

Learning Mathematics based on Islamic Values as an Alternative to Fun Learning

Pembelajaran Matematika berbasis Nilai-Nilai Islam sebagai Alternatif Pembelajaran Menyenangkan

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Abstract. *Mathematics has an essential role in real life. So the inculcation of mathematical concepts in teaching and learning activities is vital. However, most students in schools need help learning and understanding existing ideas. Therefore, every educator must become a facilitator in every teaching and learning activity by using various learning media that interested student. Apart from that, mathematics can also be integrated with Islamic values so that students can sort out right and wrong Islamic norms. So that learning mathematics based on Islamic values can be carried out in a fun way by involving all the senses possessed by students. This research was carried out using the SLR (Systematic Literature Review) method, which aims to identify, evaluate and interpret research relevant to formulating the problem in a given study. This research stage adopts the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) method. This research procedure has four steps: identification, screening, eligibility, and inclusion. The literature in this study comes from various journals, Google Scholar, Lens, SINTA, and DOAJ. Based on the results of the analysis, it shows that only 6 out of 20 journals apply fun Islamic values-based Mathematics learning.*

Keywords – mathematics; islamics values; joyfull learning

Abstrak. *Matematika memiliki peran penting di kehidupan nyata. Sehingga penanaman konsep matematika dalam kegiatan belajar mengajar menjadi penting. Akan tetapi mayoritas peserta didik di sekolah sulit untuk mempelajari dan memahami konsep yang ada. Maka dari itu kewajiban setiap pendidik adalah menjadi fasilitator dalam setiap kegiatan belajar mengajar dengan menggunakan berbagai media pembelajaran yang membuat peserta didik tertarik. Selain itu matematika juga dapat diintegrasikan dengan nilai – nilai islam agar peserta didik juga mampu memilah norma – norma Islam yang benar dan yang salah. Sehingga pembelajaran matematika berbasis nilai – nilai Islam dapat dilaksanakan secara menyenangkan dengan cara melibatkan seluruh indera yang dimiliki oleh peserta didik. Penelitian ini dilaksanakan dengan metode SLR (Systematic Literature Review) yang bertujuan untuk mengidentifikasi, mengevaluasi dan interpretasi penelitian yang relevan terhadap rumusan masalah pada suatu penelitian yang ditetapkan. Prosedur penelitian ini memiliki 4 tahapan yang terdiri dari identification, Screening, eligibility, dan inclusion. Literatur dalam penelitian ini berasal dari berbagai jurnal yang bersumber dari Google Scholar, Lens, SINTA, dan DOAJ. Berdasarkan hasil analisisnya menunjukkan bahwa hanya 6 dari 20 jurnal menerapkan pembelajaran Matematika berbasis nilai-nilai Islam yang menyenangkan.*

Kata Kunci - pembelajaran Matematika; Matematika berbasis Islam; pembelajaran menyenangkan

I. INTRODUCTION

Most students at school consider mathematics a complex subject to learn and understand.[1][2][3][4][5][6][7][8] Mathematics is a subject in which there are interrelated concepts. The interrelationships between these concepts make the concepts that have been known as initial knowledge for learning other concepts.[9] This makes mathematics the first lesson that is less attractive to students.[3][10][11] Based on the existing material, mathematics has a fundamental role in everyday life, so efforts need to be made to increase student interest and the quality of teaching and learning activities in learning mathematics.[12]

Innovation in the world of education must be carried out as a whole because all elements in education have an essential role in the education system's success.[13] An educator not only transfers knowledge but also manages students during the teaching and learning process.[14] Educators also act as facilitators who provide material to learning media that will affect students' comfort in the teaching and learning process.[2][7][15][16] Educators who can provide exciting and fun mathematics learning with various methods, approaches, and teaching media are expected to make it easier for students to learn mathematics. [1][17]

All elements of educational institutions, especially educators, are not only expected to produce graduates who have intellectual intelligence but also spiritual intelligence. [4][6][8][18][19] [20] The process of instilling religious values

will be achieved if all elements in the school can make habituation, especially educators.[21][22] The primary foundation for integrating religious values in education is the 1945 Constitution article 31, paragraph 3. The 1945 Constitution of the Republic of Indonesia article 31, paragraph 3 states, "The government seeks and organizes a national education system, which increases faith and piety and morals noble to educate the life of the nation, which is regulated by law." This indicates that the goal of education in Indonesia is not only intellectual intelligence but also to form religious human beings. [4] [19] [23] [24][25]

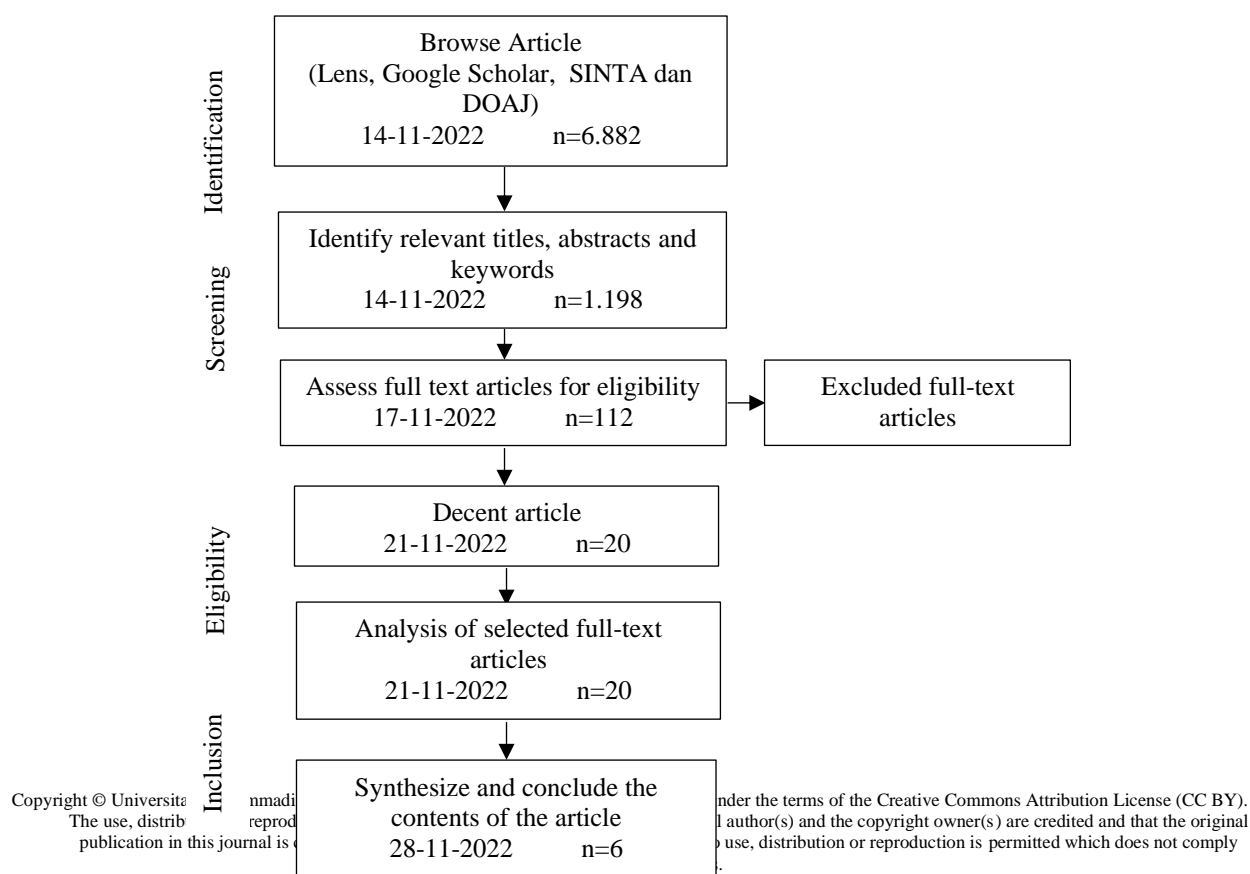
Mathematics should be integrated with Islamic values in learning. This integration can be in the form of questions or learning media without changing mathematics learning outcomes. [6] Mathematics is essential because it can help children's ability to think logically to sort out right and wrong Islamic norms. [4][26][27] The first Islamic value-based mathematics learning indicator is the existence of an honest or Siddiq attitude. Being honest in this case is that students cannot blame a theorem or definition that has been proven correct to reach the answer to the desired calculation. [4] Furthermore, the Islamic value in learning Mathematics is the attitude of istiqomah. Mathematics is based on consistency and systematics in solving every problem. [27] The following Islamic value in learning Mathematics is self-confidence. Students are required to be confident when solving problems so that they do not need to look for the truth of answers from other friends. [4] However, inculcating Islamic values in learning mathematics is more difficult because mathematics only deals with numbers, axioms, definitions, theorems, and formulas. [4][28]

Learning mathematics that is carried out in a fun way can improve student learning outcomes and interest. [2][12] Fun learning is an atmosphere in the teaching and learning process that is fun so that students will focus their attention as a whole to improve student learning outcomes. [10] Indicators of fun learning include a calm learning environment, learning material relevant to child development, learning emotionally so that students are more active and enthusiastic, involving all the five senses and the right and left brain, and challenging students to express what is being learned. [10][29]

Based on the indicators described above, an indicator of enjoyable Islamic values-based Mathematics learning is the application of an honest attitude, istiqomah attitude, and students' self-confidence. In addition, in the learning process, the class must be calm and not stressed, students use their limbs to the maximum, and students become more active in class.

II. METHOD

This study uses the SLR (Systematic Literature Review) method to identify, evaluate and interpret research relevant to formulating the problem in a given study. [30] This research stage adopts the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) method. This research procedure has four steps: identification, screening, eligibility, and inclusion. [31] The literature in this study comes from various journals, Google Scholar, Lens, SINTA, and DOAJ.



At the identification stage, the researcher collected articles with the keywords integration of Mathematics and Islam (816 articles), Islamic-based mathematics learning (392 pieces), and fun mathematics learning (5,614 articles). Keyword-relevant articles published from 2020 to 2022 totaled 1,198 articles. What identified one hundred twelve articles based on title, abstract, keywords, and topic relevance at the screening and feasibility stage. In the next step, all articles that meet the requirements are analyzed to conclude. The researcher chose 20 articles related to the keywords used. In the final stage, the researcher categorized articles associated with integrating Mathematics and Islam, Islamic-based Mathematics learning, and fun Mathematics learning.

III. RESULTS AND DISCUSSION

Learning Mathematics delivered by the teacher can shape students' Islamic character through Islamic values inserted when giving material. The integration between mathematics and Islamic values is expected to make students more religious through mathematics.[8] This integration will balance the intellectual and spiritual skills of students. [4][8] Learning integrated with Islamic values will be more meaningful for students if the learning atmosphere is fun.

Articles	Indicator					
	<i>Siddiq</i>	Istiqomah	Self Confident	Relaxed Atmosphere	Utilizing Body Members	Active Students During Learning
[1]				✓	✓	✓
[2]			✓	✓	✓	✓
[4]	✓		✓	✓	✓	
[5]				✓	✓	✓
[6]	✓	✓				✓
[7]				✓	✓	✓
[8]	✓				✓	
[9]				✓	✓	✓
[10]				✓	✓	✓
[11]	✓				✓	✓
[12]				✓	✓	✓
[16]	✓		✓		✓	✓
[17]				✓	✓	
[18]	✓					
[19]				✓	✓	
[22]				✓	✓	✓
[24]				✓	✓	✓
[26]		✓				
[27]	✓	✓				
[29]				✓	✓	✓

Based on 20 kinds of articles that were used as literature, it found that 35% of Mathematics learning taught honesty. The honest attitude in the seven journals is that students cannot blame a theorem or definition that has been proven correct to reach the answer to the desired calculation. [4] In Mathematics, proof is needed when a theorem is said to be accurate, which is in line with the siddiq or real nature. [18] In addition to being honest, 15% of the articles show that Islamic-based Mathematics learning includes an attitude of istiqomah. Mathematics is based on consistency and systematics in solving every problem. The concept of conjunctions in mathematical logic also aligns with the istiqomah principle stated in Surah Al Bayyinah verse 5, so we are always istiqomah in carrying out God's commands. [27] Then, 15% of the articles show that Islamic-based Mathematics learning contains self-confidence. Confidence will encourage students to believe in the truth of their answers, so they will not see other friends' responses when working on questions. [8]

Among the 20 types of journals, only 30% of Islamic-based Mathematics learning is enjoyable, while 70% of applied Mathematics learning needs to meet the indicators of enjoyable learning.

IV. CONCLUSION

Based on an article search conducted by researchers, during the last three years, from 2020 to 2022, 20 journals discussed learning Mathematics based on Islamic values. Among the 20 journals that have read the complete text, it shows that 35% of Mathematics learning teaches honesty, 15% istiqomah, and 15% self-confidence. Then overall, out of 20 journals, only 30% implement fun Islamic values-based Mathematics learning. At the same time, the other 70% still need to implement fun Islamic values-based Mathematics learning.

Based on 6 out of 20 journals that discuss Islamic values-based mathematics learning, educators use learning tools such as syllabi, lesson plans, worksheets, modules and e-modules, and MathMagic cards. In addition to using learning tools, educators must create calm and relaxed classroom conditions; students have an active role and maximize the function of all their five senses during teaching and learning activities.

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Conflict of Interest Statement:

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.