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Integrating Contextual Approach and Islamic Values in Three-Variable Linear Equations System Module

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ABSTRACT

In the 2013 Curriculum, students are expected to have knowledge and skills in lessons and also have spiritual and social attitudes. Therefore, it is necessary to connect learning material with real-life and religious aspects. This research aims to develop a mathematical module based on a contextual approach that integrates Islamic values into a valid Three-variable Linear Equations System. This research is a research and development (R&D). This research was designed by following Richey and Klein's development steps, namely the PPE model. The PPE model consists of 3 steps: planning, production, and evaluation. The data collection instruments used in this study were a material expert validity assessment sheet and a media expert validity assessment sheet. The data that has been obtained were analyzed using average and percentage calculations and classifying the results based on predetermined criteria. The results showed that the mathematics module based on a contextual approach that integrated Islamic values in the material of a Three-variable Linear Equations System met the valid criteria based on the assessment of expert validators. This shows that the module have "good" qualification with an average score of 83.40% by the material expert validator and "good" qualification with an average score of 87.5% by the media expert validator.

Keywords*: Module, Contextual Approach, Integration, Islamic values*

ABSTRAK

Dalam kurikulum 2013, peserta didik diharapkan tidak hanya mempunyai pengetahuan dan ketrampilan dalam pelajaran, akan tetapi juga mempunyai sikap spiritual dan sikap sosial. Oleh karena itu, perlu adanya upaya untuk mengaitkan materi pembelajaran dengan kehidupan nyata dan agama. Tujuan penelitian ini adalah untuk mengembangkan modul matematika berbasis pendekatan kontekstual yang terintegrasi nilai-nilai keislaman pada materi Sistem Persamaan Linear Tiga Variabel yang valid. Penelitian ini merupakan penelitian dan pengembangan *(Research and Development/ R&D)*. Penelitian ini dirancang dengan mengikuti langkah-langkah pengembangan Richey dan Klein yaitu model PPE. Model PPE terdiri dari 3 langkah, yaitu *Planning* (Tahap Perencanaan), *Production* (Tahap Produksi), dan *Evaluation* (Tahap Evaluasi). Instrumen pengumpulan data yang digunakan dalam penelitian ini berupa lembar penilaian validitas ahli materi dan lembar penilaian validitas ahli media. Data yang telah diperoleh dianalisis dengan menggunakan perhitungan rata-rata dan persentase serta mengklasifikasi hasil berdasarkan kriteria yang telah ditetapkan. Hasil penelitian menunjukan bahwa modul matematika berbasis pendekatan kontekstual yang terintegrasi nilai-nilai keislaman pada materi Sistem Persamaan Linear Tiga Variabel memenuhi kriteria valid berdasarkan penilaian validator ahli yang menunjukkan bahwa modul termasuk dalam kualifikasi “baik” dengan nilai rata-rata sebesar 83.40% oleh validator ahli materi, dan termasuk dalam kualifikasi “baik” dengan nilai rata-rata sebesar 87.5% oleh validator ahli media.

Kata kunci: Modul, Pendekatan Kontekstual, Integrasi, Nilai-nilai Keislaman

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INTRODUCTION

According to Law Number 20 of 2003 concerning the National Education System, article 3, one of national education functions is aim to develop capabilities and shape the character and civilization of a dignified nation in the context of educating the nation's life, aiming at developing the potential of students to become human beings who believe and fear God Almighty, noble character, healthy, knowledgeable, capable, creative, independent, and become a democratic and responsible citizen. Education implies a planned learning process activity that can activate students to develop their potential to deal with any changes due to advances in science and technology (Lestari & Handayani, 2018). Education is the key word in every effort to improve the quality of human life, in which it has a role and object to humanize humans (Lazwardi, 2017). Therefore, the focus of education is directed at the formation of a superior personality by emphasizing the process of maturation of the qualities of logic, heart, character and faith.

One of the materials that must be learned in learning at school is mathematics. Amidi and Zahid (2016) states that mathematical material is related to symbols and abstract concepts, so mathematics learning is given from primary to secondary level to understand mathematical concepts since an early age and apply mathematical concepts in everyday life. In learning mathematics, several problems are found, one of which is in the material of three-variable linear equations sytem. The Three-variable Linear Equations System is a material in the compulsory mathematics subject for class X and is a prerequisite for linear programming material and rows and series (Anggraini, 2020). Based on research (Amir, Nari, & Huda, 2019; Cardo A.P. et al., 2020; Hartinah & Ferdianto, 2019; Masynaeni, 2020; Ramadhani & Firmansyah, 2021), some of the difficulties experienced by students in solving math problems, especially Three-Variable Linear Equations System material, such as not being able to determine the variables to be used, turning story questions into mathematical models, many students forgetting to conclude the story problems, and students are also still lacking in performing mathematical operations. Thus, the teacher can relate the material discussed to the student's condition, both hobbies or student needs, cognitive development, daily environment, and provisions that students have, it will have a positive impact on students, namely learning done in learning a mathematical concept becomes joyful learning (Gazali & Atsnan, 2017).

Kurniati (2016) revealed that in several Madrasah Aliyah and Integrated Islamic schools in Pekanbaru the teaching pattern of teachers is still dominated by the lecture method, this can be seen from the way the material is delivered by the teacher, which is too abstract and the teacher rarely relates the material they discuss to problems or issues that occur around students. Therefore, innovation in learning is needed, namely by using contextual-based learning. Contextual teaching and learning is a learning concept that helps teachers relate the material being taught to real-world situations and encourages students to make connections between their knowledge and its application in their daily lives (Agustin, 2019), which involves seven contextual components,

namely constructivism, questioning, inquiry, learning community, modeling, reflection, and authentic assessment. Presentation of material with a contextual approach will make students know firsthand the benefits of what they are learning (Artikasari & Saefudin, 2017).

In the 2013 Curriculum, students are expected to have knowledge and skills in lessons and have spiritual and social attitudes. Core Competency 1 related to spiritual perspectives aims to form students with faith, purity, and noble character. In contrast, Core Competency 2, related to social attitudes, aims to develop independent, democratic, democratic students and responsible. In Islamic madrasas/schools, students' spiritual and social attitudes can be formed by instilling the values of Islamic teachings so that they can fulfill the four core competencies in the 2013 Curriculum. Kurniati (2016) said that the general education Curriculum is often considered a secular subject. This statement is contrary to the goals of national education that have been described above. Therefore, it is necessary to harmonize general education and religion by linking material with real-life and religious aspects.

Based on Kurniati (2016), in several Madrasah Aliyah and Integrated Islamic schools in Pekanbaru, it was found that Islamic integration was carried out still limited to Islamic nuances such as separating seats between male and female students, praying, reading the Qur'an, and giving advice before starting lessons. In addition, there are no books or modules and other teaching materials used by teachers that integrate mathematics with Islamic science. As a source of learning, the module has the advantage of being an independent learning medium of learning anytime and anywhere independently. On the other hand, Krismasari (2016) states that the module is one of the teaching materials that can be adapted to students' circumstances and can describe something abstract, such as pictures, photos, graphics, and others. Therefore, developing a mathematics module based on a contextual approach that integrates Islamic values is necessary. Islamic values are values that are sourced directly from the Qur'an and Hadith which have an important meaning in value education, especially for Muslims (Muslimin & Sunardi, 2021). Islamic values become a strong foundation that will lead humans to achieve happiness in life (Yuniati & Sari, 2018).

According to Syamsuar, Sulasteri, Suharti, and Nur (2021), mathematics teaching materials that are integrated with Islamic values mean that the mathematical materials discussed are related to the values in the Qur'an, mathematics is taught using narrative strategies, infusion, uswah hasanah, and analogies. The infusion strategy emphasizes the value of the Qur'an related to the material. The narrative strategy is more about telling the stories of Muslim scientists so that lessons can be drawn. The analogy strategy is a condition in which educators analogize the values of kindness when teaching. The uswah hasanah strategy is used by educators by showing good mathematics behavior, such as accuracy, sincerity, not giving up easily, and being honest. Besides that, according to Yasri (2013), several learning strategies are associated with inculcating Islamic values that can be done in learning mathematics subjects, namely: 1) always mention the name of allah, 2) use of terms, 3) visual illustrations, 4) applications or examples, 5) inserting relevant

verses or hadith, 6) historical search, 7) topic network, and 8) symbols of kauniah verses (verses of the universe).

Bermi (2016) divides the values of Islamic teachings into three types, namely faith values that teach faith in Allah SWT, worship values that guide humans so that in every step of their life it is always based on a sincere heart to get the pleasure of Allah SWT, and moral values that teach to behave and act by human norms or manners. The mathematics module with a contextual approach that integrates Islamic values is expected to activate students in the learning process with prior knowledge, link learning to students' environmental situations, motivate students by providing math activities or tasks related to everyday life, helping students explore the experience of a concept learned through a learning activity and practice the values of Islamic teachings in everyday life.

Several previous studies (Ekawati, Anggoro, & Komarudin, 2019; Suhandri & Sari, 2019; Yuniati, 2018) have shown that it is stated that learning mathematics with an integrated contextual approach to Islamic values can improve learning outcomes and problem-solving abilities. However, there are no research that develop module for Three-Variables Linear Equations System with contextual approach and integrating Islamic values. Based on some of the results of these studies, it can be concluded that teaching materials that integrate Islamic values play an important role in learning. Based on the description above, this study aims to develop a Mathematical Module Based on a Contextual Approach that is Integrated with Islamic Values in the Material of Three-Variable Linear Equations System.

This research is focused on developing a printed mathematics module on the material of a three-variable system of linear equations. The material is presented based on the steps in a contextual approach, and the integration of Islamic values includes the values of Islamic teachings that are often applied in everyday life. Then, the product quality is validate by assessment from material experts and media experts. This study does not discuss the effect on learning achievement. Therefore, in this research, we will only reach the stage of knowing the validity of the product to be produced.

RESEARCH METHODS

The study used a research and development design. The research and development carried out in this study are based on the PPE (Planning, Production, and Evaluation) model developed by Richey and Klein.

1. Planning

   This stage is the planning stage for the development of teaching materials. In planning teaching materials, the researcher carried out several stages, namely a) conducting a preliminary study, b) identifying the problems found, and c) determining the product to be developed.

2. Production

   The second stage of this research is the production or implementation stage, where the researcher carries out the activities of making the product to be developed. After the required data has been obtained, the next process at this implementation stage is a) making the initial product, b) determining the device requirements and collecting design data, and c) making the product.

3. Evaluation

   After carrying out the initial product development process, the next evaluation stage is carried out. In this evaluation process, the researcher divides into three important points, including a) evaluating or validating products by experts, b) revising and making final products, and c) reporting and completing.

The subjects in this research are two expert validators divided into material and media expert validators. The expert validators in this study were mathematics education lecturers who had expertise in mathematics education. The data collection instrument was a product validation assessment sheet. The aspect of validation in product validation assessment sheet is presented in Table 1.

Table 1. The aspect in product validation assessment sheet

Expert	Aspect	Component
Material	Content feasibility aspect	1. The suitability of the material with Competency Standards and Basic Competencies
		2. Material Accuracy
		3. Material Update
		4. Encourage Curiosity
	Presentation eligibility	1. Presentation technique
		2. Presentation support
		3. Learning presentation
		4. Coherence and coherence in the flow of thought
	Language aspect	1. simple
		2. Communicative
		3. Dialogic and interactive
		4. Suitability with the development of students
		5. Conformity with the rules of the language
	Contextual Approach	1. Contextual Reality
		2. Contextual component
	Interagrate Islamic Value	1. Accuracy and factual relevance of concepts in the material with Islamic values.
		2. The truth of the content of the material with an explanation that is in Islamic values.
		3. The language and Islamic values used are communicative.
		4. The language and Islamic values used are easy to understand.
		5. The attractiveness of learning modules as teaching materials
		6. The clarity of Islamic values and the use of letters.
		7. Clarity of illustration or description of Islamic values on the material
Media	Media	1. The suitability of the column format with the paper size used
		2. The suitability of the paper format with the layout and typing format
		3. The attractiveness of the appearance of the module
		4. The use of color is not excessive
		5. The attractiveness of learning tools
		6. Spacing between lines of normal text collation

Expert	Aspect	Component
		7. Don't use too many font combinations 8. The structure and flow between paragraphs is easy to understand 9. Organization between headings and subtitles is easy to follow 10. Appearance of the cover of teaching materials (Module) 11. Comparison of the size of the image with the text 12. Easy-to-read fonts and sizes

The data analysis technique of the validation results was carried out through several steps, namely: providing an answer score with the criteria of very good (score 5), good (score 4), quite good (score 3), less (score 2), and very poor (score 1); and calculate the percentage value with the formula:

$$P = \frac{\sum x}{SMI} \times 100\%$$

where:

P = Eligibility Percentage

$\sum x$ = Total score

SMI = Ideal Maximum Score

Then the data is interpreted based on Table 2 (Tegeh, Jampel, & Pudjawan, 2014).

Table 2. Level of Achievement and Qualification Validity

Level of Achievement	Qualification
$90\% < P \leq 100\%$	Very Good
$75\% < P \leq 89\%$	Good
$65\% < P \leq 74\%$	Good Enough
$55\% < P \leq 64\%$	Less
$0\% < P \leq 54\%$	Very Less

Based on Table 2, the resulting module is valid if the minimum qualification level of validity obtained is good or with necessary revisions. Qualifications that are quite good lacking and lacking cannot be valid.

RESEARCH RESULTS AND DISCUSSION

Developing a mathematics module based on a contextual approach that integrates Islamic values in the material of a Three-variable Linear Equations System is used PPE (Planning, Production, and Evaluation) model. At the Planning stage, a preliminary study was carried out by reviewing previous research and the mathematics Curriculum used in schools. In a study of prior research, data obtained that based on Masynaeni (2020), there are several problems experienced by students in solving math problems, especially Three-Variable Linear Equation System material, such as not being able to determine the variables to be used, turning story questions into mathematical models, many students forget to conclude story problems, and students are also still lacking in performing mathematical operations. Furthermore, in the study of the 2013 Curriculum and the 2013 Revised Curriculum in 2017 and several mathematics books used in schools, data was obtained that in the 2013 Curriculum, the material of three-variable linear equations system is

incorporated in the material of linear equations and inequalities system, while in the 2013 Revised Curriculum in 2017, the three-variable linear equation has become a separate chapter, resulting in differences in core competencies and basic competencies.

The core competencies and basic competencies for the Three-variable Linear Equations System material based on the 2013 Revised 2017 Curriculum are presented in Table 3.

Table 3. Core Competencies and Basic Competencies

Core Competencies	Basic Competencies
1. Appreciate and practice the teachings of the religion he adheres to.	1.2 Appreciate and live the teachings of the religion he adheres to
2. Develop honest, disciplined, responsible, caring, polite, environmentally friendly, cooperation, cooperation, peace-loving, responsive and proactive behavior and show attitudes as part of the solution to various national problems in interacting effectively with the social and natural environment as well as in placing itself as a reflection of the nation in the association of the world.	2.2 Demonstrate honest, disciplined, responsible, caring behavior (cooperation, cooperation, tolerance, peace), polite, responsive, and pro-active as part of the solution to various problems in interacting effectively with the social and natural environment and placing oneself as a reflection of the nation in the world association".
3. Understand, apply, analyze factual, conceptual, procedural knowledge based on their curiosity about science, technology, art, culture, and humanities with insight into society, nationality, state, and civilization related to phenomena and events, as well as apply procedural knowledge in the field-specific studies according to their talents and interests to solve problems.	3.2 Compiling a system of three-variable linear equations from contextual problems
4. Processing, reasoning, presenting, and creating in the concrete and abstract realms related to the development of what they learn in school independently and using methods according to scientific rules.	4.2 Solve contextual problems related to systems of three-variable linear equations

After conducting an assessment of Core Competencies and Basic Competencies, then determining the Competency Achievement Indicators based on the Basic Competencies of the Three-Variable Linear Equation System Material for class X, namely 1) formulating concepts and determining the general form of a Three-variable Linear Equations System, 2) designing a mathematical model of contextual problems which are Three-Variable Linear Equation System, 3) explain the characteristics of authentic problems whose solutions are related to the Mathematical model as a Three-variable Linear Equations System, 4) understand the characteristics of Three-Variable Linear Equation System from mathematical models, 5) complete the mathematical model to obtain a solution to the given problem. using substitution, elimination, and combination methods, 5) finding a solution to a contextual problem which is Three-Variable Linear Equation System, and 6) interpreting the results of the problem solving given.

Furthermore, a study of Islamic values that can be integrated with the context in the material of a three-variable linear equations system is carried out. The Islamic values that will be integrated with social activities and daily problems are presented in Table 4.

Table 4. Islamic values to be integrated

Islamic values	Value/Dimension	Resources
Please help/ta'awun	The value of worship and moral values	Q.S. Al Maidah: 2
Fair	The value of worship, morals	Q.S. An-Nahl: 90
Dutiful to parents	Values of faith, worship, and morality	Q.S. Al Isra: 23
Share / give charity	Values of faith, worship, and morality	Q.S. Al Zalzalah: 7-8
Grateful	Value of faith	Q.S. Al Baqarah: 157
Saving, saving, not wasting	Moral value	H.R. Bukhori and Muslim
Visiting the sick	Moral value	H.R. Muslim No 2568
Carry out obligations to yourself and the environment	Value of faith	Q.S. Al Hasyr: 18
Helping orphans	Worship values, moral values	Q.S. An Nisa: 36
Paying zakat	The value of aqidah and worship	Q.S. At Taubah: 71

After conducting a preliminary study, the next step is to identify the problem. Several problems were found; namely, the differences in Core Competencies and Basic Competencies Three-Variable Linear Equation System material in the 2013 Curriculum and the 2017 revised 2013 Curriculum, the teaching pattern (mathematics) of teachers in some madrasas and Islamic schools is still dominated by the lecture method, learning resources used in several madrasas and Islamic schools. Nothing integrates mathematics material with Islamic science, and the integration of Islamic values is packaged by providing verses of the Qur'an, so it is not universal.

After identifying the problem, the next step that can be done is to determine the product to be developed as a solution to the issues found. The researcher will develop a Mathematical Module based on a Contextual Approach that integrates Islamic values into the Material of a Three-variable Linear Equations System. This module is prepared with 2013 revised 2017 Curriculum and is based on a contextual approach integrated with Islamic values in a three-variable linear equations system. This module is intended for Madrasah Aliyah or Islamic Senior High Schools students.

The next stage is production. At this stage, the initial product draft/module draft is made. The module draft is still in the form of a material file without a design. It is shown in Figure 1.

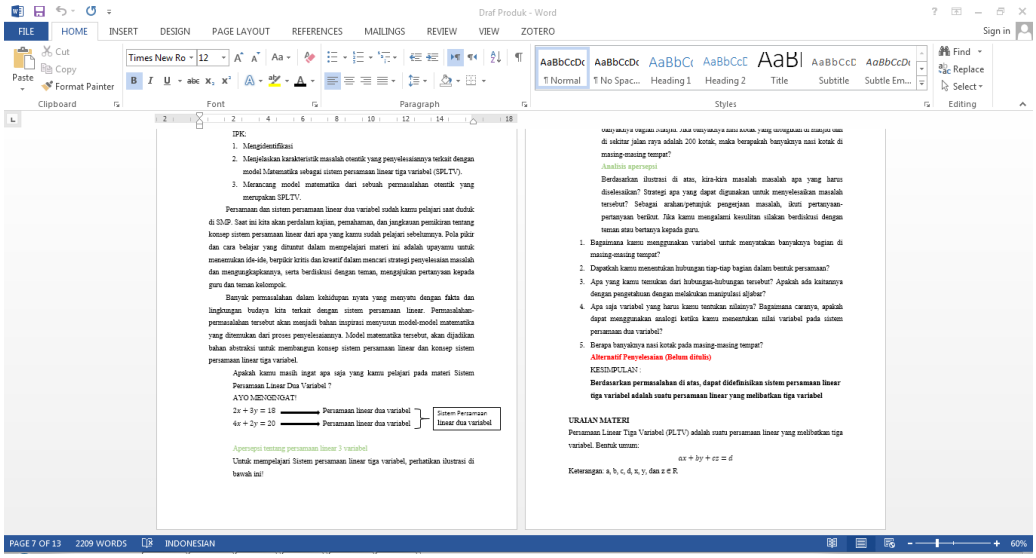


Figure 1. Initial Product Display/Module Draft

Next is product creation, which is done by collecting several images and other illustrations from the Canva web, editing them through the Corel Draw X7 application and compiling a product validity assessment instrument. It is shown in Figure 2.

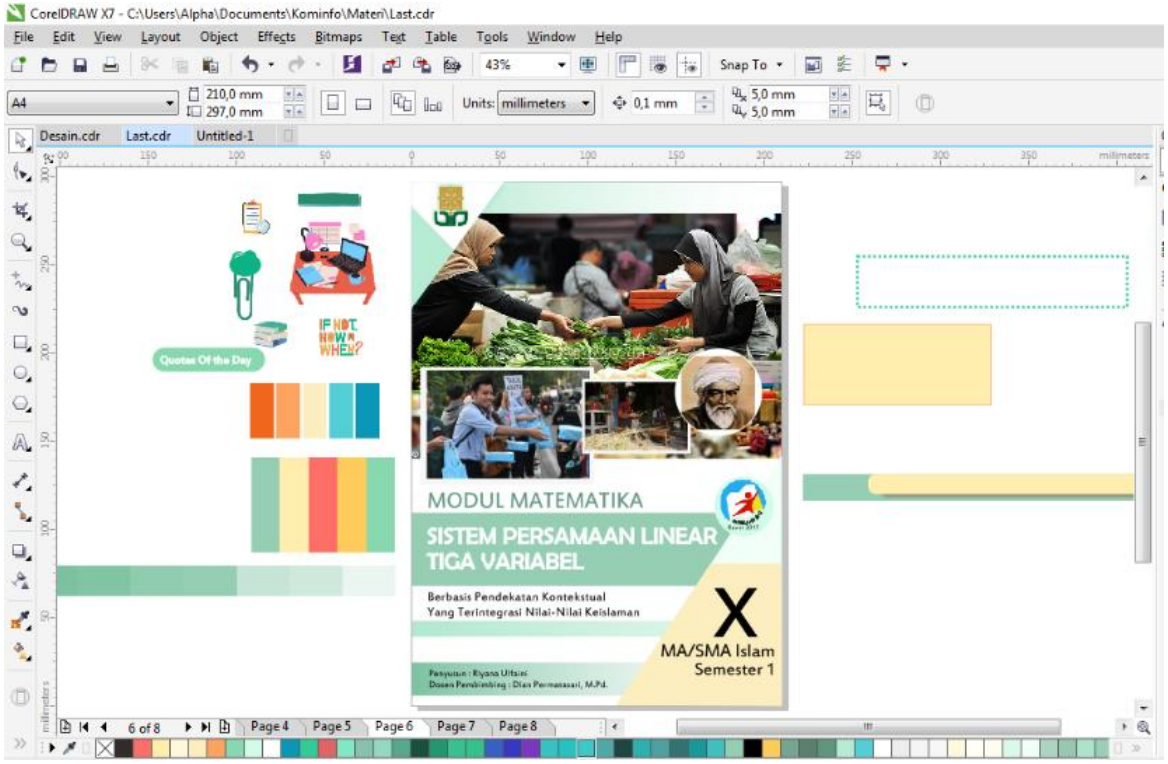


Figure 2. Module images, illustrations, and Cover Design

Lastly is manufacturing a product in a mathematical module based on a contextual approach that integrates Islamic values. At the product manufacturing stage, a design is made that will be used and then applied to the draft module that has been designed.

The last stage is evaluation. Evaluation or the evaluation stage is product validation by material and media experts. Based on the validation results by material experts and media experts, the results are presented in Table 5.

Table 5. Product Validation in Content Feasibility aspect

Aspect	Score	Qualification
Content eligibility	81.67%	Good
Presentation eligibility	85%	Good
Language	84.44%	Good
Contextual Approach	78.75%	Good
Interagrate Islamic Value	87.14%	Good
Average	**83. 40%**	**Good**

Based on Table 5, in content feasibility, a score of 81. 67% was obtained with "good" qualifications. Aspects of the feasibility of the presentation got a score of 85% with "good" qualifications. The language aspect got 84.44%, with a "good" qualification. The contextual aspect obtained a score of 78.75% with "good" qualifications. The Islamic aspect got 87.14% with "good" qualifications. Furthermore, for the media aspect, the validation results are shown in Table 5. Some

of the suggestion given by the validator are Giving conclusions on examples, checking the characteristics of Three-Variable Linear Equation System, explaining about trivial solutions, providing types of solutions, completing answer keys, adding photo sources, tidying up the glossary, using equations for variables, checking numbering on keys answers, giving equivalence marks, using clear parameters in examples, changing sentences in Competency Test questions, providing contextual cases for various solutions, clarifying the target user of the module, and adding the Inquiry aspect to the Three-Variable Linear Equation System completion sub-chapter.

Table 6. Product Validation in Media aspect

Aspect	Score	Qualification
Media	87.50%	Good

In the media aspect (Table 6), a score of 87.50% was obtained with "good" qualifications. In the aspect of media assessment, several suggestions were given, that are uniformity of the type of font on the cover, completing the table of contents, uniform writing of variables using equations, correcting margins, straightening the glossary, and including image sources that are still lacking. All suggestions for improvement given to the developed module were revised properly. Revisions are made based on the results of the assessment of the validator. After the validation stage, further revisions are made to the modules that have been developed. The final module is shown in Figure 3.

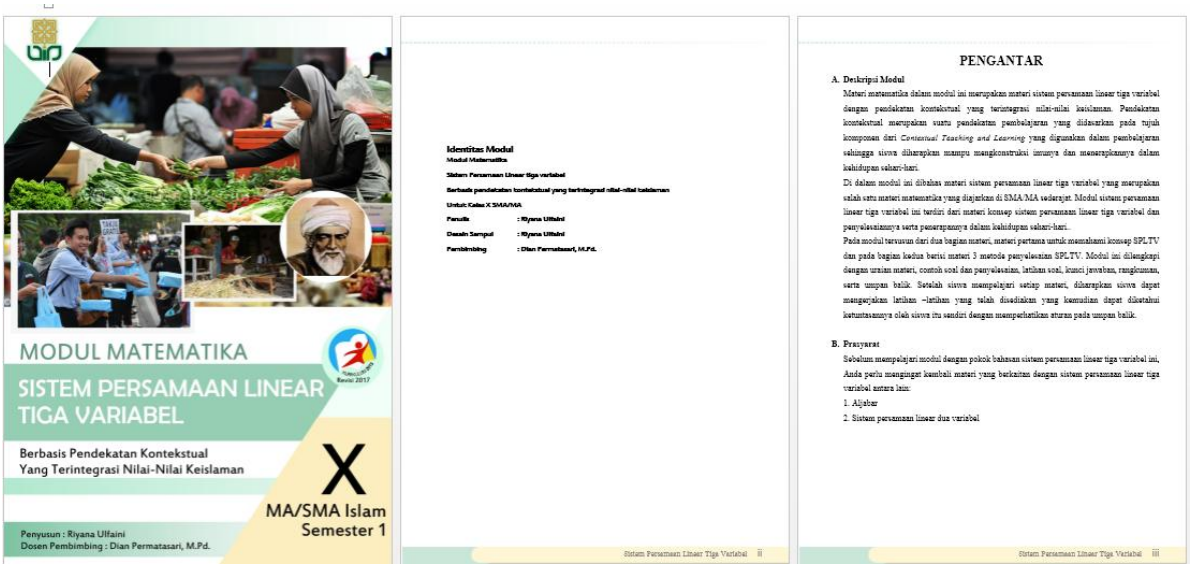
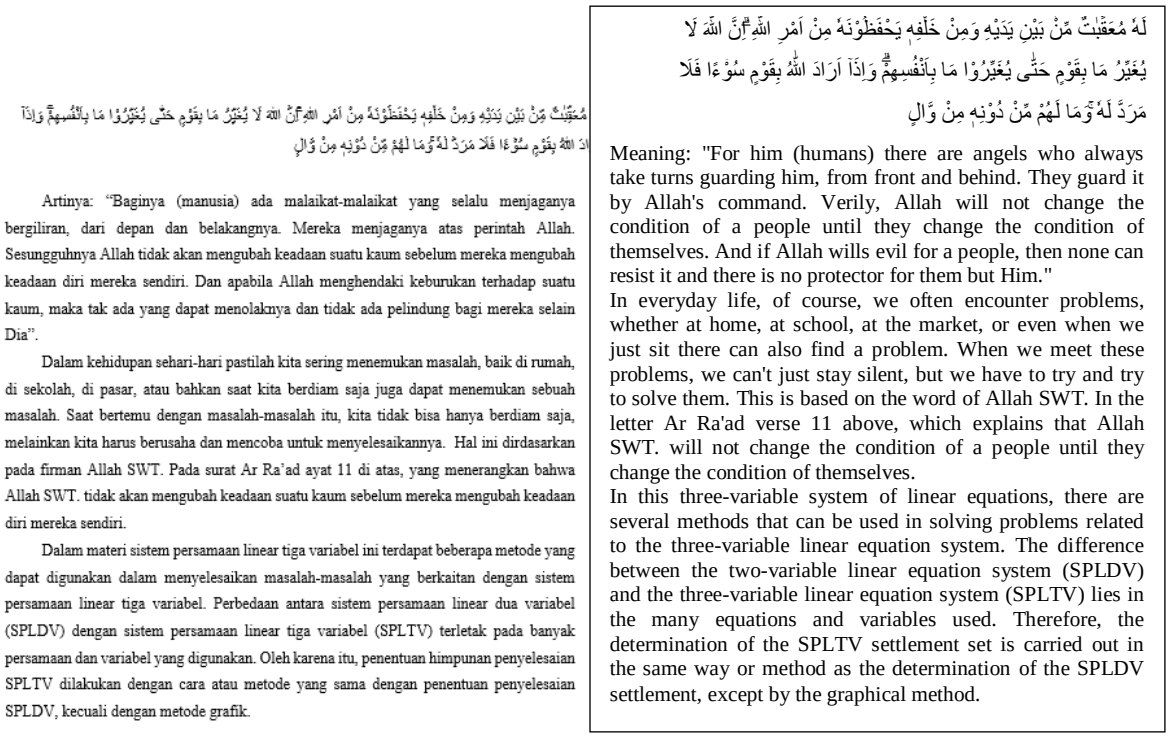


Figure 3. Final Module

In the mathematics module based on the contextual approach developed, there are seven components of the contextual system. The constructivism component solves contextual problems before entering the material section. In the completion process, the steps that must be done are given, starting from modeling to concluding. It is shown in Figure 4.



مُعَقِّبٰتٌ مِّنْۢ بَيْنِ يَدَيْهِ وَمِنْ خَلْفِهٖ يَحْفَظُوْنَهٗ مِنْ اَمْرِ اللّٰهِ ۗاِنَّ اللّٰهَ لَا يُغَيِّرُ مَا بِقَوْمٍ حَتّٰى يُغَيِّرُوْا مَا بِاَنْفُسِهِمْ ۗوَاِذَآ اَرَادَ اللّٰهُ بِقَوْمٍ سُوْۤءًا فَلَا مَرَدَّ لَهٗ ۚوَمَا لَهُمْ مِّنْ دُوْنِهٖ مِنْ وَّالٍ

Artinya: "Baginya (manusia) ada malaikat-malaikat yang selalu menjaganya bergiliran, dari depan dan belakangnya. Mereka menjaganya atas perintah Allah. Sesungguhnya Allah tidak akan mengubah keadaan suatu kaum sebelum mereka mengubah keadaan diri mereka sendiri. Dan apabila Allah menghendaki keburukan terhadap suatu kaum, maka tak ada yang dapat menolaknya dan tidak ada pelindung bagi mereka selain Dia".

Dalam kehidupan sehari-hari pastilah kita sering menemukan masalah, baik di rumah, di sekolah, di pasar, atau bahkan saat kita berdiam saja juga dapat menemukan sebuah masalah. Saat bertemu dengan masalah-masalah itu, kita tidak bisa hanya berdiam saja, melainkan kita harus berusaha dan mencoba untuk menyelesaikannya. Hal ini dirdasarkan pada firman Allah SWT. Pada surat Ar Ra'ad ayat 11 di atas, yang menerangkan bahwa Allah SWT. tidak akan mengubah keadaan suatu kaum sebelum mereka mengubah keadaan diri mereka sendiri.

Dalam materi sistem persamaan linear tiga variabel ini terdapat beberapa metode yang dapat digunakan dalam menyelesaikan masalah-masalah yang berkaitan dengan sistem persamaan linear tiga variabel. Perbedaan antara sistem persamaan linear dua variabel (SPLDV) dengan sistem persamaan linear tiga variabel (SPLTV) terletak pada banyak persamaan dan variabel yang digunakan. Oleh karena itu, penentuan himpunan penyelesaian SPLTV dilakukan dengan cara atau metode yang sama dengan penentuan penyelesaian SPLDV, kecuali dengan metode grafik.

لَهٗ مُعَقِّبٰتٌ مِّنْۢ بَيْنِ يَدَيْهِ وَمِنْ خَلْفِهٖ يَحْفَظُوْنَهٗ مِنْ اَمْرِ اللّٰهِ ۗاِنَّ اللّٰهَ لَا يُغَيِّرُ مَا بِقَوْمٍ حَتّٰى يُغَيِّرُوْا مَا بِاَنْفُسِهِمْ ۗوَاِذَآ اَرَادَ اللّٰهُ بِقَوْمٍ سُوْۤءًا فَلَا مَرَدَّ لَهٗ ۚوَمَا لَهُمْ مِّنْ دُوْنِهٖ مِنْ وَّالٍ

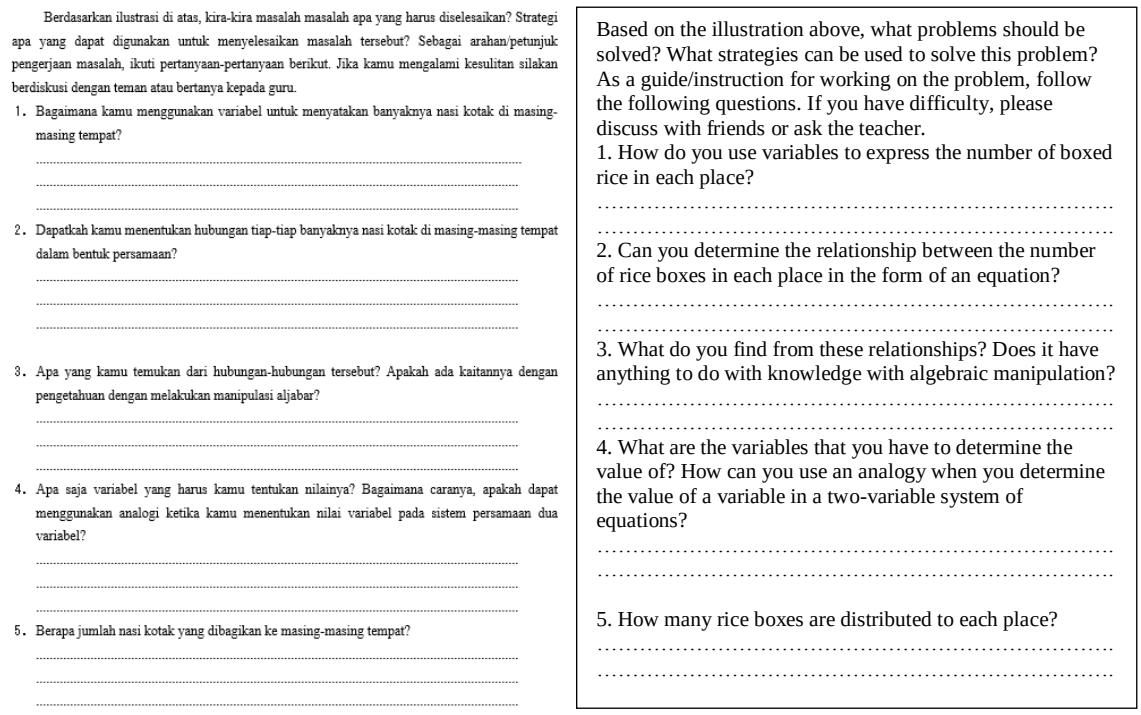
Meaning: "For him (humans) there are angels who always take turns guarding him, from front and behind. They guard it by Allah's command. Verily, Allah will not change the condition of a people until they change the condition of themselves. And if Allah wills evil for a people, then none can resist it and there is no protector for them but Him."

In everyday life, of course, we often encounter problems, whether at home, at school, at the market, or even when we just sit there can also find a problem. When we meet these problems, we can't just stay silent, but we have to try and try to solve them. This is based on the word of Allah SWT. In the letter Ar Ra'ad verse 11 above, which explains that Allah SWT. will not change the condition of a people until they change the condition of themselves.

In this three-variable system of linear equations, there are several methods that can be used in solving problems related to the three-variable linear equation system. The difference between the two-variable linear equation system (SPLDV) and the three-variable linear equation system (SPLTV) lies in the many equations and variables used. Therefore, the determination of the SPLTV settlement set is carried out in the same way or method as the determination of the SPLDV settlement, except by the graphical method.

Figure 4. An Example of Contructivism

Furthermore, in the inquiry component, students are given practice questions to find their answers. Students are expected to find solutions to existing problems based on the facts in story problems by answer some questions. The inquiry component is presented in Figure 5.



Berdasarkan ilustrasi di atas, kira-kira masalah masalah apa yang harus diselesaikan? Strategi apa yang dapat digunakan untuk menyelesaikan masalah tersebut? Sebagai arahan/petunjuk pengerjaan masalah, ikuti pertanyaan-pertanyaan berikut. Jika kamu mengalami kesulitan silakan berdiskusi dengan teman atau bertanya kepada guru.

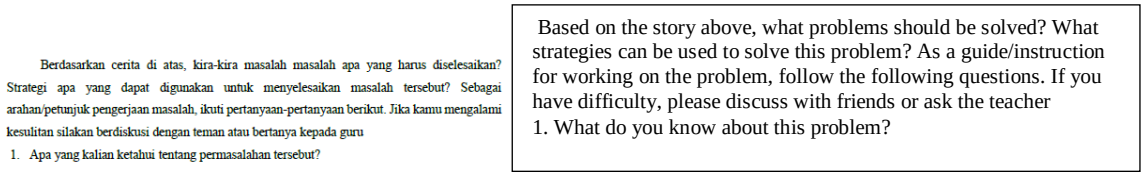
1. Bagaimana kamu menggunakan variabel untuk menyatakan banyaknya nasi kotak di masing-masing tempat?
2. Dapatkah kamu menentukan hubungan tiap-tiap banyaknya nasi kotak di masing-masing tempat dalam bentuk persamaan?
3. Apa yang kamu temukan dari hubungan-hubungan tersebut? Apakah ada kaitannya dengan pengetahuan dengan melakukan manipulasi aljabar?
4. Apa saja variabel yang harus kamu tentukan nilainya? Bagaimana caranya, apakah dapat menggunakan analogi ketika kamu menentukan nilai variabel pada sistem persamaan dua variabel?
5. Berapa jumlah nasi kotak yang dibagikan ke masing-masing tempat?

Based on the illustration above, what problems should be solved? What strategies can be used to solve this problem? As a guide/instruction for working on the problem, follow the following questions. If you have difficulty, please discuss with friends or ask the teacher.

1. How do you use variables to express the number of boxed rice in each place?
2. Can you determine the relationship between the number of rice boxes in each place in the form of an equation?
3. What do you find from these relationships? Does it have anything to do with knowledge with algebraic manipulation?
4. What are the variables that you have to determine the value of? How can you use an analogy when you determine the value of a variable in a two-variable system of equations?
5. How many rice boxes are distributed to each place?

Figure 5. An Example of Inquiry

In the questioning component, there are questions in problem-solving activities and the process of asking the teacher or friends when they encounter difficulties. This component can be done in every problem that is considered difficult by students. The next component is the learning community. Although the module is an independent learning resource, students can ask teachers, tutors, or friends in the learning process to have a sharing and discussion process. The questionning and learning community in the module is hown in Figure 6.



Berdasarkan cerita di atas, kira-kira masalah masalah apa yang harus diselesaikan? Strategi apa yang dapat digunakan untuk menyelesaikan masalah tersebut? Sebagai arahan/petunjuk pengerjaan masalah, ikuti pertanyaan-pertanyaan berikut. Jika kamu mengalami kesulitan silakan berdiskusi dengan teman atau bertanya kepada guru

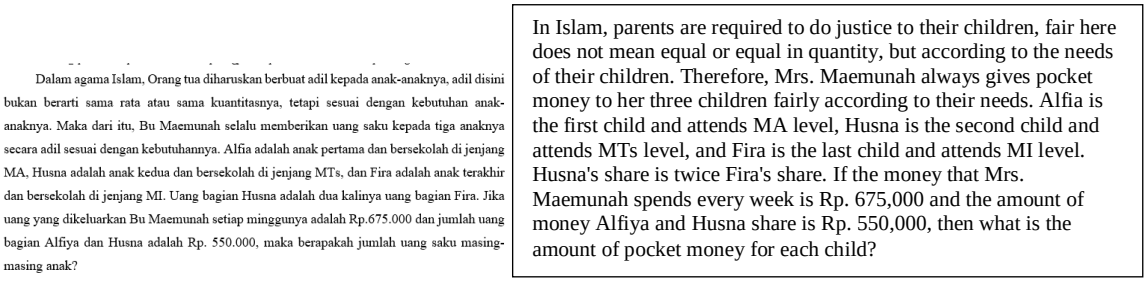
1. Apa yang kalian ketahui tentang permasalahan tersebut?

Based on the story above, what problems should be solved? What strategies can be used to solve this problem? As a guide/instruction for working on the problem, follow the following questions. If you have difficulty, please discuss with friends or ask the teacher

1. What do you know about this problem?

Figure 6. An Example of Questionning and Learning Community

One of the components of modeling in this module is providing examples of questions and their solution steps. Even though they are in a state of self-study, students can still find information if they encounter difficulties. It is shown in Figure 7.

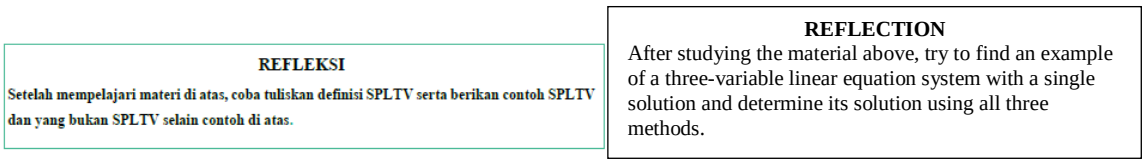


Dalam agama Islam, Orang tua diharuskan berbuat adil kepada anak-anaknya, adil disini bukan berarti sama rata atau sama kuantitasnya, tetapi sesuai dengan kebutuhan anak-anaknya. Maka dari itu, Bu Maemunah selalu memberikan uang saku kepada tiga anaknya secara adil sesuai dengan kebutuhannya. Alfia adalah anak pertama dan bersekolah di jenjang MA, Husna adalah anak kedua dan bersekolah di jenjang MTs, dan Fira adalah anak terakhir dan bersekolah di jenjang MI. Uang bagian Husna adalah dua kalinya uang bagian Fira. Jika uang yang dikeluarkan Bu Maemunah setiap minggunya adalah Rp.675.000 dan jumlah uang bagian Alfiya dan Husna adalah Rp. 550.000, maka berapakah jumlah uang saku masing-masing anak?

In Islam, parents are required to do justice to their children, fair here does not mean equal or equal in quantity, but according to the needs of their children. Therefore, Mrs. Maemunah always gives pocket money to her three children fairly according to their needs. Alfia is the first child and attends MA level, Husna is the second child and attends MTs level, and Fira is the last child and attends MI level. Husna's share is twice Fira's share. If the money that Mrs. Maemunah spends every week is Rp. 675,000 and the amount of money Alfiya and Husna share is Rp. 550,000, then what is the amount of pocket money for each child?

Figure 7. An Example of Modelling

Next is the reflection component. The reflection component contains orders to write summaries or ideas about the material that has been studied. It aims to train students to remember the lessons that have been learned. One of them is that students are asked to write down the definition of Three-Variable Linear Equation System along with examples presented in Figure 8.



REFLEKSI

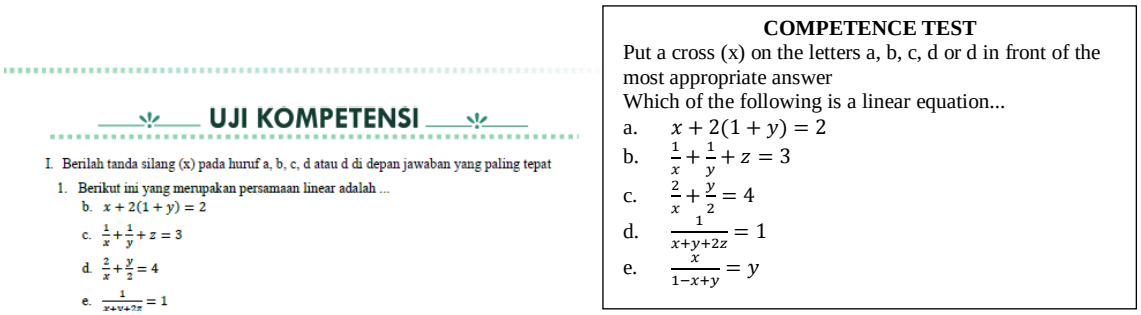
Setelah mempelajari materi di atas, coba tuliskan definisi SPLTV serta berikan contoh SPLTV dan yang bukan SPLTV selain contoh di atas.

REFLECTION

After studying the material above, try to find an example of a three-variable linear equation system with a single solution and determine its solution using all three methods.

Figure 8. An Example of Reflection

The last one is authentic assesment. The assessment component is presented in the form of a competency test which contains questions on a three-variable linear equations system like presented in Figure 9.



UJI KOMPETENSI

I. Berilah tanda silang (x) pada huruf a, b, c, d atau d di depan jawaban yang paling tepat

1. Berikut ini yang merupakan persamaan linear adalah ...
   b. $x + 2(1 + y) = 2$
   c. $\frac{1}{x}+\frac{1}{y}+z=3$
   d. $\frac{2}{x}+\frac{y}{2}=4$
   e. $\frac{1}{x+y+2z}=1$

COMPETENCE TEST

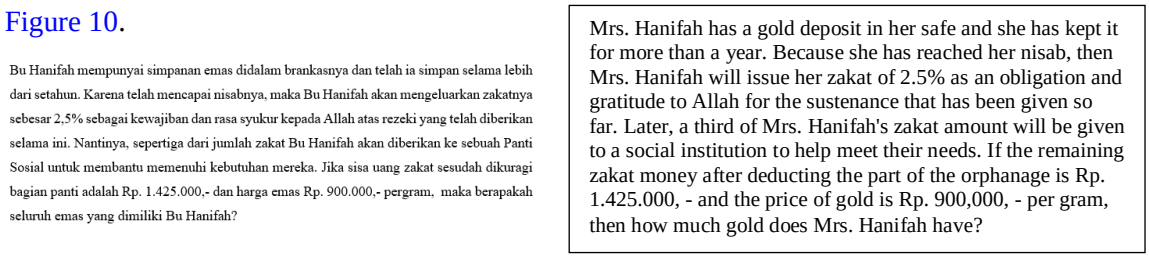
Put a cross (x) on the letters a, b, c, d or d in front of the most appropriate answer

Which of the following is a linear equation...

a. $x + 2(1 + y) = 2$
b. $\frac{1}{x}+\frac{1}{y}+z=3$
c. $\frac{2}{x}+\frac{y}{2}=4$
d. $\frac{1}{x+y+2z}=1$
e. $\frac{x}{1-x+y}=y$

Figure 9. An Example of Authentic Assesment

In addition to the contextual approach component, the mathematics module based on a contextual approach that integrates Islamic values developed has an integrated aspect of Islamic values, including the values of faith, worship values , and moral values. The integration of the importance of faith in the mathematics module based on a contextual approach lies in the story about the obligation to pay zakat, where paying zakat is one of the values of Islamic teachings to express gratitude and obedience to Allah SWT. In addition to the obligation to pay zakat, the values of faith integrated into the module are filial piety to parents, giving charity, and carrying out obligations as Muslims. It is presented in Figure 10.

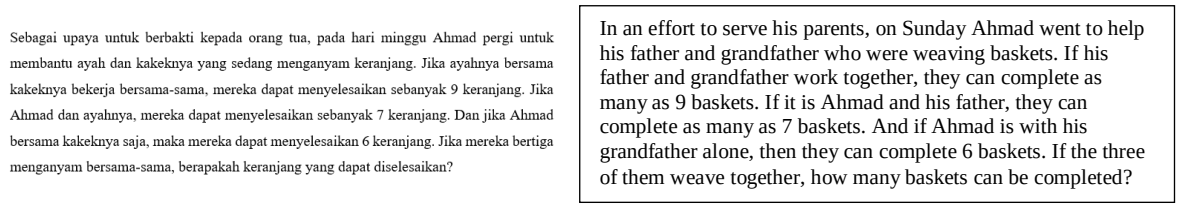


Bu Hanifah mempunyai simpanan emas didalam brankasnya dan telah ia simpan selama lebih dari setahun. Karena telah mencapai nisabnya, maka Bu Hanifah akan mengeluarkan zakatnya sebesar 2,5% sebagai kewajiban dan rasa syukur kepada Allah atas rezeki yang telah diberikan selama ini. Nantinya, sepertiga dari jumlah zakat Bu Hanifah akan diberikan ke sebuah Panti Sosial untuk membantu memenuhi kebutuhan mereka. Jika sisa uang zakat sesudah dikuragi bagian panti adalah Rp. 1.425.000,- dan harga emas Rp. 900.000,- pergram, maka berapakah seluruh emas yang dimiliki Bu Hanifah?

Mrs. Hanifah has a gold deposit in her safe and she has kept it for more than a year. Because she has reached her nisab, then Mrs. Hanifah will issue her zakat of 2.5% as an obligation and gratitude to Allah for the sustenance that has been given so far. Later, a third of Mrs. Hanifah's zakat amount will be given to a social institution to help meet their needs. If the remaining zakat money after deducting the part of the orphanage is Rp. 1.425.000, - and the price of gold is Rp. 900,000, - per gram, then how much gold does Mrs. Hanifah have?

Figure 10. An example of integration of faith values

In the development of the module, the integration of worship values lies in the story about helping family members and friends, and relatives who are affected by the disaster, where mutual help or ta'awun is one of the actualizations of Islamic teachings contained in the letter Al Maidah verse 2 as presented in Figure 11.



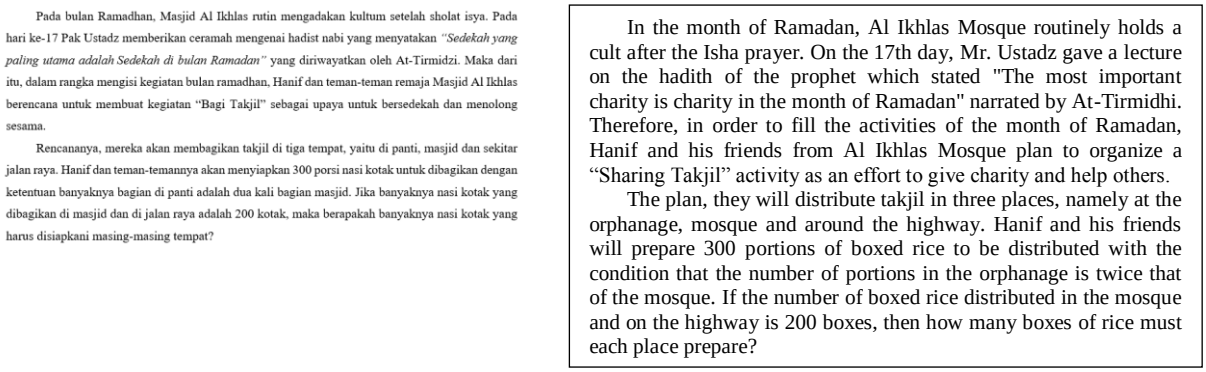
Sebagai upaya untuk berbakti kepada orang tua, pada hari minggu Ahmad pergi untuk membantu ayah dan kakeknya yang sedang menganyam keranjang. Jika ayahnya bersama kakeknya bekerja bersama-sama, mereka dapat menyelesaikan sebanyak 9 keranjang. Jika Ahmad dan ayahnya, mereka dapat menyelesaikan sebanyak 7 keranjang. Dan jika Ahmad bersama kakeknya saja, maka mereka dapat menyelesaikan 6 keranjang. Jika mereka bertiga menganyam bersama-sama, berapakah keranjang yang dapat diselesaikan?

In an effort to serve his parents, on Sunday Ahmad went to help his father and grandfather who were weaving baskets. If his father and grandfather work together, they can complete as many as 9 baskets. If it is Ahmad and his father, they can complete as many as 7 baskets. And if Ahmad is with his grandfather alone, then they can complete 6 baskets. If the three of them weave together, how many baskets can be completed?

Figure 11. An example of the integration of worship values in the module

Furthermore, integrating moral values in the mathematics module based on a contextual approach covers almost all story questions. Every action based on obedience, both in faith and

worship, will form good behavior or be called akhlakul karimah. One of the integrations of moral values is presented in Figure 12.



Pada bulan Ramadhan, Masjid Al Ikhlas rutin mengadakan kultum setelah sholat isya. Pada hari ke-17 Pak Ustadz memberikan ceramah mengenai hadist nabi yang menyatakan *"Sedekah yang paling utama adalah Sedekah di bulan Ramadan"* yang diriwayatkan oleh At-Tirmidzi. Maka dari itu, dalam rangka mengisi kegiatan bulan ramadhan, Hanif dan teman-teman remaja Masjid Al Ikhlas berencana untuk membuat kegiatan "Bagi Takjil" sebagai upaya untuk bersedekah dan menolong sesama.

Rencananya, mereka akan membagikan takjil di tiga tempat, yaitu di panti, masjid dan sekitar jalan raya. Hanif dan teman-temannya akan menyiapkan 300 porsi nasi kotak untuk dibagikan dengan ketentuan banyaknya bagian di panti adalah dua kali bagian masjid. Jika banyaknya nasi kotak yang dibagikan di masjid dan di jalan raya adalah 200 kotak, maka berapakah banyaknya nasi kotak yang harus disiapkani masing-masing tempat?

In the month of Ramadan, Al Ikhlas Mosque routinely holds a cult after the Isha prayer. On the 17th day, Mr. Ustadz gave a lecture on the hadith of the prophet which stated "The most important charity is charity in the month of Ramadan" narrated by At-Tirmidhi. Therefore, in order to fill the activities of the month of Ramadan, Hanif and his friends from Al Ikhlas Mosque plan to organize a "Sharing Takjil" activity as an effort to give charity and help others.

The plan, they will distribute takjil in three places, namely at the orphanage, mosque and around the highway. Hanif and his friends will prepare 300 portions of boxed rice to be distributed with the condition that the number of portions in the orphanage is twice that of the mosque. If the number of boxed rice distributed in the mosque and on the highway is 200 boxes, then how many boxes of rice must each place prepare?

Figure 12. An example of integration of moral values

The results show that this research has succeeded in developing a Mathematical Module Based on a Contextual Approach that is Integrated with Islamic Values in a valid Three-variable Linear Equations System. Krismasari (2016) states that the module is one of the teaching materials that can be adapted to students' circumstances and can describe something abstract, such as pictures, photos, graphics, and others. Based on research Kurniati (2016), learning resources used in several Madrasahs and Integrated Islamic schools are only in the form of textbooks that emphasize giving concepts to students, without the students themselves building the idea and not being integrated with Islamic values. Furthermore, Masynaeni (2020) revealed that there were several problems experienced by students in the material for a Three-variable Linear Equations System, such as not being able to determine the variables to be used, turning story questions into mathematical models, many students forgetting to conclude story questions, and students are also still lacking in performing mathematical operations.

Developing a mathematics module based on a contextual approach that integrates Islamic values into the material of a Three-variable Linear Equations System is an effort to help teachers and students in the learning process. Mahu, Ratumanan, and Tamalene (2020) argues that a contextual approach is an approach that emphasizes the process of full student involvement to be able to find the material being studied and relate it to real-life situations to encourage students to be able to find the material being studied and connect it to their life situations. The context used in this module is stories that occur in students' daily lives, such as in measurement, economic activities, calculation of zakat, and social activities both at home, school, and in the community. Meanwhile, Islamic values in this module include the values of faith, worship, and moral values integrated with contextual issues.

CONCLUSION

Based on the research results that have been described previously, it can be concluded that the mathematics module based on a contextual approach that integrates Islamic values in the material of a Three-variable Linear Equations System is declared valid based on the assessment of the expert validator, which indicates that the module is included in the "good" qualification with an average value. There was an average of 83.40% by material expert validators and included in the "good" qualification with an average value of 87.5% by media expert validators. Thus, the mathematics module based on a contextual approach that integrates Islamic values in the material of a Three-variable Linear Equations System is declared valid.

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