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Mathematic Score of the Champions

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Abstract

Mathematics is still a shortcoming for primary school children. Various studies were conducted to improve the learning results of mathematics. Unexpectedly there was a phenomenon in a remote place, under the foot of Mount Lawu, which was a primary school that had been ranked in the top ten of the National and 5 of Central Java Province to achieve the National Mathematics exam scores. The primary school is Public Elementary School 03 Bandardawung. Good scores students at Public Elementary School 03 Bandardawung are still stable today. This study aims to determine the learning and causes of excellence of students at Public Elementary School 03 Bandardawung in Mathematics. The research method uses qualitative descriptive-analytical with phenomenological design. The results showed: First, planning of learning in the design according to the materials and needs of the students and following the prevailing rules. Second, the implementation of learning is implemented in the student center with media optimization. Third, evaluation is done from the process to the end, there is a repetition system, where if there are students who do not understand, it will be repeated continuously until the student understands. Fourth, the competency of teachers is good, demonstrated by the fulfillment of four teachers competence and ten basic teaching techniques. Fifth, the school, community, and family environment fully support learning. Synergy, support, and high dedication from all elements make learning so optimal. The benefit of research is to provide an overview of how potential Mathematics learning can be used widely because it has proven its good results over the years at Public Elementary School 03 Bandardawung.

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INTRODUCTION

As time goes by and the development of science and technology, making competence in each field increasingly stringent. These developments are inseparable from the influence of mathematical developments in the fields of number theory, algebra, analysis, probability theory, and discrete mathematics. Mathematics, as one of the basic sciences, has indeed developed very rapidly both in terms of material and its use in daily life. Cockcroft (1986) says that mathematics is very useful in all aspects of daily life.

The first step to know Mathematics is learned from school, because mathematics plays a very important role in technological development, that is why school needs Mathematics. Without mathematical assistance, there is no possible development of technology as it is today. According to Muhsetyo (2000) mathematics learning is the process of providing a learning experience to students through a series of plan activities, so that students gain competency about the mathematics materials itself. According to Fathani (2016) there are two demands of student's ability in mathematics, other than counting ability, which is logical ability and critical ability in problem-solving. The problem refers here is not merely a matter of routine from the teacher as well as the book, but rather to the daily problems.

The mathematical ability became known as the ability of mathematical literacy. Observing the latest results for the survey conduct by the Programme for International Student Assessment (PISA, 2015) the new level of mathematical literacy can be ranked at 69 from 76 countries. Far below Singapore and Vietnam. The results of the test and evaluation of PISA, 2015 (Programme for International Students Assessment) the performance of Indonesian students is still relatively low. Consecutive average scores of Indonesian students' achievements for science, reading, and mathematics were ranked at 62, 61, and 63 from the 69 countries evaluated. The rating and average of the Indonesian score did not differ

considerably from the previous PISA test and survey results in 2012 which also were in a low material mastery group

Based on a survey of Trend in International Mathematics and Science Study (TIMSS, 2015). TIMSS is an international study that measures the ability of students in mathematics and science. Based on the results of the TIMSS study, Indonesia received 397 points on science and was ranked at 45 from 48 countries. It does not differ considerably from the science results; the mathematical score results are also 397, ranked 45 from 50 countries.

Seeing the TIMSS and PISA results, education in Indonesia, especially mathematics in schools, both at the basic level up to the advanced level, has not been so encouraging results both for national and international scale. Indonesia is still far behind by other countries, and although the international individual has an achievement, it is not an overview of education in Indonesia.

Herman (2007) argues that in fact, the student's mathematical learning outcomes are very low, both in the primary and educational levels. This issues according to the survey of IMSTEP-JICA (Development of Science And Mathematics Teaching for Primary and Second Education In Indonesia) (IMSTEP)-Japan International Cooperation Agency (JICA) due to Mathematics learning teachers generally concentrate on the practice of solving questions. In the learning activities, the teacher explained the concept on an informative basis, giving examples of questions and exercises. Teachers are the center of activities while students tend to passive learning. Students simply listen, record explanations, and do exercises. So the learning experience they get is not growing.

Heruman (2012) suggests that mathematics is a symbol language, deductive science that rejects inductive evidence, the knowledge of regularity patterns and organized structures. Rahmawan, Mariani, and Sulhadi (2015) in his research stated that there are five general purposes of mathematics learning, namely communicating (mathematical communication), reason (mathematical

reasoning), solving problems (mathematical problem solving), and forming Positive attitude toward mathematics. All of them require student activeness, not the other hand. According to Saragih (2007) school mathematics is an essential concept as a basis for understanding the higher concepts, which generally have many applications in the life of the community. These concepts can be understood through inductive and deductive approaches tailored to the cognitive development of students. The fact shows that until today, complaints and disappointments towards student mathematics learning results are still voiced loud, both through mass media and through seminars. The opinion of the students about learning mathematics itself is not much different from the above research results. Students reveal that mathematics is a lesson identical to memorizing formulas, difficult, unusable, and boring.

Many problems that prevent learning mathematics in schools that show how low score of Mathematics, Public Elementary School 03 Bandardawung in Tawangmangu District, Karanganyar, Central Java prove the opposite. In recent years, the scores of national examinations, especially mathematics, are very high. As reported in the Government of Karanganyar Regency, the achievement of primary school students in Public Elementary School 03 Bandardawung was able to achieve the best scores in the National exam in mathematics. The average scores of the UN figure of primary school students in year 2013/2014 are 9.3. In year 2014/2015 the average score of mathematical national examinations students at Public Elementary School 3 Bandardawung was 9.87 or the top 10 best national and best in Central Java because 23 out of 30 achieved perfect grades. Even trial exam results can reach an average of 9.9. The achievement was successfully maintained in the 2015/2016. The average score of School Exam for Mathematics at Public Elementary School 03 Bandardawung in 2016/2017 reached 99.63 and 97.04.

This issues became a very interesting phenomenon to respond to. Among the many data that says that mathematics is one of the

subjects that is difficult for students, students at Public Elementary School 03 Bandardawung even prove the opposite. Research that has been implemented Haryono, a⁵ Hardjono (2014) mentions in the results that **one of the uniqueness and excellence of a school is to have a solid school culture and exist⁵ll. The combination of three in one is both students, teachers, and parents who work together to create a better community through quality education, and are responsible for improving the quality of learning in schools,** making good schools in the community.

Learning contains a sense of change from perception and behavior, ¹⁸luding improved behavior. Learning includes not only subjects but also mastery, habits, pleasures, interests, social adjustments, various skills and ideals (Hamalik, 2009). According ¹⁰Uno (2008) planning is to select and connect knowledge, facts, imagination, and assumptions for the future in order to visualize and formulate the desired outcome, the sequence of activities required, and behavior within acceptable boundaries that will be used in resolving.

Implementation of learning is at the heart of the learning process in a learning environment, which generally includes three activities, opening, competency building, and closing. The success of achieving many educational objectives depends on how the learning process is performing, much less mathematics learning. Teachers should strive for students to form their competence according to what is outlined in the curriculum, as described in the planned implementation of ⁷ learning (RPP). In this case, the primary task of the teacher is to condition the environment to have a meaningful learning experience for the students. Last, the evaluation, TenBrink (1974) suggests that evaluation is the process of collecting information and using it as a material for consideration in making⁸ decisions.

The purp³ of this research is to describe the study at Public Elementary School 03 Bandardawung, the competency of teachers of Public Elementary School 03 Bandardawung, describing the environment around Public

Elementary School 03 Bandardawung, and the advantages of students at Public Elementary School 03 Bandardawung in mathematics.

The benefits of this research, in addition to knowing the effective concepts/methods of learning mathematics and supporting factors in mathematics learning, but also expected to add horizons and perspectives in education, especially in the Mathematics learning 24 students in primary school. For the teachers, it is hoped that the results of this study will be a useful reference to the concept of Mathematics learning as well as a guide in carrying out mathematics learning in primary schools.

Some studies have been conducted before, such as the research conducted by Karim (2011) on the application of the method of discovery guided in mathematics learning which proved to improve the understanding of concepts and critical thinking skills of Elementary School students. Subsequently, Soviawati (2011) research successfully improved students critical thinking skills at Elementary School level through the realistic mathematical approach (PMR). Then there is also the research 30 of Dahlan, and Juandi (2011) which analyzes the mathematical representation of primary school students in solving contextual mathematical problems.

This research is different from some previous studies. Previous research comes from a lack of learning outcomes in primary school mathematics and tries to find solutions to the problem. While this research starts from the good scores of mathematics for later analyzed the cause.

Exploring the learning process at Public Elementary School 03 Bandardawung is important because of the striking and consistent results of the Mathematics National Exam at Public Elementary School 03 Bandardawung so that it can produce students with a very high score of the national exam than another primary school around, even in central Java. The benefit of this study is to explain how potential mathematics should be learned to be a reference for learning mathematics for other primary schools.

METHODS

This research uses the description of the methods and steps done by elaborating on an exploratory basis using a qualitative approach. Researchers choose to use this method in consideration that the case being researched is a case that requires the use of observation instead of using a model of a shortage, second with qualitative research is easier when dealing with reality, third is the proximity of the emotional connection between researchers and respondents so that it will produce a deep data.

The meaning of qualitative research according to Moleong (2011) is a study that intends to understand the phenomenon of what is experienced by the subject of research holistically and by way of description in words and language, on a special context that is natural and by utilizing various scientific methods. This research uses the phenomenological approach. According to Creswell (2015) the phenomenological study describes the general pursuits of several individuals against their various experiences of life-related to the concept or phenomenon.

The design of the phenomenological research seeks to illustrate the phenomenon in a profound and complex, through a complete understanding and inseparable from its context. Therefore, researchers focus on learning mathematics at Public Elementary School 03 Bandardawung. Use observations, interviews, and documentation on data retrieval and research data sources from informers (researchers as primary instruments; principals, teachers and students as subjects) and documents (learning devices, photo activities, audio recordings, as well as other artifacts or incidental data 15 uired).

Analysis of research data that is activity in the analysis of qualitative data is done interactively and lasts continuously until 22 mplete, so the data is saturated. According to Miles, and Huberman (1994) activity in data analysis, namely: data reduction, data display, and conclusion. Researchers conduct data analysis and triangulation interactively, departing from the phenomenon of mathematics high score exam at Public Elementary School 03

Bandardawung followed by a description of the incident which includes the field findings, data reduction, and data analysis and conclusion and verification, the result of analysis of the high score of the mathematics exam of Public Elementary School 03 Bandardawung.

RESULTS AND DISCUSSION

Mathematics Study at Public Elementary School 03 Bandardawung

Table 1 explains that learning at Public Elementary School 03 Bandardawung is a whole unit ranging from planning, implementation, to evaluation. Each process has the role and impact for the mathematics learning process in the sixth grade Public Elementary School 03 Bandardawung. According to the analysis data, the planning of learning Mathematics at Public Elementary School 03 Bandardawung started by mapping the material. Material that has never been taught is given more time than material that has already been given. It also always prepares to learn implementation plan (RPP), because RPP is one of the control tools in learning. As one of the control tools in learning, it can be said that RPP is functioned in learning management, which is a planning function.

Table 1. Mathematics Study at Public Elementary School 03 Bandardawung

Process	Findings
Planning	Learning plan
Implementation	Opening, competence formation, closing
Evaluation	Assessment of processes and results

The plan of mathematics learning has been seriously calculated by the teachers, about what will be done in the implementation of the learning, and how to achieve the goals. RPP created by the teacher is following the RPP K-13 revision, where the RPP is derived from the syllabus.

After preparations, step is implementation, according to the data, the implementation began by issuing the motivation to learn students through the game/quiz/singing together. Once it is given material, the material submitted must be meaningful, using being linked to everyday life.

Also, the use of media/props is also a plus point. Teachers do not prohibit students from being wrong; teachers prohibit students not to be afraid of trying. Last, in the implementation of learning, students are also given reward systems.

The conclusion of the fact data above is, in the implementation of evaluation at Public Elementary School 03 Bandardawung, students are included in the learning process so that the assessment is not only in the final result but also from the process. Public Elementary School 03 Bandardawung formulated the evaluation flow, first is specified evaluation purpose, second is determine what parts will be evaluated, third is determining how to evaluate, fourth is to define follow-up.

From the evaluation teacher has a record of anyone who has not yet understood, the teacher makes notes where the material is expected to be difficult for the students. If any student has not understood yet, then the material will be repeated, and the student will be asked to do various questions relating to the material until the student is good enough. Explanation about the plan, implementation, and evaluation will follow:

Learning Plan of Mathematics at Public Elementary School 03 Bandardawung

The learning plan is the process of decision-making to think rationally about the goals and objectives of learning, a series of activities that must be implemented as an effort to achieve the objectives by utilizing all potential and learning resources so that it can be used as a guideline in the implementation of learning in the classroom.

The mathematical learning plan at Public Elementary School 03 Bandardawung starts with mapping the material. Material that has never been taught is given more time than material that has already been given. So at the end of learning, all material has been delivered, because the fact time for material at class VI will be reduced by the holiday and Try Out. Kurniawan, Rusdi, and Marzal (2018) stated that in mathematics learning activities, planning is very important by the teacher to carry out the learning activities

because it affects the process, such as strategy, model, the content of matter, media, and evaluation. Planning is a guide for teachers in determining the direction of learning activities.

The results showed that teachers also had data to anticipate students who were lacking in absorbing the material. Proven teachers do the necessary assistance to children who are less understanding of the material, and there is a collaborative process between students and teachers. Yamaji (2016) stated that the collaborative process of students with teachers would help math learning. Also, teaching preparation, appraisal, and discussion will make a major influence on mathematics learning. Support for students who need help in learning will make it easier for teachers to decide on assignment reference will use small group discussions or instructional assignments.

Also, teachers always prepare a learning implementation plan (RPP). RPP created by the teacher is following the RPP K-13 revision, where the RPP is derived from the syllabus. RPP is also adapted to look at the student's abilities and characteristics, in addition to the planning, students are also involved in the learning process later. Riyanti, Sutarna, and Maryadi (2017) stated that RPP is one of the control tools in learning. As one of the control tools in learning, it can be said that RPP is one of the functions in learning management, which is a planning function. The plan of mathematics learning has been seriously calculated by the teachers, about what will be done in implementation of the learning, and how to achieve the goals.

Mathematics Learning at Public Elementary School 03 Bandardawung occurs well, and this is evidenced by the achievement of the learning objectives that are seen from the student's score. This process is in line with the study Mawaddah, Kartono, and Suyitno (2015) which concluded that one of the purposes of mathematics education in school is to develop creative activities involving imagination, intuition, and discovery by developing the divergent thinking, original, curiosity, make predictions and assumptions and dabble. Creative thinking skills need to be cultivated to train

students thinking supple (flexibility), smooth (fluency), original (originality), and able to elaborate (elaboration).

The Implementation of Mathematics Teaching at Public Elementary School 03 Bandardawung

The implementation of learning is the core of the learning process in a learning environment, which generally includes three activities, opening, competency building, and closing. The success of achieving many educational goals depends on how the learning process is performing, much less mathematics learning. Teachers should strive for students to form their competence according to what is outlined in the curriculum, as described in the planned implementation of the learning. In this case, the primary task of the teacher is to condition the environment to have a meaningful learning experience for the students.

Based on the findings of the lesson plan and observations of learning mathematics in class, when opening a lesson, the teacher provokes students motivation to use various methods, starting to guess, sing, or play. In addition to provoking student motivation, it can also be used to attract students attention. After the student is motivated, only then the teacher conveys learning. This was strengthened based on the research results of Khakiim, Degeng, and Widiati (2016) which formulated the indicator to open and close the lesson. The following are activities undertaken by the teacher to open the lesson and close the lesson.

Table 2. Opening and closing Activities

Opening activities	Closing activities
Attracting attention	Review
Raises motivation	Evaluate
Giving reference	Follow Up (assignment/homework)
Delivering materials	

The teacher's material submission is largely supported by the use of teaching media/props. Ahmadi, and Wang (2104) proves how to increase the big motivation in primary school children by using media. Fakhruddin, Ahmadi, Sumilah, and Apri (2017) also concluded in his research that the use of media in

the learning process is one of the efforts to create meaningfully and quality learning.

It was found from the results of interviews. Also, in learning, sometimes students are rewarded for appreciating the results of their work. This activity is supported by the research of Ernata (2017) explaining that the granting of reward and punishment is still relevant to be implemented if it applied precisely and efficiently. This means that the implementation should be adjusted to the student's situations and conditions. If the reward and punishment easily delivered, the result will eliminate the score of effectiveness, because the students will be saturated and being ineffective.

The implementation of learning is similar to the research of Anwar (2102) that concluded that in conducting mathematics learning, teachers use steps or general procedures in the learning process, which is to open a lesson, then followed by a review or warming up, then doing material exposure as the 36 of learning and ending with a closing. At the end of the mathematics learning process, teachers always give the students homework. These tasks will be collected for review and graded by the teacher and included as student's daily score.

Learning Evaluation of Mathematics at Public Elementary School 03 Bandardawung

Evaluation of learning is a process of collecting information and using that information as an ingredient to determine the score or benefit of 35 learning activities through assessment and measurement activities.

In the implementation of the evaluation at Public Elementary School 03 Bandardawung, students are included in the learning process, so that the assessment is not only in the final result but also from the process. Public Elementary School 03 Bandardawung formulated the evaluation plot; The groove begins by determining the evaluation objective; determine what parts will be evaluated; determining how to evaluate; and specify follow-up. From the evaluation, the teacher has a record of anyone who has not yet understood, and which material is expected to be difficult for the students. If any

student has not yet understood, then the material will be repeated, and the student will be asked to do various questions relating to the material until the student is bored. Students are also welcome to be wrong; the opportunity for students to convey their opinions is given wide-width. Sarbiyono (2016) concluded that active students, experiencing problems and trying to find the resolution, said that the students will find a mathematical concept, and will develop their creative thinking skills.

Good learning is learning that follows learners in the learning process. It's no longer the teachers too dominate in learning. Teacher assignments are limited to initiators, supervisor, and learning resources. The activity of students will enlarge the learning goals realized. This activity has also been conducted at Public Elementary School 03 Bandardawung. For example, if in daily circumstances, teachers make a question, and students do questions, then students are given the task to make a question. This will stimulate the student's a way to think about finding solutions to mathematical problems. Students wrong is a sign that students are really-really learning.

Based on Arani, Shibata, Sakamoto, Iksan, 38 hirullah, and Lander (2017) tries to find out how teachers should respond to students who make mistakes in 31 mathematical learning process. In general, the teacher's response is to allow students to make mistakes, help students understand where their mistakes are and then evaluate them, and learn from mistakes.

Analysis of the Relationship between Teacher's Competence and National Mathematics Exam Results

Teacher competence is the ability of teachers to perform their duty 27 in both inside the school and outside school. The teacher's ability can be reflected in the learning process and the teacher's daily life. Based on the ability of teachers of sixth grade Public Elementary School 03 Bandardawung is stated to be pleasant in teaching, because the students can understand, easily understood, and not boring. Sixth-grade

teachers are also not fierce and always answer student's questions.

11 In this regard, Manzilatusifa (2007) stated that the teacher is a professional educator with the main task of educating, teaching, guiding, directing, training, assessing and evaluating learners in a formal path. Teachers 23 carrying out their functions are obligated to create an educational atmosphere that is meaningful, fun, creative, dynamic, dialogical, and motivate students to build the student's ideas, initiatives, and responsibilities to learn.

Based on the document research, teacher of sixth grade Public Elementary School 03 Bandardawung has four professional 14 teacher competencies, ranging from pedagogic competence, personality competence, social competence, and professional competence. In his learning, teachers also carry out ten basic teaching skills, ranging from lesson-opening skills to lesson closing skills.

Teachers of sixth grade Public Elementary School 03 Bandardawung always know which students are not material-savvy, because as a class teacher who each day meets the students, the teacher already know 32 which students are weak. Teachers also use the media in learning. Creative teachers can use any media that can be found to help to learn. Pingge, and Wangid (2016) concluded that in terms of the competence of primary school teachers, the competency of teachers in diagnosing student's learning difficulties, utilizing learning media, and managing a large contributing class in student learning outcomes. The research of Agustina, and Yuliani (2006) also concluded that the initiative factor, creativity, and innovation of teachers are very supportive of success when combined with contextual learning and student-oriented learning. It is found in the research process, in the findings of interviews, documentation, and observations conducted at Public Elementary School 03 Bandardawung.

Description of the Condition of School and Community Environments in Supporting Mathematics Learning Process 3

Learning is an activity that requires high concentration. A comfortable place and learning environment will make it easier for students to concentrate. By preparing the right environment, students will get better results and can enjoy the learning process. This learning environment condition determines the smoothness of the learning process, including physical condition, socio-cultural environment or community, and school environment.

Public Elementary School 03 Bandardawung school's Environment is very supportive for the learning process because it is in the countryside, under the mountain Lawu, with a cool and calm condition and still far from the crowd, even on the roadside but not make any doubt, because it does not many vehicles pass by. It is also supported by the adequate facilities and infrastructures at Public Elementary School 03 Bandardawung. Because in each class there is a lot of learning media. Widyaningtyas, Karmin, and Radiyono (2013) states a learning environment that supports all student learning activities will provide a comfortable and encouraging experience for students to spur their learning achievements continuously. Aini, and Taman (2012) says that the environment is distinguished from being a family environment, school, community, and can all affect students in learning. Student learning environments include a physical environment consisting of learning places, learning tools, learning resources, lighting, and weather conditions.

The school environment, community environment, and family environment 9 are very supportive in the learning process at Public Elementary School 03 Bandardawung. This is based on the findings of the research document. The environment that surrounds individuals in his life, such as parents, homes, playmates, communities, even the psychological environment, has supported the learning process. The learning environment that supports all student's learning activities will provide a comfortable and encouraging experience for

students to continuously spur their learning achievements. The good environment needs to be cultivated to make a positive influence on the student⁷ so that they can learn the best.

The learning environment conditions are very supportive, making students more enthusiastic in the learning process. For example, the atmosphere is safe and comfortable so that students can permeate with⁷ the teacher teaches and so the opposite. If the environmental conditions are less supportive in the learning process, then the student will feel uncomfortable in that it impacts the motivation students. This condition resulted in students simply departing from school to listen to the material taught by the teacher without understanding the knowledge given, resulting in low student learning achievement.

Support from all parties in support of learning at Public Elementary School 03 Bandardawung can be said as the key. All elements have been complementing each other and doing its part well to form slick cooperation and synergize in supporting learning so that it can make the students get the maximum score.

8 CONCLUSION

Based on the results of the research and discussion on the Mathematic score of the champions at Public Elementary School 03 Bandardawung can be concluded:

First planning of learning Mathematics at Public Elementary School 03 Bandardawung can produce a good score in the national exam, which starts with mapping the material. Material that has never been taught is given more time than material that has already been given. It also always prepares RPP or learning implementation plan because RPP is one of the control tools in learning. As one of the control tools in learning, it can be said that RPP is one of the functions in learning management, which is a planning function. The plan of mathematics learning has been seriously calculated by the teachers, about what will be done in the implementation of the learning, and how to achieve the objectives. RPP created by the teacher is following the RPP K-13

revision, where the RPP is derived from the syllabus.

Implementation of the study, teachers at Public Elementary School 03 Bandardawung began by issuing the motivation to learn students through the game/quiz/singing together. Once it is given material, the material submitted must be meaningful, using being linked to daily life. Also, the use of media/props is also a plus point. Teachers do not prohibit students from being wrong, and teachers prohibit students not to be afraid of trying. Lastly, in the implementation of learning, students are also given reward systems.

Implementation of the evaluation at Public Elementary School 03 Bandardawung, students, are included in the learning process so that the assessment is not only in the final result but also from the process. Public Elementary School 03 Bandardawung formulates the evaluation flow, which specifies the evaluation objectives; Determine what parts will be evaluated; Determining how evaluation; Specify follow-up.

From the evaluation, the teacher has a record of anyone who has not yet understood and on the material where the material is expected to be difficult for the students. If any student has not yet understood, then the material will be repeated, and the student will be asked to do various questions relating to the material until the student is bored.

Second, competencies of sixth-grade teachers of Public Elementary School 03 Bandardawung have four professional teacher competencies, ranging from pedagogic competence, personality competence, social competence, and professional competence. In his studies, teachers also carry out ten basic teaching skills, ranging from opening skills to closing skills.

Third, environmental conditions around Public Elementary School 03 Bandardawung such as parent's environment, home, friends play, community, even the psychological environment, support all student's learning activities and provide a comfortable and encouraging atmosphere for students to continuously spur his learning achievements. The good environment needs to be managed until it can give positive

influence to the students so that they can learn best.

Learning at Public Elementary School 03 Bandardawung is pure as in primary school studies, the difference is the support of all parties so that the cooperation is formed and synergized. Another key to learning success is the maximum dedication of every element that has made the student excellence at Public Elementary School 03 Bandardawung, especially in the field of mathematics can be maintained.

Suggest of this research is first, to get a good result as at Public Elementary School 03 Bandardawung, the teacher must completely change his teaching mindset. Teachers must always do their own introspective to improve their abilities. Teachers should see ten basic skills of teaching to make the lesson fun and meaningful. Second, bringing everyday problems related to the material into learning will grow student's interest and make learning meaningful, because it starts from student's experience and they solve it themselves. Third, according to the success of Public Elementary School 03 Bandardawung in Mathematics, preferably a teacher re-introspection about his professional duties, improve the environmental teaching, improve the motivation of teaching, growing motivation to make his students become the best.

REFERENCES

- Agustina, H., & Yuliani, I. (2006). Faktor-faktor yang mempengaruhi kinerja guru matematika dalam pelaksanaan kurikulum berbasis kompetensi (kbc) pada sekolah menengah atas kota Palembang. *Jurnal Bisnis dan Manajemen*, 4(7), 24-31. Retrieved from <http://eprints.unsri.ac.id/4465>
- Ahmadi, F., & Wang, W. (2014). The effect of "jarimatika" multimedia in counting ability of children. *Information and Knowledge Management*, 4(6), 40-47. Retrieved from <https://www.iiste.org/Journals/index.php/IKM/article/view/13859>
- Aini, P. N. & Taman, A. (2012). Pengaruh kemandirian belajar dan lingkungan belajar siswa terhadap prestasi belajar akuntansi siswa kelas xi ips sma negeri 1 sewon bantul tahun ajaran 2010/2011. *Jurnal Pendidikan Akuntansi Indonesia*, 10(1), 48-65. Retrieved from <https://journal.uny.ac.id/index.php/jpakun/article/view/921>
- Anwar, Z. (2012). Pelaksanaan pembelajaran matematika di sekolah dasar. *Jurnal Penelitian Ilmu Pendidikan*, 5(2), 24-32. Retrieved from <https://journal.uny.ac.id/index.php/jpip/article/view/4747>
- Arani, M. R. S., Shibata, Y., Sakamoto, M., Iksan, Z., Amirullah, A. H., & Lander, B. (2017). How teachers respond to students' mistakes in lessons: a cross-cultural analysis of a mathematics lesson. *International Journal for Lesson and Learning Studies*, 6(3). Retrieved from <https://www.emerald.com/insight/content/doi/10.1108/IJLLS-12-2016-0058/full/html>
- Cockcroft, W. H. (1986). *Mathematics counts*. London: HMSO.
- Creswell, J. W. (2015). *Penelitian kualitatif dan desain riset: memilih di antara lima pendekatan*. Yogyakarta: Pustaka Pelajar.
- Dahlan, J. A., & Juandi, D. (2011). Analisis representasi matematik siswa sekolah dasar dalam penyelesaian masalah matematika kontekstual. *Jurnal Pengajaran MIPA*, 16(1), 128-138. Retrieved from <http://journal.fpmipa.upi.edu/index.php/jpmipa/article/view/273>
- Ernata, Y. (2017). Analisis motivasi belajar peserta didik melalui pemberian reward dan punishment di sdn ngaringan 05 kec.gandusari kab.blitar. *Jurnal Pemikiran dan Pengembangan Sekolah Dasar*, 5(2), 781-790. Retrieved from <http://ejournal.umm.ac.id/index.php/jp2sd/article/view/4828>
- Fakhrudin, Ahmadi, F., Sumilah, & Ansori, I. (2017). Ibm guru sekolah dasar melalui upaya peningkatan kualitas guru dengan 1 pelatihan pengembangan media pembelajaran pada implementasi kurikulum 2013. *Jurnal Abdimas*, 21(2), 103-110. Retrieved from <https://journal.unnes.ac.id/nju/index.php/abdimas/article/view/12337>
- Fathani, A. H. (2016). Pengembangan literasi matematika sekolah dalam perspektif multiple intelligences. *Edu Sains: Jurnal Pendidikan Sains dan Matematika*, 4(2), 136-150. Retrieved from <http://e-journal.iain-palangkaraya.ac.id/index.php/edusains/article/view/524>
- Hamalik, O. (2009). *Psikologi belajar dan mengajar*. Bandung: Sinar Baru Algensindo.

- Haryono, & Hardjono. (2014). Peningkatan partisipasi masyarakat untuk mewujudkan pendidikan berkualitas. *Jurnal Abdimas*, 18(1), 27-30. Retrieved from <https://journal.unnes.ac.id/nju/index.php/abdimas/article/view/5722>
- Herman, T. (2007). Pembelajaran berbasis masalah untuk meningkatkan kemampuan penalaran matematis siswa smp. *Jurnal Cakrawala Pendidikan*, 1(1), 41-62. Retrieved from <https://journal.uny.ac.id/index.php/cp/article/view/8544>
- Heruman. (2012). *Model pembelajaran matematika di sekolah dasar*. Bandung: Remaja Rosdakarya.
- Karim, A. (2011). Penerapan metode penemuan terbimbing dalam pembelajaran matematika untuk meningkatkan pemahaman konsep dan kemampuan berpikir kritis siswa sekolah dasar: studi eksperimen pada siswa kelas v sd negeri di kecamatan kuta blang kabupaten bireuen tahun ajaran 2010/2011. *Thesis*. Bandung: Universitas Pendidikan Indonesia. Retrieved from <http://repository.upi.edu/8771>
- Khakiim, U., Degeng, I. N. S., & Widiati, U. (2016). Pelaksanaan membuka dan menutup pelajaran oleh guru kelas 1 sekolah dasar. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 1(9).
- Kurniawan, A., Rusdi, M., & Marzal, J. (2018). Pengembangan modul pedoman guru dalam mendesain instrumen penilaian matematika berbasis pemecahan masalah matematika. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 7(3), 363-370. Retrieved from <http://ojs.fkip.ummetro.ac.id/index.php/matematika/article/view/1558>
- Manzilatusifa, U. (2007). Pemberian motivasi guru dalam pembelajaran. *EDUCARE Jurnal Pendidikan dan Budaya*, 5(1), 67-73. Retrieved from <http://jurnal.fkip.unla.ac.id/index.php/educare/article/view/59>
- Mawaddah, N. E., Kartono, & Suyitno, H. (2015). Model pembelajaran discovery learning dengan pendekatan metakognitif untuk meningkatkan metakognisi dan kemampuan berpikir kreatif matematis. *Unnes Journal of Mathematics Education Research*, 4(1), 10-17. Retrieved from <https://journal.unnes.ac.id/sju/index.php/ujmer/article/view/6901>
- Miles, M. B, and Hubberman, A. M. (1994). *Qualitative data analysis*. London: Sage Publications
- Moleong, L. J. (2011). *Metodologi penelitian kualitatif*. Bandung: Rosdakarya.
- Muhsetyo, G. (2000). Strategi pengembangan dalam pembelajaran matematika sekolah dasar. *Matematika*, 6(1). <http://journal.um.ac.id/index.php/matematika/article/view/1480>
- Pingge, H. D., & Wangid, M. N. (2016). Faktor yang mempengaruhi hasil belajar siswa sekolah dasar di kecamatan kota tambolaka. *Jurnal JPSPD (Pendidikan Sekolah Dasar)*, 2(1), 146-167. Retrieved from <http://journal.uad.ac.id/index.php/JPSPD/article/view/4947>
- Rahmawan, J., Mariani, S., & Sulhadi. (2015). Model pembelajaran outdoor mathematics dalam group investigation bermuatan karakter untuk meningkatkan kemampuan pemecahan masalah. *Unnes Journal of Mathematics Education Research*, 4(1), 18-25. Retrieved from <https://journal.unnes.ac.id/sju/index.php/ujmer/article/view/6902>
- Riyanti, Utama, & Maryadi. (2017). Manajemen pembelajaran matematika di sd negeri mangkubumen 83 surakarta. *Jurnal VARIDIKA Kajian Penelitian Pendidikan*, 29(1), 65-74. Retrieved from <http://journals.ums.ac.id/index.php/varidika/article/view/5150>
- Saragih, S. (2007). Penerapan problem-based learning dengan pendekatan kontekstual pada pembelajaran matematika. *Jurnal Forum Kependidikan*, 27(1).
- Sarbiyono. (2016). Penerapan pendekatan matematika realistik terhadap kemampuan pemecahan masalah matematis siswa. *Jurnal Review Pembelajaran Matematika*, 1(2), 163-173. Retrieved from <http://jurnalfk.uinsby.ac.id/index.php/jrpm/article/view/29>
- Soviawati, E. (2011). Pendekatan matematika realistik (pmr) untuk meningkatkan kemampuan berfikir siswa di tingkat sekolah dasar. *Jurnal Metodik Didaktik, Edisi Khusus 2*, 79-85. Retrieved from [http://jurnal.upi.edu/md/view/670/pendekatan-matematika-realistik-\(pmr\)-untuk-meningkatkan-kemampuan-berfikir-siswa-di-tingkat-sekolah-dasar.html](http://jurnal.upi.edu/md/view/670/pendekatan-matematika-realistik-(pmr)-untuk-meningkatkan-kemampuan-berfikir-siswa-di-tingkat-sekolah-dasar.html)
- TenBrink, T. D. (1974). *Evaluation: A practical guide for teachers*. New York: McGraw-Hill, Inc.
- Uno, H. B. (2008). *Teori motivasi dan pengukurannya*. Jakarta: Bumi Aksara.

- Widyaningtyas, A., Karmin, S., & Radiyono, Y. (2013). Peran lingkungan belajar dan kesiapan belajar terhadap prestasi belajar fisika siswa kelas x sekolah menengah atas negeri 1 pati. *Jurnal Pendidikan Fisika*, 1(1), 136-143. Retrieved from <http://jurnal.fkip.uns.ac.id/index.php/pfisika/article/view/1773>
- Yamaji, A. (2016). Teacher discourse supporting peer collaboration in mathematics. *International Journal for Lesson and Learning Studies*, 5(3), 255-270. Retrieved from <https://www.emerald.com/insight/content/doi/10.1108/IJLLS-12-2015-0043/full/html>

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