

DEVELOPING QUR'AN-BASED MATHEMATICS TEACHING MATERIALS FOR 21ST-CENTURY LEARNING

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ABSTRACT

This study aims to develop Qur'an-based teaching materials for teaching lines in Grade 4 for 21st-century learning. This research is a research and development (R&D) research using the ADDIE model, involving the stages of analysis, design, development, implementation, and evaluation. The subjects in this study were 4th-grade students in Bekasi, Indonesia. The data were analyzed descriptively, and percentages were used to represent the results. The results showed that 1) validation of material experts indicated 77% with valid criteria, 2) validation of linguists reporting 87.5% with very valid criteria, and 3) validation of media experts resulting in 83% with very valid criteria. The assessment of students' responses revealed that a one-to-one trial with five subjects each showed an average of 95% with high criteria. Based on the results of this assessment, the Qur'an-based mathematics teaching materials for the topic of lines aligning to 21st-century learning are valid or suitable for use.

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INTRODUCTION

The scientific view of Islam believes that the Qur'an, the miracle of Prophet Muhammad PBUH from Allah SWT (the most glorious, the exalted), is the primary source and reference for knowledge. Students should integrate the values of the Qur'an in every lesson because the Qur'an does not only contain procedures for carrying out worship but rather contains relationships between people. Qur'an regulates the relationship between humans and how to study, such as the learning process, including mathematics. It can be seen that the Qur'an consists of verbal language and numerical language, the language of sounds and numbers representing the language of numbers. Furthermore, Fathani said what children and adults do when learning to read and study the Qur'an is related to the presence of numbers, such as through emphasis or experience (Mauluddiana, 2015).

It can be concluded that developing mathematical skills can be achieved through the contents of the Qur'an. This is because the Qur'an develops not only cognitive but also practical. Like P21 or 21st-Century Learning is a teaching and learning activity that directs to improve life skills applied in 4C: Critical Thinking, Communication, Collaboration, and Creativity. Schools are challenged to formulate methods of directing students to achieve success by understanding and mastering critical thinking skills, communicating, collaborating, and being creative, which is contained in the Qur'an. Based on observations, there have been those who have developed Qur'an-based teaching materials associated with Elementary School mathematics, namely developing Qur'an-based mathematics teaching materials in elementary schools (Kenedi et al., 2018). However, these teaching materials are not associated with 21st-Century Learning (P21).

According to Russeffendi (Rahmah, 2018), mathematics originates from Latin, namely mathematics, originally through Greek: mathematike means learning. The saying comes from mathema, namely knowledge or science (knowledge, science). The word mathematics relates to words similar to mathein or mathenein (think). Thus, mathematics means knowledge obtained through reasoning (thinking). Kline (in ZULHANI, 2018) explained that mathematics is a language of symbols that attempt to think inductively and deductively. Just like Kline, John, Myklebust, and Lerner (Ana, 2019), explained that mathematics is a sign language that allows humans to think, take notes, and communicate ideas about elements and quantities. In another sense, Mustafa in Wijayanti (Nuraini, 2015) said mathematics is the science of

quantity, arrangement, shape, and size. The main thing is procedures and stages to consistently find the right and slow concept related to size and size—amount through abstract. Based on the above understanding, Jihad in Prastiwi (Rusli et al., 2018) identified if mathematics differs from subjects in various matters consisting of abstract discussion objects, the discussion relies on reasoning, includes calculation, and can be used every day or for other knowledge.

The Qur'an and mathematics are inseparable from people's daily life. Islamic education experts have the same opinion regarding the basic concept of Islamic education, leading to monotheism. H.M. Quraish Shihab (Rosyita, 2019) argued that Allah's miraculous words were revealed to the Prophet Muhammad SAW through the Angel Jibril using the pronunciation and meaning from Allah SWT, which are mutually recited. Reading it is an act of worship; Qur'an starts with Surah Al-Fatihah and ends with Surah An-Naas. One of the verses in the Qur'an mentions mathematical concepts, namely Surah An-Nisa Verses 11 to 12, stating the share of assets for heirs, including fractions: $1/2$, $1/3$, $2/3$, etc. This surah represents the concept of fractions in daily activities, indicating mathematics, and the Qur'an is inseparable.

In addition, the researchers observed that Indonesia has many Islamic Integrated Elementary Schools (SDIT). However, no Quran-based mathematics teaching materials, such as for 21st-century learning, are available. Teaching materials are everything related to the structured preparation of material so that students are active in learning and are relevant to the curriculum (GONDORINI, 2017). Furthermore, according to the explanation of the National Center for Vocational Education Research Ltd / National Center for Competency Training (Malalina & Kesumawati, 2014), there are two definitions. First, teaching materials are the media, information, and text the teacher/instructor needs to plan and examine learning. Second, teaching materials are a variety of materials used as aids for teaching staff/instructors during teaching and learning activities in the classroom for the material, such as written or unwritten material.

Teaching materials are systematically developed through various learning sources to contain certain elements. Prastowo's explanation (Zam-Zam, 2016) revealed that six parts are closely related to elements. However, the authors cite only four: learning instructions, competencies to be achieved, supporting information, and training. Teaching materials are grouped based into types based on several aspects distinguishing them. Prastowo (Ramadani,

2016) stated that classifies teaching materials based on form, work systematics, nature, and substance (material content).

Researchers' teaching materials should be adjusted to the National Education Standards Agency or commonly abbreviated as BSNP. The standards BSNP has determined are contained in Government Regulation No 32 of 2013, article 43, paragraph 5, which regulates the standard of text lessons. In this case, especially the development of books must follow the standards of language, acceptable content, and graphics modified according to individual needs. The experts cover the material (content), language, media (graphic) feasibility standards, and the bloom taxonomic feasibility aspects according to BNSP (Shahidayanti, 2012)

Previous research was conducted by Nursupiamin (2018) on graph theory and the Quran. Tiara et al. (2019) also developed Qur'an-based materials for junior high schools. Rahmadi & Agnes (2016) developed teaching materials on Islamic education. On the other hand, BR Karo (2018) showed the influence of Quranic Mathematics Interconnection on Mathematics Learning Outcomes at the junior high school level. Kenedi et al. (2018) developed teaching materials using Quranic verses before starting the material with a minimalist word display. However, no teaching materials integrate the Qur'an for 21st-century skills has been developed. Thus, this study aims to develop teaching materials and determine the validity of Qur'an-based mathematics teaching materials, which align with 21st-century skills in Grade 4 for the topic of line.

METHOD

This study is development research to produce a product of Quran-based teaching materials aligning with 21st-Century skills in mathematics. Research and development is an analytical procedure to produce a product and to test the product's effectiveness. To produce a product uses research that needs analysis while testing the effectiveness of the product so that it functions for society requires research to test the effectiveness of the product (Sugiyono, 2015). This study uses a development model, ADDIE, as a learning system design model. ADDIE looks at the fundamental processes in designing a learning system that is simple and easy to understand. This model consists of five main stages: (a) analysis, (d) design, (d) development, (i) implementation, and (e) valuation, which are shown in the following chart.

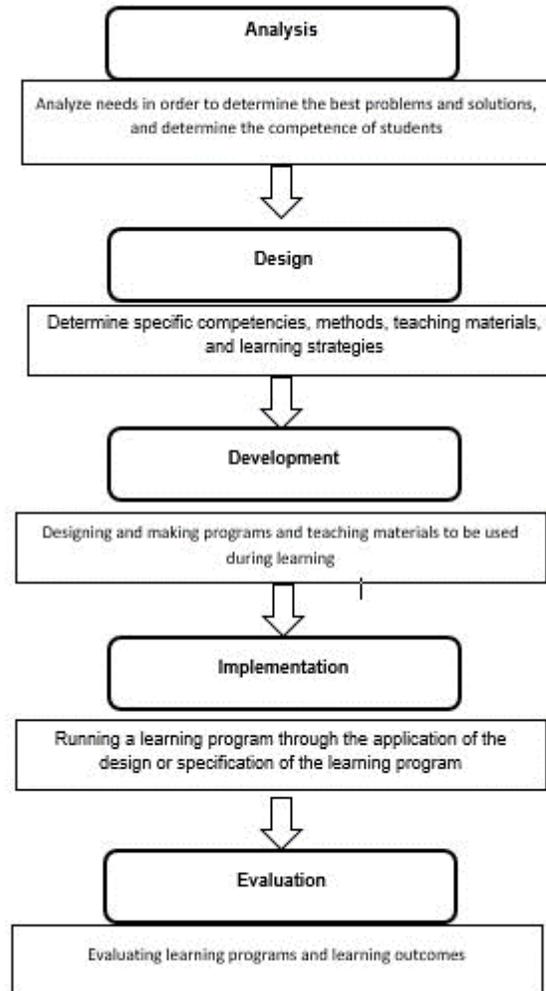


Figure 1. Development model of ADDIE (Cahyadi, 2019)

The following is the research and development stage based on the ADDIE development model, consisting of analysis, design, development, implementation, and evaluation. This analysis aims to explain in detail the program or design. In this process, the researchers examine matters related to the development of teaching materials, consisting of curriculum analysis, needs analysis, and analysis of teaching material development. After going through the analysis process, we designed mathematics teaching materials based on the Qur'an in line with 21st-century learning. The stage to be carried out during the preparation of teaching materials consists of formulating learning objectives, compiling a map of teaching material needs, and designing printed media for teaching materials.

In the development stage, two important objectives must be achieved. It consists of

producing and revising the teaching materials to achieve the goals according to the formulation set. It also selected the media or combination of media to obtain learning objectives through several activities, such as design development, material development, product validation, and revision. At the analysis stage, the curriculum analysis was conducted, considering students' needs, psychological aspects, and characteristics of students. The analysis of teaching material development based on a literature review was also undertaken. At the design stage, researchers formulated teaching materials according to learning objectives, material preparation, question exercises, feedback, and design of assessment instruments, as well as print media designs of teaching materials (fonts, sizes, images, and illustrations). The implementation stage is where the researchers give the product developed to students. The teaching material products are trialed for fourth-grade students. Researchers also used a response questionnaire to determine student responses, which were modified into one-to-one trials. The evaluation will be adjusted to the validation test and implementation, the first stage after validation. Next, an evaluation was done by the material, language, and media experts. The second stage evaluated the teaching materials on student responses to the one-to-one trial. The final stage of the evaluation is to produce a Qur'an mathematics teaching material suitable for 21st-century learning.

In this research, the researcher used a subject in the form of a formative evaluation covering four processes: expert review, one-to-one evaluation, small group, and field test.

RESULT AND DISCUSSION

This research was not conducted in schools because of the COVID-19 pandemic. Thus, the researchers conducted a small group user test. The field test required more students and classrooms, so the researchers conducted a one-to-one trial on five fourth-grade students around the area where the researchers lived. Based on research on the development of Qur'an-based mathematics teaching materials aligning with 21st-century for Grade 4, the development and research results from the analysis, design, development, implementation, and evaluation stages are as follows.

Analysis

The analysis carried out by analyzing the needs, curriculum, and the results of the reviewed journals, interviews, and observation show the need for mathematics teaching materials to help students develop cognitive and affective skills and form a good character or

akhlakul karimah. The current curriculum used is 2013's Curriculum or K13. The mathematics syllabus of Grade 4 includes the topic of lines in semester 2. The objectives are that students can know, understand, and implement problems involving lines (parallel, intersecting, and coinciding lines). Schools are also challenged to find ways to engage students to succeed in life by mastering critical thinking skills, communication, collaboration, and creativity, and they are contained in the Qur'an.

Design

Based on the analysis results, the book was chosen to be developed in this study. This book contains a set of materials, learning instructions, competencies to be achieved, supporting information, and exercises arranged attractively to support students in the learning process at school and home. The researchers started the material with learning objectives or basic competencies and the core that students must achieve, including *iman* and *taqwa* or faith and piety. This book also contains Quranic verses related to line materials. In addition, there are colorful pictures related to the material to eliminate student boredom in reading and understanding it. These images are related to the material contained in the verses of the Qur'an and everyday life. Understanding material requires practice questions. Besides the material, this book also contains practice questions.

Development

The main materials were developed shortly and concisely refer to the formulation of core and basic competencies that students must achieve. Based on the analysis of core and basic competencies, there are two main subjects, as follows.

Table 1. Explanation of the main materials in the book

Subject	Description
Line	Andi drew a collection of points with a very far distance between the two points. He drew again with the same dots but not too far away. Likewise, the distance between the points gets closer with the third image. When there is no more distance between the points, it will form a line. It turns out that a straight line is a collection of very many regular and continuous points.
The relationship between the lines	<p>A railroad track is an example of two straight lines with constant distance. Two lines that are equidistant in a plane and never intersect even though the line is extended to infinity are called two parallel lines.</p> <p>A total solar eclipse phenomenon is where the shadow forms two lines intersecting on its axis. Two lines in a plane intersecting at one point are said to be two lines that</p>

Subject	Description
	intersect each other.
	When the clock shows 12:00, the two-hour hands show the same number. Two lines located on a straight line so that they only appear as one line are said to be two lines overlapping each other.

The book design creation and validation process also occurred at this stage. Validation was carried out by the content, linguists, and media experts. Validation was done by filling out a questionnaire and providing grades, criticisms, and suggestions in the assessment column prepared. A mathematics lecturer carried out the material validation to assess the content feasibility. Table 2 displays the results of the material expert's assessment.

Table 2. Result of Assessment by Material Experts

Category	Score	Criteria
Content Feasibility Aspects	50	Valid
Percentage	77%	Valid

Next, the Head of the Indonesian Language Education and Literature Study Program validated the language feasibility aspect. The following are the assessment results (Table 3).

Table 3. Result of Assessment by Linguists

Category	Score	Category
Aspects of Language Eligibility	35	Aspects of Language Eligibility
Percentage	87,5%	Percentage

Meanwhile, the Head of the Elementary School Teacher Education Study Program validated the feasibility aspect of graphics. The evaluation results are displayed in Table 4.

Table 4. Result of Assessment by Media Experts

Category	Score	Criteria
Graphic Feasibility Aspects	50	Valid
Percentage	83%	Strong Valid

Implementation

After the product was validated by experts and was feasible to be tested, due to the limited circumstances of the Covid-19 pandemic, a one-to-one trial was carried out on five Grade 4 students around the researcher's area. The trial was conducted to determine students' responses to the developed product. Based on the student response questionnaire results in the one-to-one trial, teaching materials got an average score of 95% (high).

Evaluation

In the evaluation stage, the researchers evaluated the initial stage to the final stage of the research. This stage paid more attention to the use of different words in groups and sequences in mathematics and followed the General Guidelines for Indonesian Spelling (PUEBI), improved image layout and color composition, and adjusted illustrations with the content.

The following is the final result of the development of Qur'an-based mathematics teaching materials for the 21st century on the topic of lines in Grade 4.

Table 5. Final Results of Teaching Materials

Pictures of teaching materials

The images show the following pages:

- Cover:** Titled "Garis Matematika Kelas 4", featuring illustrations of children and geometric shapes.
- Page i (Foreword):** Titled "Kata Pengantar", containing an opening prayer and a preface by the author.
- Page ii (Introduction):** Titled "Tentang Buku Pembelajaran Garis Matematika Kelas 4", listing six points about the book's features and purpose.
- Page iii (Table of contents):** Titled "Daftar Isi", listing the book's structure including the foreword, introduction, and chapters on lines.
- Page 1 (Objective):** Titled "Mari Kita...", listing four learning objectives (Mengamati, Bertanya, Menalar, Mencoba) with corresponding illustrations.
- Page 2 (Concept maps):** Titled "Peta Konsep", showing a hierarchical diagram of line types (Garis) and their applications (Bangun yang menggunakan garis sejajar, berpotongan dan berhimpitan).

Pictures of teaching materials

Yuk Mengaji

قَامِرٌ عَلَىٰ مَائِقَةٍ وَسَبَّحَ بِحَمْدِ رَبِّهِ قَبْلَ طُلُوعِ الشَّمْسِ وَقَبْلَ الْغُرُوبِ ۚ وَمِنَ اللَّيْلِ فَسَبَّحَهُ وَقَبَّلَ الصُّلُوفَ ۚ فَاتَّبَعَتْهُ ذُنُوبُهُ خَلْقًا ۗ إِنَّهَا لَتَوَالِي سِحْرَ الْمَلَائِكَةِ وَالرُّسُلِ ۗ إِنَّهَا لَتَخْلُبُ أَلْبَابَ الْمُبِينِ ۗ

Artinya: "Maka sabalah engkau (Muhammad) atas apa yang mereka katakan, dan bertakabbil dengan mereka (Muhammad) sebelum matahari terbit, dan sebelum terbenam, dan bertakabbil (pukul) pada waktu tengah malam dan di siang yang hari, agar engkau merasa tenang" (QS. Ta-Ha: 130)

Dalam Surat Ta-Ha ayat 130 terdapat perintah untuk melaksanakan sholat sesuai waktu yang ditetapkan. Jika digambarkan, maka waktu sholat tersebut membentuk sebuah silinder dimana pada waktu Fajr (Subuh), Zuhur dan Asr jika ditarik garis akan membentuk tiga garis lurus.

Page 3. Quranic Verses related to Line Material

1. Garis

Ayo Mengamati

Pengamatan
Perhatikan gambar dan bacalah berikut dengan cermat!

Sinta menggambar barisan titik-titik dengan jari antarnya karena sangat jauh. Ia menggambar lagi dengan titik-titik yang sama, tetapi jaraknya tidak terlalu jauh. Kemudian dengan gambar ketiga, jarak antar titikannya semakin dekat. Ternyata, ketika titik-titik lagi jarak antar titikannya akan membentuk garis. Dapatkah kalian menyebutkan pengertian garis?

Page 4. Observation line material

Setelah kamu melakukan pengamatan, tulis hasil pengamatanmu di buku tulis!

Ayo Bertanya

Tetahu Kawan!
Ruas garis atau segmen garis adalah garis yang dibatasi dua titik di kedua ujungnya.
A. Ruas garis AB atau BA
B. Ruas garis AC atau CA

Ayo Menalar
Berikut ini penjelasan lebih rinci dari pengamatan tentang garis
Menurut Andri, garis adalah kumpulan titik-titik yang sangat banyak jika titik-titik tersebut berimpit secara teratur dan beraturan-bangun akan membentuk garis lurus. Beberapa contoh garis lurus dalam kehidupan sehari-hari adalah rel kereta api, sisi buku, sisi meja, dan tali televisi.
Dapatkah kalian membantu untuk menyebutkan benda lain yang berkaitan dengan garis?

Ayo Mencoba

1. Berilah tanda ✓ pada gambar yang mengukap garis lurus dan ✗ yang bukan garis lurus!

Page 5. Questions and understanding of the line material

2. Hubungan Antar Garis

Ayo Mengamati

Pengamatan 1
Perhatikan gambar dan bacalah berikut dengan cermat!

Gambar di atas adalah rel kereta api. Sebuah rel kereta api terlihat seperti garis lurus yang saling berimpitan. Apakah lintasan kereta api tersebut selalu berjarak sama? Bagaimana jika lintasan kereta api tersebut tidak berjarak sama?

2. Berilah nama pada jenis garis tersebut!
a. D ——— C
b. X ——— Y
c. V ——— W
d. V ——— Z

3. Sebutkan 5 contoh benda di sekitarmu yang berbentuk garis lurus!

Page 6. Practice questions on line material and observations 1. The subject of the relationship between lines (parallel lines)

Pengamatan 2
Gerhana Matahari

Perhatikan peristiwa Gerhana Matahari total di atas. Gerhana matahari total terjadi ketika bulan berdekatan bumi dan matahari dalam satu garis lurus. Terdapat dua bayangan dalam proses gerhana, yaitu umbra dan penumbra. Umbra adalah bayang bayang yang sangat gelap (bayang bayang inti). Penumbra adalah bayang-bayang semu. Terlihat dua garis yang saling memotong pada perantara.

Apakah hubungan antara kedua garis tersebut?

Yuk Mengaji

Perhatikan gerhana matahari di atas yang membentuk dua garis saling memotong pada perantara dipisahkan dalam Al-Qur'an:

Artinya: "Matahari dan bulan (beredar) menurut perhitungan" (QS. Al-Rahman: 15)

Yakin keduanya berjalan beriringan menurut perhitungan yang tepat dan tidak menyimpang sedikit pun? Berapa?

Pengamatan 3
Perhatikan gambar jam dinding gambar di samping jam tersebut menunjukkan pukul 12.00. Kedua jarum jam menunjukkan angka yang sama. Jika jarum jam tersebut digambarkan dua buah garis, apakah hubungan kedua garis tersebut?

Tulis ulang bacalah di atas! Gunakan kalimat sendiri, jelaskan setelah kamu melakukan pengamatan, tulis hasil pengamatanmu di buku tulis!

Page 7. Observation 2. The subject of the relationship between lines (intersecting lines), Quranic verses related to intersecting lines, and observation of 3 lines coincide

Ayo Bertanya

Berikut adalah contoh pertanyaan tentang hubungan antar garis.
1. Ada berapa hubungan antar garis?
2. Apa sajakah hubungan antar garis?
Buatlah pertanyaan lainnya.

Ayo Menalar

Berikut ini penjelasan lebih rinci dari bacaan di atas.
Pengamatan 1
Lintasan kereta api merupakan contoh dua garis lurus yang jaraknya selalu tetap.
Jika jaraknya berubah maka kereta api tidak bisa melaluinya. Dua garis yang berjarak sama dalam satu bidang datar dan tidak pernah berpotongan merupakan garis tersebut. Dipanjangkan sampai tak hingga dikatakan dua garis saling sejajar.
Dapatkah kalian menyebutkan contoh lain dari dua garis saling sejajar yang berada di sekitarmu?

Pengamatan 2
Terlihat dua garis yang membentuk dan saling memotong pada perantara. Dua garis dalam satu bidang datar dan berpotongan di salah satu titik dikatakan dua garis saling berpotongan.
Dapatkah kalian menyebutkan benda lain yang saling berpotongan?

Pengamatan 3
Ketika jam menunjukkan pukul 12.00, kalikan akan terlihat dua jarum jam saling menunjukkan angka yang sama. Dua garis yang terletak pada satu garis lurus sehingga hanya

Tetahu Kawan!
Notasi untuk dua garis sejajar adalah \parallel
Notasi untuk dua garis saling berpotongan tegak lurus adalah \perp
Notasi untuk dua garis saling berpotongan m memotong n di titik O
Garis lurus AB atau BA
Garis lurus AC atau CA

Page 8. Questions and understands from observations 1, 2, and 3 (parallel lines, intersecting lines, and intersecting lines).

Terdapat sebagai satu garis dikatakan dua garis saling berimpit.
Dapatkah kalian menyebutkan benda saling berimpit selain dua jarum jam?

Ayo Mencoba

1. Perhatikan gambar bangun datar di atas ini. Berikan nama pada setiap segmen garis bangun datar di bawah ini (sebut garis a, garis b, garis c, garis d dan lain-lain). Temukan segmen garis manakah yang sejajar? Segmen garis-garis manakah yang berpotongan? Manakah segmen garis-garis yang berpotongan tegak lurus? Adakah segmen garis yang berimpit?

2. Buatlah
a. tiga pasang garis yang saling sejajar
b. tiga pasang garis yang saling berpotongan
c. dua pasang garis yang saling tegak lurus
d. dua pasang garis yang saling berimpit

3. Jika tiga rusuk bambu panjangnya 30 cm dan panjang rusuk untuk memegang tangga 120 cm, berapakah panjang bambu yang dibutuhkan Ayah Mali untuk membuat tangga tersebut?

Page 9. Practice questions on line material and observations 2. The subject of the relationship between lines (intersecting lines), Quranic verses related to intersecting lines, and observation of 3 lines coincide

Contoh

Sinta melewati jalan sepanjang 100 m. Setiap 200 m Sinta menjumpai tanaman mawar di sebelah kanan dan kiri jalan. Ada berapa mawar yang dapat dijumpai Sinta sepanjang jalan?

Pemecahan:
Jalan dapat digambarkan sebagai garis yang sejajar. Jalan yang dilewati Sinta adalah 100 m = 10.000 cm, di sisi kanan jalan, bunga mawar yang dijumpai Sinta ada sebanyak $\frac{10.000}{200} = 50$ mawar. Di sisi kiri jalan, $\frac{10.000}{200}$ bunga mawar yang dijumpai Sinta ada sebanyak $\frac{10.000}{200} = 50$ mawar.
Jadi, bunga mawar yang dijumpai Sinta sepanjang 100 m adalah $50 + 50 = 100$ bunga

Page 10. Bibliography and additional resources

Daftar Pustaka

1. Rusliharis, 2019. Matematika Kelas 4 SD Islam Al-Azhar. Jakarta: Yayasan Pustakan Islam Al-Azhar.

2. Yuliani Yuyun, 2018. Buku Siswa Matematika Untuk Siswa SD/MI Kelas IV. Jember: Baiturrahman CV Ayo Date.

Page 11. Bibliography and additional resources

 Pictures of teaching materials

 Page 9.
 Practice problems between the
 Lines.

 Page 10.
 Example of calculation about lines

References



Back cover

CONCLUSION

Several conclusions can be drawn from this study. The development of Qur'an-based mathematics teaching materials for 21st-century learning in Grade 4 was categorized as very good, although some improvements and minor revisions are needed. In addition, the level of student effectiveness based on a one-to-one trial indicates a high response, with an average score of 95%. It can be concluded that teachers and students can use this teaching material to develop mathematical skills, especially on the line topic integrated with Quranic verses. It is expected that students will better understand that the Quran is very close to mathematics and can inspire students on the importance of exploring. This research is only limited to the level of the environment of students attending Islamic-free schools, which in its application, requires adult assistance. Therefore, it is necessary to further investigate the effectiveness of this teaching material when accompanied by adults.

REFERENCES

Ana, A. R. (2019). Analisis Kesulitan Menyelesaikan Soal Matematika Bentuk Cerita Materi Pengukuran Pada Siswa Kelas V SD Se-Gugus Hasanudin Kecamatan Margadana Kota Tegal. Universitas Negeri Semarang.

- BR Karo, D. (2018). Pengaruh Pembelajaran Dengan Pendekatan Interkoneksi Matematika Al – Qur’an Terhadap Hasil Belajar Matematika Siswa Kelas VII SMP Islam An – Nur Prima Medan T.A 2017/2018 [Skripsi, Universitas Islam Negeri Sumatea Utara Medan]. <http://repository.uinsu.ac.id/4029/>
- Cahyadi, R. A. H. (2019). Pengembangan Bahan Ajar Berbasis Addie Model. *Halaqa: Islamic Education Journal*, 3(1), 35. <https://doi.org/10.21070/halaqa.v3i1.2124>
- Gondorini, A. (2017). Pengembangan Bahan Ajar Menulis Pengalaman Dengan Pendekatan Whole Language Dalam Pembelajaran Bahasa Indonesia Sekolah Dasar Kelas V. Universitas Muhammadiyah Purwokerto.
- Kenedi, A. K., Helsa, Y., & Hendri, S. (2018). Pengembangan Bahan Ajar Matematika Berbasis Alquran Di Sekolah Dasar. *Jurnal Inovasi Pendidikan Dan Pembelajaran Sekolah Dasar*, 2(1). <https://doi.org/10.24036/jippsd.v2i1.100034>
- Malalina, M., & Kesumawati, N. (2014). Pengembangan Bahan Ajar Interaktif Berbasis Komputer Pokok Bahasan Lingkaran Untuk Kelas Viii Sekolah Menengah Pertama. *Jurnal Pendidikan Matematika*, 8(1), 55–70. <https://doi.org/10.22342/jpm.8.1.1861.55-70>
- Mauluddiana, N. L. (2015). Pengaruh Pembelajaran Dengan Pendekatan Interkoneksi Matematika-Al-Qur’an Pada Ayat-Ayat Pilihan Dengan Pokok Bahasan Himpunan Terhadap Hasil Belajar Matematika Siswa Kelas Vii Mts Al-Umron Bendosewu Kabupaten Blitar Tahun Pelajaran 2014/2015. Institut Agama Islam Negeri (IAIN) Tulungagung.
- Nuraini, N. (2015). Peningkatan Hasil Belajar Matematika Melalui Strategi Masyarakat Belajar (Learning Community) pada siswa kelas V MI Yaa Bunayya Hidayatullah Makassar. Universitas Islam Negeri (UIN) Makassar.

- Nursupiamin, N. (2018). Representasi Matematika Al-Qur'an Melalui Teori Graf. *Al-Khwarizmi: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam*, 3, 39–56.
<https://doi.org/10.24256/jpmipa.v3i2.234>
- Rahmadi, F., & Agnes, M. (2016). Pengembangan Materi Ajar Dalam Konsep Pendidikan Islam.
- Rahmah, N. (2018). Hakikat Pendidikan Matematika. *Al-Khwarizmi: Jurnal Pendidikan Matematika Dan Ilmu Pengetahuan Alam*, 1(2), 1–10.
<https://doi.org/10.24256/jpmipa.v1i2.88>
- Ramadani, C. A. (2016). Pengembangan Bahan Ajar Muatan Lokal Budaya Banyumasan Menggunakan Media Komik Di Kelas Iv Sekolah Dasar Proposal Skripsi. Universitas Muhammadiyah Purwokerto.
- Rosyita, H. D. (2019). *Siddiq dalam Al-Qur'an (Kajian Tafsir Tematik)*. Institut Agama Islam Negeri (IAIN) Kediri.
- Rusli, R. A., Tahmir, S., Dassa, A., Studi, P., Matematika, P., Pendidikan, K., & Sekolah, M. (2018). Comparison Of Cooperative Learning Of Stad Type And Direct Learning By Giving Scaffolding In Mathematics Learning Of Class Viii Students At Smpn 33 Makassar. Universitas Negeri Makassar.
- Shahidayanti, T. (2012). Pengembangan Modul Pada Materi Segi Empat Untuk Siswa Kelas Vii Smp Berdasarkan Pendekatan Kontekstual Untuk Meningkatkan Hasil Belajar Siswa. Universitas Negeri Yogyakarta.
- Sugiyono. (2015). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Tiara, K., Hartoyo, A., & Nursangaji, A. (2019). Pengembangan Bahan Ajar Matematika Berintegrasi Al-Qur'an Materi Persamaan Garis Lurus Kelas VIII di SMP. <https://core.ac.uk/display/289709135>

Zam-Zam, V. A. (2016). Pengembangan bahan ajar Fisika berbasis kearifan lokal untuk siswa kelas VIII SMP/MTs pada materi usaha dan energi, tekanan, dan cahaya. Universitas Islam Negeri Walisongo.

Zulhani, B. F. (2018). Analisis Kesalahan Menyelesaikan Soal Matematika Materi Aljabar Siswa Kelas Viii Mts. Al-Mawaddah 2 Blitar Tahun Ajaran 2016/2017. Institut Agama Islam Negeri (IAIN) Tulungagung.