not the same for each series, so the researchers transformed the card series originally consisted of 3 series then converted into 2 series.

3.3 Results Testing Products

Products which have become further test small group of 9 students. The small group trial conducted twice learning is learning pretest and learning posttest. Learning is done in a separate library for the students who will be the subject of a large group. The goal is to seperate students as subjects in a large group to know the groove and the media, because it will affect the initial conditions of students. On thelearning pretest studentusing a regular image media, while at the posttest students using Conservation Donat media. At the end of the evaluation of learning both work on the problems. The results of the evaluation oflearning pretest and posttest in small groups are shown in Table 1.

Table 1. Results of Evaluation of Learning pretest and posttest Small Group

Learning	Lowest Rated	Top Value	Average	Percentage Complete
Pretest	55	85	73.89	77.78%
Posttest	80	100	90.5	100%

Table 1 shows that the learning pretest lowest score was 55 and the highest is 85 with an average of 73.89 and a percentage of 77.78% completeness. While on thelearning posttest lowest score was 85 and the highest was 100 with an average of 90.5 and the percentage of completeness 100%. It shows differences in cognitive learning outcomes of students before and after uses the media, and the result of evaluation on learning posttest. higher than pretest.

Having successfully applied to a small group, then media Donat Conservation would be applied in a large group. In a large group of students were 30 who sequently formed into 5 groups. Students who have been involved in a small group is not allowed to participate in learning in large groups because previously they have been getting the same material. The treatment given to large groups as well as small groups. Will be performed learning pretest and posttest. At the end of the lesson will be given about the evaluation. Here are the results of the evaluation in a large group.

Table2.Learning Evaluation Results pretest and posttest Large Group

Table 2 shows that the learning pretest lowest score was 50 and the highest is 85 with an average

Learning	Lowest Rated	Top Value	Average	Percentage Complete
Pretest	50	85	73.89	60%
Posttest	75	100	90.5	100%

of 73.89 and a percentage of 60% completeness. While on thelearning posttest lowest score was 80 and the highest was 100 with an average of 90.5 and the percentage of completeness 100%. It shows the results of evaluation on learning turns posttest higher than pretest. It is similar to a study conducted by Carmen Brankaer, Pol Ghesquiere, and Bert De Smedt in 2015 under the title "The Effect Of A Numerical Domino Game On Numerical Magnitude Processing In Children with Mild Intellectual Disabilities" with the results of the children who play the game numerical domino experienced significantly faster when posttest compared to pretest on symbolic comparison task.

3.4 Data Analysis

Analysis Datawere done with the test for normality byformula. the Shapiro-Wilk Normalitasi Calculations performed with SPSS version 21. Normality test results on a small group pretest andreaches 0.231 posttest reached 0.595. While a large group of normality test on the pretest andreaches 0.379 posttest reached 0.092. All these results show the value of more than 0.05 and normality curve shaped like an inverted bell. This means that the normal distribution of data and can be continued for the next calculation.

The results ofvalue pretest and posttest in small and large group followed bytest N-Gain to determine the success of the students' understanding of the concept. Results N-Gain small groups and large groups are shown in Table 3.

Table 3. Results N-Gain Small Group and Large Group

Group	Total Score pretest	Total Score posttest	scores Maximum	*Gain*
N-Small	665	815	900	0.64
Large	2090	2660	3000	0.63

Table 3 shows the N-Gain large groups and small groups. The small group shows a total score of 665 pretest and posttest total score 815 with a maximum score of 900, the obtained N-Gain 0.64 which are in the middle criteria. And a large group showed a total score of pretest posttest in 2090 and 2660 with a total score of a maximum score of 3000, the obtained N-Gain 0.63 which are in the middle criteria.

In addition to calculating the N-Gain also performed t test. T test aims to determine whether there are differences in learning outcomes or not before and after using Donat Conservation. Calculations performed with SPSS version 21 and obtain data sig (2-tailed) 0.000. It means that sig (2-tailed) 0.000 <0.05. And (21.651)> (2.045). So we can conclude there are differences in learning outcomes IPS Nation Cultural Diversity materials before and after using instructional media Conservation Donat.

Seeing these results, it can be concluded that the conservation Donat effective against cognitive learning outcomes IPS materials Nation Cultural Diversity at the fourth grade students of Elementary Schoof of 01 Purwoyoso Semarang.

4. CONCLUSION

The conclusion of this research is Developing a learning medium IPS Donat Conservation has

conducted research in several stages according to the model designed by Sugiyono covering the steps of the potential and problems, data collection, product design, design validation, the revised design, product testing, product revision , utility testing, and product revision of Conservation Donat. Data collection Data collection was done by using interviews, questionnaires, and documentation data lists the value of the Grade IV Elementary Schoof of Purwoyoso 01 Semarang and analysis needs. At the stage of product design, the researchers used aprototype.Then proceed with design validation by experts and media materials, revised and continued testing of products in small groups and continued with a big group test.

Feasibility study media products developed is determined through the validation by subject matter experts and media, as well as a small group of test results. Based on the evaluation by experts materials, products gain eligibility with a percentage of 89%, which means very feasible and by media experts get a score of eligibility with a percentage of 84.7%, which is very decent. In a small group of test results obtained by an increase in social studies achievement after using the media with an understanding of 0.64 were included in the criteria.

Results of experiments in classroom samples showed an average pretest (before using the media) is 69.67, while the average posttest (after using the media) is 88.67. After using the media to achieving an understanding of 0.63 are included in the medium criteria. According to test calculations paired t-test produced 2-tailed sig 0.000 <0.05 andt (21.651)> ttable (2,045), it can be concluded if the Conservation Donat instructional media have a significant influence on the results of social studies grade IV Elementary Schoof of Purwoyoso 01 Semarang. The learning outcome to prove if there is a difference between the results of social studies before and after using instructional media of Donat Conservation.

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