Development of Learning Tools Fractional Counting Operation Materials based on the Integration of the Fara'id Concept for Elementary School Students

Zubaidah Amir MZ, Risnawati and Ramon Muhandaz
Mathematics Education Department, Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

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Abstract: This study purpose to examine the validity, practicality, and effectiveness of the development of mathematics learning tools (student worksheets) for operating materials to calculate the fraction of the integration of the Fara'id concept in fifth grade students of elementary schools. This study is research and development (R & D). This development research design consists of 3 stages, namely front-end analysis, prototype phase, assessment phase. This prototype was then validated by experts in mathematics education and religious education from UIN Suska Riau. In the practicality stage, the device was tested on the fifth-grade students of SDN 002 Sumahilang Pekanbaru. The trial was observed by 2 (two) observers. The effectiveness observed was about the results of learning mathematics and religion, especially the discussion of Fara'id after attending the learning. The results showed that; (1) The designed learning tools are valid from the point of view of mathematics and religious education experts; (2) Learning devices can be used by students and teachers without significant constraints, in the practical sense of their use; (3) Effective learning tools for learning mathematics but not yet effective for religious learning which are shown by the results of the percentage of 75% and 21% classical graduation test.

1 INTRODUCTION

The relationship between religious elements in learning are expected not only to form moral values, but also be related to learning subject. The linkage is termed the word integration. The integration of general science with Islamic values is echoing in the world of education with the aim of directing students into religious life. This is also confirmed by the Government through the formulation of the Republic of Indonesia's National Education System Law No. 20 of 2003 article 339 (Sekneg RI, 2003), which implies that the purpose of Indonesian education directs its citizens to religious life. Educators should be able to integrate Islam in the education curriculum, including mathematics learning.

Then, as a realization of the National Education System Law, Integration is an alternative that must be chosen to make education more comprehensive (integral-holistic). The reflection of the Islamic curriculum according to Siregar must contain the principle: a) Containing basic unitary values for the equality of Islamic values always and places; b) contains the value of unity of interest in developing the mission of Islamic teachings; c) contains material that contains spiritual, intellectual and physical development (Siregar, tt). Therefore, the process of integrating general science with Islam can be applied in an inseparable entity. This is in line with Afiful Ikhwan that there should be no dichotomy of general science and religion, including in mathematics learning (Ikhwan, 2014). This suggests that the implementation of the Islamic education curriculum has a strategic portion in completing the general education curriculum.

The process of integration of learning between general education (mathematics learning) and religion is expected to be the main axis in creating human resources with insight and science and technology, so that the added value obtained by students with the implementation of Islamic-minded learning, leads students to more moral, moral and behavioral good, can enhance the interest and awareness of students about religious life. And with a historical review of mathematical concepts will be able to help learning mathematics curriculum in

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school (Puadi, 2017). The history of mathematics in Islam has a very strong contribution because there are certain verses in the Qur'an that have a connection with the mathematics used by Islamic scholars in developing it, in accordance with the purpose of the Qur'an to reveal that humans can use their intellect (Hussain, 2017). doing far better than just copying Greek and Indian, their additional research techniques developed and systematized some in the field of mathematics (Smith, 2008).

An implementation of general curriculum integration with Islam can be found in mathematics teaching subjects, such as student worksheets. This agrees with Amir MZ (2003) that one of the integration models that can be used is the Webbed Model (spider network model). This model is integrated learning that uses thematic approaches. In this case the mathematical material is associated with the study of Al-Qur'an. This is in line with Abdussakir (2009) who stated that in his study it was stated that mathematics and Islamic science had very close links. As well as mathematics as a basic science related to religious life. In the context of jurisprudence (Muniri, 2016). In this case the researcher is interested in combining the material of division with the science of Fara'id (distribution of inheritance) contained in the Qur'an.

Science of Fara'id is one of the branches of Fiqh science. Science Faraid specifically discusses the definition of heir and heir (Rasjid, 2007). The science of mawaris is a very important science and is only found in Islam, because with the knowledge of mawaris someone's inheritance can be given to those who have the right to prevent disputes about the inheritance, so inheritance (inheritance) can be shared with those who are entitled to receive well and correctly without anyone feeling disadvantaged, because all of them are based on the rules or provisions of the applicable law (Juhdi, et,all, 2017). The distribution of Islamic heritage over the death of a Muslim is an obligation not to be taken lightly by all Muslims (Noordin, et.all, 2013). So, besides that, it also discusses the mathematical division of rights obtained by heirs. Because the science of Fara'id uses the concept of calculation, the researcher wants to integrate mathematics learning with the aim of introducing students early on the science of fara'id. The material that is integrated is understanding, grouping of expert experts and the simplest rules of distribution.

To combine mathematical subjects and Islamic subjects is not easy. Therefore, researchers tried to develop learning devices for the fifth grade of elementary school on the topic of fraction counting operations with the science of Fara'id. The device in question is LKPD (student worksheet). This study examines the validity, practicality of the development of the LKPD and its effectiveness on the results of students' mathematical learning in the distribution material and religious material about Fara'id. This is in accordance with the principle of developing teaching materials must meet the criteria valid, practical and effective, so that they can have a positive impact on learning (Akker, 1999).

2 METHODOLOGY

This study is a research and development (R & D) development of prototypical project interventions (Akker, 1994). This development research design consists of 3 stages, namely front-end analysis, prototype stage, assessment stage. Learning tools developed are LKPD (Student Worksheet). Activities at the stage of the back-face analysis carried out included interviews with colleagues, analyzing syllabus, textbooks, literature. Based on the results of the analysis of the back face compiled a learning device prototype which was then consulted with experts. This prototype was then validated by 6 experts, namely three mathematicians and three religious education experts (fiqh) from UIN Suska Riau.

In the practicality and RPP and LKPD test phases were tested on teachers and fifth grade students of Sumahilang Pekanbaru Elementary School 02 in 2015. The reason for choosing the school was by considering the ease of communication with the school and knowing the conditions of the participants. The trial was observed by 2 (two) observers. Practical Test Data was collected through observation sheets of learning implementation and interviews with teachers. The effectiveness of the LKPD investigation was carried out in line with the practicality stage, using pre-experimental research with the model of the research design was "The One-Shot Case Study" (Sugiyono, 2007). The effectiveness observed was about the mathematics learning outcomes of calculating fractions and material Fara'id after participating in learning. Data were analyzed descriptively and used very valid, valid, quite valid, less valid, invalid categories. For practicality using criteria is very practical, practical, quite practical, less practical, and not practical. While the effectiveness of the devices developed is said to be effective if it achieves classical learning completeness, namely the KKM value (Minimum Completion Criteria) 75 for each mathematics and religious material (Fara'id science).

3 RESULT

3.1 Learning Device Validity

3.1.1 Design of Learning Devices

The prototype of the mathematics learning device integration of Islamic concepts for Comparative material was designed based on the back-face analysis. This activity began with interviews with colleagues, analyzing the material syllabus, analyzing mathematics textbooks and Fara'id science. The prototype of the mathematics learning device integration of Islamic concepts designed and developed consists of 2 types, namely RPP (Learning Implementation Plan) and LKPD (Student Work Activity Sheet) for three meetings.

RPP material that was designed and developed refers to the comparison material of class V elementary school and basic introductory science of Fara'id. The characteristics of RPP include: learning identity, competency standards, material, competency indicators, learning strategies, and evaluation. Characteristics of LKPD are: Learning objectives, summary of material, sample questions, guided exercises and practice questions and conclusions.

The following is a description of the characteristics of the mathematics learning device, the integration of Islamic concepts of RPP and LKPD that the researchers design, namely:

a. Competency indicator.

This indicator researchers develop from the competencies that exist in the mathematical syllabus that researchers adjust to the book fara'id science.

Indicators for RPP and LKPD 1 are:

1) Students can explain the meaning of inheritance.
2) Students can explain the meaning of Muwaris.
3) Students can explain the meaning of inheritance.
4) Students can explain Maurust's understanding.
5) Students can explain the reasons for the importance of studying Fara'id / Waris.
6) Students can determine which fractions are worth.
7) Students can sort fractions from smallest to large and vice versa.

Indicators for RPP and LKPD 2 are:

1) Students can explain the reasons for obtaining inheritance.
2) Students can explain the causes of not getting inheritance.
3) Students can determine the heirs of Zawil Furudh.
4) Students can determine the comparison / fraction sum.
5) students can determine the heirs who get the most inheritance based on the provisions of zawilfurudh.

Indicators for RPP and LKPD 3 are:

1. Determination in the Division of Inheritance
2. Students can determine the number of each part of inheritance based on Fara'id's provisions. The form of the matter of the amount of inheritance is unknown in the form of money.
3. Students can do mathematical calculations in determining inheritance in the form of a sum of money. The form of the problem is known the determination of the division of the heirs and the number of inheritances.
4. Students can determine inheritance parts with questions that are known only to the heirs and the number of inheritances. Forms of questions vary.

b. Summary material

Contents of summary material from researchers adapted from grade V elementary school textbooks, published by Yudhistira, Open University's Elementary Mathematics Learning Module, and mathematics books related to comparison material.

For introductory science material Fara'id, researchers adapted from the book Islamic Fiqh written by Sulaiman Rasjid, Inheritance Law in Islam written by M. Ali Hasan, Fiqh book for students of Madrasah Tsanawiyah and others related to the science of Fara'id.

c. Guided Exercise.

The guided training questions were taken from the questions in the books mentioned above. Then adjusted to the level of student ability. Guided training helps students understand and apply their knowledge.

d. Exercise.

Difficulty level of practice questions at the level above guided training questions. The difference is only different number variations. Language questions are used language that is easily understood by students.

e. Students are asked to draw conclusions from LKPD entries. So, the conclusion is the result of the construction of students' knowledge with the

hope that LKPD makes students actively work and think.

3.1.2 Results of Validation of Mathematics Learning Devices by Experts

Validation of mathematics learning devices integration of Islamic concepts was carried out by 6 people, each of whom were three people from mathematical education experts and three people from religious experts (fiqh). Each validator provides an assessment, suggestions for aspects of content and constructs validity [10]. The names of validators can be found in Appendix 2. The numbers listed in the tables discussing the validation results indicate the number of validators.

Table 1: RPP Validation Results.

Validator	Expert	Mean	Information
1	4	3.33	Valid with little improvement
2	3.5		
3	3		
4	3.5		
5	3		
6	3		

Table 2: LKPD Validation Results.

Validator	Math Expert	Fiqh Expert	Mean	Information
1	3	3	3.54	Valid with little improvement
2	3	4		
3	4	4		
4	4	3.5		
5	4	4		
6	3	3		
Mean	3.5	3.58		

The results presented in Tables 1 and 2 illustrate that the learning tools (RPP and LKPD) are valid with some improvements. Some corrective notes from the validator include reducing the indicators, as well as the material and number of questions. Besides that, improvements in aspects of language and questions that are too large in mathematics. This is related to the number of indicators with inadequate time provided. Thus, the validator concludes that the learning device can be used with several revisions / improvements.

3.2 Practicality of Learning Devices

After the validation process with the expert is complete, then the revision of the prototype of the mathematics learning device is carried out in accordance with the validator's suggestions. To see the practicality of learning tools, trials were conducted at SD Negeri 002 Sumahilang Pekanbaru VA class. Before the trial was carried out, the researcher and the teacher discussed about the technical implementation of the trial. For the implementation to be more technically clear, the researcher provides a learning tool to the teacher.

Trials of learning tools developed were carried out in three meetings. During the trial acting as a teacher was a math teacher / VA class teacher, while the researcher assisted by one observer was tasked with observing the implementation of learning.

Practical data on the use of learning tools is obtained from observations of the implementation of learning and interviews with teachers. The results of the practicality obtained, the researcher described as follows:

1. Results of Observation of Learning Implementation
   Observation of the implementation of learning is focused on seeing whether learning is carried out in accordance with the RPP that is designed and seeing if there are obstacles in its implementation. Observations were carried out by 2 observers. The following is a description of the results of observations of the implementation of learning with the use of developed Learning Tools.
   a. RPP I
      RPP I was carried out according to plan. The planned time is two meetings, this is because for one meeting time is not enough. This are found in several questions that were not discussed such as questions number 3, 4, and 5 of the subjects. Means that the discussion of subject and questions that can be discussed at this meeting is 80%. The teacher asks students to discuss questions that have not been discussed with other student pairs outside of learning and continue to fill in the LKPD at home.
   b. RPP II
      RPP II is quite implemented according to plan. The drawback is that there are no students who answer the initial question, because students do not read the summary of the material. As a result, the time needed to carry out the initial question exceeds the planned time which is ± 15 minutes. Because the planned time is not enough so that the question discussed is only 65%.
   c. RPP III
      The learning carried out is in accordance with the learning activities planned in the

RPP. But the discussion is only on guided training. Training questions cannot be done by students. Material discussion is only about 75%.

2. Results of Interviews with Teachers Regarding the Practicality of Learning Tools developed.
Interviews are conducted after the end of the learning process. From the results of interviews with researchers and teachers, it can be concluded that the use of RPP and LKPD can be used properly without significant constraints. Although many students asked about filling in LKPD, what was asked was a place of filling that was not enough for writing answers. This is because elementary students tend to write with a relatively larger font size than usual. In addition, the teacher also stated that the use of time was relatively less. Because the process of introducing mathematical calculations takes a lot of time. So that the delivery of religious material uses only a little time. The following is a summary of the results of the interview:

Teacher: LKPD guidelines are clearly designed as seen from the instructions in the process.

Teacher: Students ask about filling out LKPD, even though the steps are clear and if students try it themselves, students get more understanding in solving the problem, but the place of filling is relatively less for them. Students tend to write in large letters from the standard.

According to the teacher the questions that exist in LKPD vary, there are easy and difficult problems. As a result, not all questions can be solved by students.

The results of the interview are as follows:

Teacher: On average the problem is being, Problem is difficult to be in the material applying a comparison in determining inheritance.

Easy questions on guided training.

Teacher: Not all questions can be answered by students. Questions that can be answered are questions on guided training

The time needed to fill the LKPD varies and depends on the learning conditions at that time, as shown in the following interview results:

Teacher: for smart students ± ½ hours, while weak students can spend ± 1 hour but gradually and there are still problems that are not done because they cannot.

Related to the results above, based on the results of interviews with researchers with classroom teachers, it was concluded that in the learning process the classroom teacher himself admitted that he did not give emphasis on his religious material. Teachers tend to spend a lot of time teaching the calculation process (mathematics). The teacher stated that achieving mathematics learning goals was more time consuming, so the target of learning his religion was not optimal. The teacher also stated that there was a dilemma in learning like this. The teacher is faced with religious abilities as well as mathematical abilities. This is difficult, especially irrelevant education. In addition, it is dilemma on the target of achieving the mathematics curriculum. He said that for this integration, it should only be limited to the introduction of Fara'id Science concept, not the advanced material, since the students find it difficult to memorize all at the same time, consequently it is less effective for the achievement of learning completeness. In addition, he suggested that for the future implementation it would take a longer time for the teacher to first understand the religious material before practicing it in the classroom teaching.

3.3 Effectiveness of Learning Devices

The effectiveness of this mathematics learning tool for integration of Islamic concepts is only done on the results of learning mathematics and religion of students. The effectiveness stage is carried out by giving evaluations / daily tests to students. Questions are made consisting of religious and mathematical material.

To find out the effectiveness of the use of learning devices, it is carried out tests on the results of learning mathematics and religion (Fara'id science). Tests are given in the form of written tests with structured essay questions. In addition, interviews with teachers were also conducted.

Based on the results of the mathematics learning outcomes test, the data above shows that 24 students from 32 students obtained completeness. This means 75% of students achieve completeness in learning mathematics. But for religious learning does not reach completeness. Individual completeness criteria for learning mathematics and religion are 75. Based on the results of Fara'id's learning outcomes test, obtained data that 7 students from 32 students obtained completeness. Precisely only 0.21% of

students who attained completeness for religious learning (Fara'id science).

Data of student learning completeness in the division and science fara'id material can be found in the following diagram.

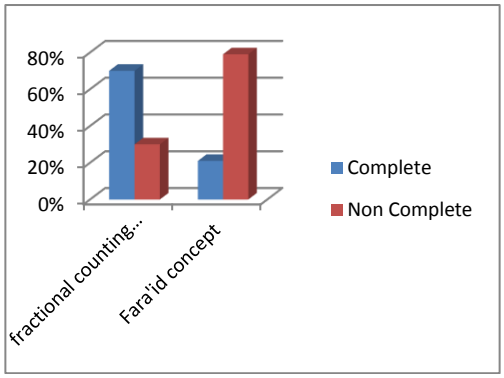

Diagram 1: Data of student learning completeness in the material division and science of fara'id.

From a further search, it can be summarized that many students cannot answer questions about the urgency of fara'id science material to develop. Students are also unable to remember well about the meaning, division of heirs, especially on the rules for the distribution of inheritance. It seems like many students are not interested in the material. But for the mathematical calculation process, students are far more capable. Complete students are students who have high abilities.

4 DISCUSSIONS

The description of the results of the validation above shows that the mathematical learning tools of the integration of Islamic concepts are valid. By making improvements according to the advice of the validator. Mathematical learning device integration of Islamic concepts is quite valid, meaning that the device is quite capable of measuring what should be measured.

Based on the results of observations of the implementation of learning with the tools of mathematics learning the integration of Islamic concepts and the results of interviews with teachers, the researchers concluded that the tools of learning mathematics and the integration of Islamic concepts are practical. In general, the obstacles faced by teachers are insufficient time to discuss guided training. The following is explained about the practicality of the mathematics learning device for the integration of Islamic concepts in the trial class.

A. Results of observations of the implementation of learning

Observation sheet to see the practicality of the implementation of learning with the tools of mathematics learning the integration of Islamic concepts is provided for each lesson plan. The focus of observation is only on the implementation of the RPP by the teacher, whether it is in accordance with the drafted RPP, and also on the constraints encountered during the implementation.

The following is a discussion of the results of observations for each RPP, namely:

1. RPP I

   The teacher has implemented the RPP in accordance with the draft RPP. The teacher has done the task of conveying the learning objectives and motivating students. The teacher also asks questions and asks students to think about them. Then students share with their partners and classmates. Because time is insufficient, there are still questions that were not discussed. Students are still constrained in filling in question number 2, because there are still many differences of opinion during the presentation in front of the class. At the end of learning, students are asked to make conclusions.
2. RPP II

   The implementation of RPP II is in accordance with the plan. When the teacher asks a question, no student answers the question. This is because students do not read the summary of the material. Students who appear are students who have appeared in previous meetings. At this meeting only, a part of the questions can be discussed. At the end of the study there were several students who delivered their conclusions.
3. RPP III

   RPP III has been done well. Firstly, given the opportunity for students to exchange opinions with their friends to fill the guiding exercises. The question of training was not done by students. Therefore, filling in LKS is continued at home.

B. Results of interviews with teachers regarding the practicality of Learning Tools

Based on the results of the interview between the researcher and the teacher about the practicality of the mathematics learning device, the integration of Islamic concepts was obtained as follows:

1. Students understand that by filling in the mathematics learning tool for integration of Islamic concepts because the instructions and steps given to LKPD are quite clear.
2. Mathematics learning tools integration of Islamic concepts helps students in understanding learning material.
3. The time provided for students to work on LKPD is still lacking, in the end LKPD is done at home.

The constraints faced by students when working on learning devices are:

1. Students have difficulty working on questions in the form of applications.
2. Even though the time provided is sufficient but there are still questions that cannot be done by students, namely the high level of difficulty. After discussing with his partner and sharing with classmates, the problem still cannot be resolved.
3. The ability of teachers for religious materials is very lacking, because their knowledge is different, so that when teaching the teacher is also less emphasis on religious material.

C. Effectiveness of Learning Devices

Product quality / educational development results can be determined based on the validity of practicality and effectiveness. Effectiveness can implement if the product is valid and practical. The effectiveness of the mathematics learning tool for the integration of Islamic concepts is seen from the results of students' mathematics and religion learning tests.

Based on the test results after learning shows that the device of learning mathematics integration of Islamic concepts only provides good effectiveness on the achievement of mathematics learning. The completeness of classical learning is achieved with the KKM 75 and 75% of students complete.

Based on the test results after learning shows that the device of learning mathematics integration of Islamic concepts is not able to provide good effectiveness on the achievement of religious learning, especially the material of Fara'id science. Classical learning completeness is not achieved with 75 KKM and only 21% of students complete.

Thus, the results of this research add to the wealth of research on Islamic integration through the development of mathematics learning tools. The results of this research also support related research results such as Suparni's Study entitled National Character Development (2012). Through Integrating Islamic Values in Learning Mathematics, and Mahfuzoh (2011) in the title of his research the influence of Integration of Islam and Science on Mathematics, both recommended the importance of planting Islamic values in mathematics learning. Suparni (2012) conducted a case study in learning mathematics integrated Islamic education, while sitimahfuzoh was a literature study that recommended that further studies need to look for mathematical relations in the Qur'an. Besides this study by Abdussakir (2009) entitled The Importance of Mathematics in Islamic thought. In his study, it was stated that mathematics and Islamic science have a very close connection. To learn and understand the Islamic knowledge contained in the Qur'an, mathematics is needed.

5 CONCLUSIONS

Mathematics learning devices integration of Islamic concepts developed for elementary school fifth grade mathematics learning include: comparisons and Fara'id science. Based on the results of data analysis that has been done can be concluded as follows: 1) that the mathematics learning device developed is valid; 2) The results of the trials conducted show that the use of practical learning devices; 3) the mathematics learning tools that are developed effectively for the results of learning mathematics, but not for the Fara'id science material.

Mathematics learning device integration of Islamic concepts is carried out in the learning process. So, the use of time is not efficient in filling out LKPD by students. Others who want to use this learning tool are advised to ask students to study at home first. For the future usage, it needs a technical guidance that can be implemented and if it is necessary to conduct some trainings in the development of integrated Islamic learning tools.

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REFERENCES

Abdussakir, 2009. Pentingnya Matematika dalam Pemikiran Islam. *Seminar Internasional "The Role of Sciences and Technology in Islamic Civilization" di UIN Malang*.

Akker, J. V., 1999. *Design Approaches and Tools in Education and Training*. Dordrecht: Kluwer Academic Publishers

Akker, Jan Van Den and Plomp, Tjeerd, 1994. *Educational Development in Developing Countries*. In Skutsch, Margaret M., Opdam, J. Hans M. and Nordholt, Nico G. Schulte (Eds.), *Towards Sustainable Development*. Enschede: Technology and Development Group University of Twente. p. 462.

Amir MZ, Zubaidah, 20013. Integrasi Nilai Pendidikan Islam dalam Pendidikan Umum Sebagai Revitalisai Pendidikan Islam. *Jurnal Potensia*, June Edition.

Hussain, Liya K. Asy-Syaimaa', 2017. Contributions of Islamic Civilization to the Mathematics Development. *Jurnal Ilmiah Agama dan Sosial Budaya* 2, 2, December: pp. 199-208

Ikhwan**,** Afiful, 2014. Integrasi Pendidikan Islam (Nilai-Nilai Islami dalam Pembelajaran). Ta'allum. *Jurnal Pendidikan Islam*. Vol.2. No. 2.

Juhdi, K. I. & Nursuprianah, I. & Misri, Muhamad Ali, 2017. Hubungan Pemahaman Konsep Pecahan dan Aturan Radd dalam Ilmu Faraid terhadap Kemampuan Siswa dalam Menyelesaikan Masalah Pembagian Harta Warisan. *Journal for Islamic Social Sciences IAIN Syekh Nurjati Cirebon.* Volume 2, Nomor 1, 2017. pp. 28-44.

Mahfuzoh, Siti, 2011. Pengaruh Integrasi Islam Dan Sains Terhadap Matematika. *Proseding Seminar Nasional Matematika dan Pendidikan Matematika Yogyakarta*, 3 Desember 2011, ISBN: 978 – 979 – 16353 – 6 – 3, p. 38.

Muniri, 2016. Peranan Matematika dalam Konteks Fiqih. *Prosiding seminar nasional pendidikan matematika Institut Agama Islam Negeri Tulungagung*, 15 Oktober 2016.

Noordin, Noraini & Shuib, Adibah & Zainol, M.S., & Adil, Mohamed Azam Mohamed, 2013. Delay in Islamic Inheritance Claim – An Ignorance Issue. *Noraini Noordin et al. / Procedia - Social and Behavioral Sciences* 90 2013, pp. 504 – 512.

Puadi, Evan F.W., 2017. Kajian Matematika Islam (tinjauan konsep aritmatika al-Uqlidisi). *Jurnal Matematika Ilmiah STKIP Muhammadiyah Kuningan* Vol. 3 No.1 Mei 2017.

Rasjid, Sulaiman, 2007. *Fiqh Islam.* Bandung: Sinar Buku Algerindo.

Sekretaris Negara. 2003. *UU Sistem Pendidikan Nasional RI No. 20 tahun 2003 pasal 339*. Jakarta

Siregar, Imran. 2011. *Pendidikan Agama Terpadu: Studi Kasus SMU Kraksaan Probolinggo Jawa Timur*. Balai Litbang Agama, 76, Jakarta.

Smith, Julian A., 2008. Arithmetic in Islamic Mathematics. *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, 240–242. *Dordrecht: Springer Netherlands, 2008, doi: 10.1007/978-1-4020-4425-0_8445.*

Sugiyono, 2007. *Metode Penelitian Pendidikan; Pendekatan Kuantitatif, Kualitatif, dan R&D.* Bandung. Alfabeta.

Suparni, 2012. Pengembangan Karakter Bangsa Melalui Integrasi Nilai Keislaman Dalam Pembelajaran Matematika. *Prosiding Seminar Nasional Penelitian, Pendidikan, Dan Penerapan MIPA, Fakultas MIPA, Universitas Negeri Yogyakarta, 2 Juni 2012.*