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Development of student worksheets based on STEM and religion in digestive system materials

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ABSTRACT

Integration of STEM (Science, Technology, Engineering, and Mathematics) with religious values in learning is important to do so that material can be conveyed more thoroughly in aspects of students' lives. So, this study aims to: first, produce and describe STEM-Religion-based worksheets on digestive system materials; second determine the feasibility level of the worksheet developed. This research method uses research and development methods using Analysis Design, Development, Implementation, and Evaluation (ADDIE) model. The results of this study are: first, elements of science were developed in the matter of nutritional content, elements of technology were developed in material processing technology and food safety, elements of engineering were developed in the process of designing healthy menus, mathematical elements were developed by calculating calorie needs and food preparation costs. The addition of religion element is divided into 3 sub-topics, namely the topic of the concept of *halalan thayyiban* food, eating and drinking etiquette according to Islam, and eating portions in Islam. Second, the average product assessment by validators on a scale of five obtained a score of 4.2 with a very good category, so it can be concluded that the developed worksheet is feasible to use.

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INTRODUCTION

Mastery of science and technology is one of the main keys for a nation to achieve progress. Mastery of qualified science and technology can improve various areas of people's lives, both in terms of economy, health, social, and so on. Therefore, education has an important role to try to make it happen by providing knowledge and technology to students directly through learning at school, one of which is through learning the family of science subjects.

STEM learning according to Tsupros is learning that is characterized by an interdisciplinary approach, in which students learn science, technology, engineering, and mathematics in a real-life context by trying to relate material at school, the world of work, and the global world so that they are able to compete in new economic era (Winarni et al., 2016: 978). With the development of critical thinking, problem-solving, teamwork, communication, and empathy, STEM is a multidisciplinary integrated approach that solves local and global concerns (Eckert & Butler, 2021). This is what makes STEM-based learning promoted in many countries with the aim of preparing its citizens to have multidimensional abilities in the fields of science and technology needed in modern life (Pimthong & Williams, 2020: 1). The STEM-based learning process can promote critical thinking in students and highlight the best advancements in biology education for improved learning outcomes in terms of students' cognitive development (Zb et al., 2021: 94).

In addition to adequate mastery of science and technology, good character in society is important in building a nation. People who have good character will support the creation of a stable country. The implementation of character education can be done through science learning, this is because in science learning besides there are aspects of scientific products and processes, there are also aspects of scientific attitudes (Sayekti, 2015: 145). In science learning, a scientific attitude is needed by students in conducting scientific investigations or searches, practicum, or doing other scientific work. According to Sainab & Herna (2022, p. 51) the process of searching and self-discovery of answers to existing questions or problems is an active involvement of students who can develop scientific attitudes (characterized behavior). A scientific attitude is needed by students in conducting scientific investigations, practicum, and doing other scientific work. Students need to have attitudes and characters like scientists such as being honest, objective, diligent, not easily discouraged, and various other positive attitudes so that they will be successful in conducting science experiments or practicums.

Character building through education can be done by integrating religious values into learning. Universal moral values of religion should be used as the basis as a basis for implementing character education, including in learning the natural sciences (Sahroni, 2015: 115). Religion is one of the elements that shape the behavior of its people. Psychologically, religion gives encouragement inside and outside oneself in one's behavior. The impulse that comes from religious beliefs is believed to have more power than other motives (Amran, 2015: 24). In Islam, there are teachings about the etiquette of consuming food as in Surah al-A'raf verse 31, which recommends not to overdo it in consuming food. According to Imam Syafi'i (a scholar who is the reference for the majority of Muslims in Indonesia), *halal* is something that has no evidence or agreement that forbids it (Thabrani, 2014: 57). So, in the context of food, halal means food that is permissible for consumption by Muslims. While *thayyiban* means good. In the context of food, the food is beneficial for health and does not cause harm when consumed (Fitriani, 2022: 55). So *Halalan Thayyiban* food can be interpreted as food that is not prohibited and also has good health value when consumed.

Competence of knowledge and skills of the digestive system material required of students at the high school level according to Regulation of Indonesian Ministry of Education and Culture No. 37 of 2018, namely: basic competence 3.7 "Analyzing the relationship between the structure of the tissues that make up the organs in the digestive system in relation to nutrition, bioprocesses and functional disorders that can occur in the human digestive system" and basic competence 4.7 "Presenting reports on test results of food substances contained in various types of ingredients food is related to the energy needs of each individual as well as food processing technology and food safety" (Mendikbud, 2018).

Teaching materials are one of the learning devices that exist in the learning process. Through teaching materials, students can absorb the knowledge presented in it. Therefore, teaching materials

should not only contain information in the form of concepts or facts, but also must contain certain visions and values so that they become more meaningful when used by students. One of the learning materials that are commonly used in schools is the Student Worksheet. Student worksheets is a teaching material that contains a summary of material from several relevant books makes it easier for students while saving time in learning when used (Barlenti & Hasan, 2017: 83). Yunitasari (2013, p. 10) divide the student worksheet components consisting of titles, study instructions, learning indicators, supporting information, work steps, and assessments. Without the proper strategy, student worksheets cannot stand alone, and the learning model cannot be adequately applied since it enables teachers to carry out efficient learning and engage students in the learning process (Nurjanah et al., 2022: 168). Therefore, the STEM model which is added with religion becomes the main framework of this developed student worksheets.

Research that has relevance to this research plan has been carried out by Sianturi, Amelia, & Asikin, (2020) with the title "Validity of Student Worksheets (LKPD) Oriented to Science, Technology, Engineering, Mathematics (STEM) Approaches on Digestive System Materials for Class XI SMA". This study aims to develop and assess the validity of the STEM approach-oriented worksheets on the digestive system material, by showing the results that the developed worksheets are very valid. The similarity with this research is that they both develop Biology worksheets on the material of the digestive system using the STEM approach. While the difference is, this research plan will be added with elements of the Islamic religion, which will be integrated with religious values related to the digestive system.

Other relevant research has been done by Latifah, Setiawati, & Basith (2016) with the title "Development of Student Worksheets Oriented to Islamic Religious Values through a Guided Inquiry Approach on Temperature and Heat Material". This research uses an inquiry approach, where the inquiry approach is one element of STEM, so this study will develop previous research on the STEM approach. The similarity with this research is that they both develop student worksheets which includes Islamic religious values. The study showed the results that the student worksheets developed was declared valid by experts and received a high response by students.

Based on the results of preliminary research that has been carried out through observation, there has not been found a learning device that combines STEM and Religion on the material of the digestive system. Based on this and the background that has been written, this study aims to: first, describe the development of student worksheet based on science, technology, engineering, mathematics, and religion on the material of the digestive system; second, determine the feasibility level of student worksheet based on science, technology, engineering, mathematics, and religion in the developed digestive system material.

RESEARCH METHODS

Research Design

This research method uses research and development (R&D) methods. It is a process or steps to develop a new product or improve an existing one that can be accounted for (Sukmadinata, 2017). The development model used is the Analysis, Design, Development, Implementation, and Evaluation (ADDIE). Branch (2009) mentioned that the ADDIE model design is a design about stages that refer to Analysis, Design, Development, Implementation, and Evaluation developed by Dick and Carry (Wulandari, 2019: 168).

Population and Samples

The population used in this study were students of class XI Natural Sciences MAN 1 Pekalongan City, totaling 210 students who were grouped into 6 classes. While the determination of the sample used to implement the STEM-R worksheet product was carried out using a simple

random sampling technique, namely the sample was taken randomly. The choice of this technique is because the population is considered homogeneous (Sugiyono, 2021: 149). The selected sample is students of class XI Natural Sciences 1 totaling 35 students.

Instruments

The data collection instrument used in this study was the student worksheets validation sheet. This validation sheet is used to validate the developed student worksheets. The validators in this study consisted of material expert validators, learning media experts, Islamic studies experts, and biology teachers. The student worksheets assessment sheet is prepared by taking into account aspects of the assessment of teaching materials, namely aspects of content feasibility, presentation, graphics/appearance, language suitability, suitability with the STEM approach, and suitability of integrated religious values. Another instrument is the student response questionnaire sheet to the developed student worksheets products and the learning process. Indicators of student response questionnaires to student worksheets consist of aspects of eligibility, presentation, and language. The component of the student response questionnaire to the learning process consist of aspects of lesson plan implementation, process-based learning aspects, aspects of Nutrition Awareness Planting, and aspects of Model Science, Technology, Engineering, Mathematics, and Religion. These questionnaires are useful for obtaining data on student acceptance of the products being developed and the learning process as well as obtaining suggestions and input from students as users.

Procedures

The stages of development carried out are: a) Analysis (needs analysis to determine problems and appropriate solutions and determine student competencies); b) Design (composing the student worksheet framework, map of student worksheet needs and compiling an assessment sheet); c) Development (developing student worksheet according to the chosen learning approach); d) Implementation (testing the student worksheet, carrying out tests, and distributing response questionnaires); and e) Evaluation (performing analysis and correction of errors that occurred during the trial) (Cahyadi, 2019: 36). To make it easier to understand the flow of this research, the flow chart of this research procedure can be seen in Figure 1.

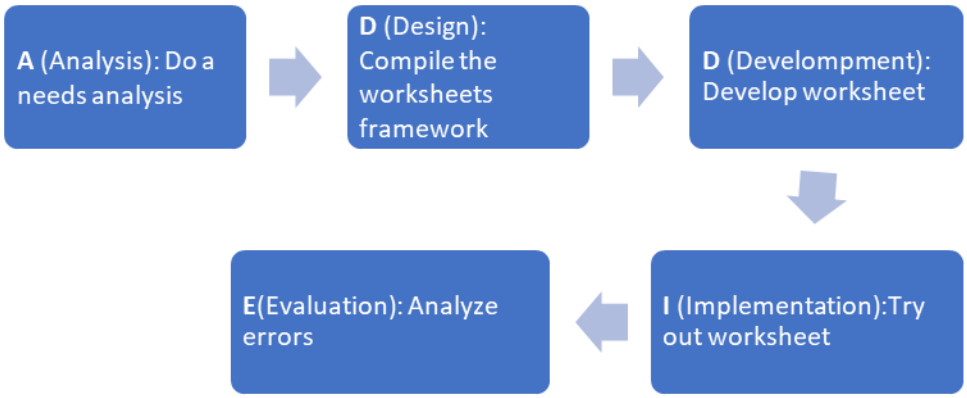

Figure 1. Research Procedure Diagram

Data Analysis

The results of the student worksheets validation by experts and teachers and also the results of filling out student response questionnaires to worksheets are in the form of scores and notes or input. Scores of the two assessment results is then averaged. The average score is then converted

using a scale of 5. According to Azwar (2012). The categorization of learning device assessment scores and assessment tools is presented in Table 1.

Table 1. Product Validation Score Conversion by Validator

Value	Interval Score	Category
A	4,05 < X	Very Good
B	3,35 < X ≤ 4,05	Good
C	2,65 < X ≤ 3,35	Enough
D	1,95 < X ≤ 2,65	Not Enough
E	X ≤ 1,95	Very Low

The product is said to be feasible or good if the value of the eligibility of the product by the validator is at least "B" in the good category.

RESULTS

The summary of the results of the validation of the feasibility of the student worksheets by expert lecturers and biology teachers after conversion refers to Table 1 is presented in Table 2.

Tabel 2. Student Worksheets Validation Result Score by Validator

Expert I	Expert II	Expert III	Expert IV	Teacher	Average
3.6	4.8	4.6	3.2	4.8	4.2

In addition to providing validation assessments, the validators also provide corrections, input, suggestions, and notes on student worksheets. These inputs become evaluation material for student worksheets improvement. The results of validation and input from the validator in the form of corrections, notes, and input are presented in Table 3.

Table 3. Student Worksheets Validation Results from Reviewers

Validator	Notes/Feedback/Correction/Conclusion
Validator I	1. The cover image seems to pile up untidy 2. The contrast on the cover is lacking 3. Instructions need to be detailed in the section on how to do it, in the third point the instructions are better placed at the beginning before entering the Student Worksheets, and also related to competence 4. Arabic text of the Qur'an or hadith should be displayed, not just the translation 5. Typographical errors, accuracy and consistency of language use are written directly on the document **Conclusion:** Worth using with revision
Validator 2	1. The summary of the material should be in the order of the Learning Objectives 2. In the summary of material regarding the digestive system in humans, a brief explanation of the tract should be adapted to the learning objectives, namely an explanation of the digestive process 3. In the summary of the material on the human digestive system, it is better to add a video link from youtube regarding the flow of the human digestive process to provide an understanding and real learning experience even though it is animated or virtual

	4. Pay attention to some of the prepositions that are still not correct according to the writing rules
	5. Pay attention to table naming especially for order
	6. Practice questions are adjusted to the learning objectives
	7. Pay attention to the writing of foreign words, Indonesian words and loanwords
	Conclusion: Worth using with revision
Validator 3	1. In general, in terms of material, presentation, appearance, and language are good. However, there needs to be a detailed explanation of STEMR and the location of S, T, E, M, R on the Student Worksheets. So that the reader is not looking for themselves.
	2. For religion, please add the verse and the connection of the verse with the digestive and STEM material itself so that students have meaning in studying the Student Worksheets and the digestive material.
	Conclusion: Worth using with revision
Validator 4	1. Additional Material:
	a. The term *halal* here means the type of food that is allowed to be consumed and not forbidden, whether it is haram lidzatihi (for example: carrion, blood, pigs, wild animals, fangs, sharp nails, amphibians, unclean animals, disgusting (khabaits), intoxicating food, etc.) as well as haram li ghairihi, for example: Animals Slaughtered For Offerings, Animals Slaughtered Without Reading Basmalah, Food Consumed in Excessive, Food Obtained By Haram, etc.
	b. The term *thayyiban* means all types of food that benefit humans because they meet health requirements (eg: nutrition, protein, hygiene, etc.) not unclean, not intoxicating, does not have a negative effect on physical and psychological health, and is obtained in a lawful way.
	2. Added material for the JPH Law (Law No.33 of 2014 concerning Halal Product Guarantee), the duties of the halal auditor in JPH include:
	a. Examine and review the materials used;
	b. Examine and review the product processing process;
	c. Examine and review the slaughter system;
	d. Researching product locations; researching equipment, production and storage space; check the distribution and presentation of products;
	e. Examine the halal guarantee system of business actors; and report inspection and/or test results to LPH.
	3. Additional material the effect of food on human life
	a. Affects physical growth and Intellect
	b. Affects Traits And Encourages Certain Behaviors
	c. Affecting Children To Be Born
	d. Affects the Acceptance or Rejection of Worship and Prayer
	e. Affects Life/Charity Scales in the Hereafter
	f. Why does Allah SWT remind people to consume Halalan Thoyyiban food or drink? Every food or drink consumed by humans will have an impact on physical and spiritual health, in addition to being one of the

	considerations for human fate in the hereafter, is it including the lucky or the unfortunate?
	Conclusion: Worth using with revision
Validator 5	It's good, just need to expand the material
	Conclusion: Worth using without revision

The next data is data about the results of filling out a questionnaire about students' responses to the student worksheets that has been developed. The questionnaire filled out by students has indicators consisting of aspects of feasibility, presentation, and language. The data on the results of the student response questionnaires can be seen in Table 4.

Table 4. Results of Filling Out Student Response Questionnaires

Device	Score	Category
Student Worksheet	4,43	Very Good
Learning Process	4,24	Very Good

In addition to filling out a questionnaire in the form of student response scores on the student worksheets, students also write notes, suggestions, or input on the student worksheets that was developed. As for the evaluation results from students in the form of corrections, notes, and input are presented in Table 5.

Table 5. Suggestions from Students

No.	Notes/Input/Correction Worksheets
1.	Image printing is a bit blurry
2.	Instructions for using Student Worksheets are too concise

DISCUSSION

The discussion of the development that has been carried out using the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) research and development procedure or stage are as follows (Cahyadi, 2019: 36).

Analysis Stage

At this stage the researcher analyzes the need for the development of teaching materials and analyzes the feasibility and development requirements. The stages of analysis carried out include two things, namely needs analysis and curriculum analysis.

Needs Analysis

Needs analysis is carried out by analyzing availability of teaching materials and the need to develop teaching materials that combine STEM and religious approaches. The results of the researchers' observations showed that there were no teaching materials that integrated STEM and religion in the digestive system material. Based on the results of preliminary interviews with biology teachers of MAN 1 Pekalongan City, Khaiqatun Nazili said that biology teaching materials that integrate STEM with Religion do not yet exist (personal interview, 2022), so integration of STEM and religion needs to be done so that students get more complete knowledge that is not only limited to STEM elements but also religious elements which are also important for forming knowledge and beliefs so that students have more good character. As stated by Ningsih et al., (2022, p. 569), that through the integration of science and religion, the learning process is more focused which can hone thinking power, increase the values of faith in God, become more religious

and intelligent. From the results of this needs analysis, researchers feel the need to develop teaching materials in the form of appropriate STEM and Religion-based worksheets.

Curriculum Analysis

Based on the results of an analysis of the contents of the 2013 curriculum, digestive system material is taught to class XI with Basic Knowledge Competency 3.7, namely "analyzing the relationship between the structure of the tissues that make up the organs in the digestive system in relation to nutrition, bioprocess, and functional disorders that can occur in the human digestive system", and Basic Competency Skills 4.7, namely "Presenting reports on the results of food substance tests contained in various types of food ingredients related to the energy needs of each individual as well as food processing technology and food safety" (Mendikbud, 2018). Based on the results of the curriculum analysis, the contents of the worksheet to be developed will adapt to these basic competencies.

Design Stage

Based on the results of the analysis that has been done previously, then the design stage is carried out by determining the elements needed in the student worksheets, the references used in developing the material in the student worksheets, and also the instruments used to validate the developed student worksheets. The following are the results of the design stage that has been carried out.

Student Worksheets

The student worksheets component consists of a Table of Contents, Instructions for Use, Basic Competencies, Achievement Indicators, Learning Objectives, Summary of Material 1: Food and Food Substances, Water, Food Additives, Food Processing Technology, Food Safety Technology, Human Digestive System, Digestive system disorders, Islamic Teachings on the Digestive System, Activity 1: Test the Content of Food Ingredients, Summary of Material 2: Energy Needs, Energy Balance, Maintaining Ideal Body Weight, Nutrition Management and a Balanced Food Menu, Activity 2: Calculating Daily Calorie Needs, Practice Questions, and References (Yuningsih, 2020).

Student Worksheet Assessment Sheet

The student worksheet assessment sheet is prepared by taking into account aspects of the assessment of teaching materials, namely aspects of the feasibility of content, presentation, graphics/display, language suitability, conformity with the STEM approach, and the suitability of integrated religious values.

Student Response Questionnaire

The student response questionnaire sheet was prepared with the aim of knowing the student's response to the student worksheets that had been developed and the learning process that had been implemented. Questionnaire indicators of student responses to student worksheets consist of aspects of feasibility, presentation, and language. Questionnaire indicators of student responses to the learning process consist of aspects of lesson plan implementation, process-based learning aspects, aspects of Nutrition Awareness Planting, and aspects of Model Science, Technology, Engineering, Mathematics, and Religion.

Development Stage

The development stage is the realization stage of product designs and research instruments that have been designed at the Design stage. The following are the results of the instrument development that has been carried out.

Student Worksheet

The development of STEM elements in the material of the digestive system is explained as follows. Elements of science are developed in the discussion of nutrition (nutrient content) and calorie needs. The element of technology is developed in using the internet to find information and discussions related to processing technology and food safety. Technical elements are developed in the process of calculating weight using a scale, designing food processing, designing healthy menus, and making food menu models. Elements of mathematics are developed in calculating calorie needs, and calculating the cost of preparing meals.

The thing that is of added value to this student worksheets compared to other STEM-based student worksheets is the addition of religious elements as an effort to instill character in students while at the same time distinguishing other STEM learning. The addition of the element of religion (religion) into the student worksheets is done by adding a topic of discussion with the title Islamic Teachings on the digestive system. This topic is divided into 3 sub-topics, namely, an explanation of *halal* and *thayyiban* food, etiquette of eating and drinking according to Islam, and the portion of food in Islam.

According to Imritiyah (2016), among the etiquette towards food and drink according to Islam are as follows: 1) Pray before and after eating; 2) Washing hands before and after eating; 3) Eat with the right hand; 4) Do not blow food; 5) Closing food and drink; 6) Do not criticize food, and 7) Do not eat and drink while standing.

In relation to food and drink, in the Qur'an there is the term *halalan thayyiban* which is contained in four letters, namely al-Baqarah verse 168, al-Maidah verse 88, al-Anfal verse 69 and an-Nahl verse 114. Halal means the food is not prohibited for consumption (*haram*). Meanwhile, *thayyib* means good food and drink (Nuraini, 2018: 92).

According to Setiawan (2020, p. 40) *Halal* and *Thayyib* food have four characteristics, namely: a) The food is halal in terms of substances, how to get it, and in terms of how to process it. b) The food must contain adequate and balanced nutrition for consumption. c) the food is consumed proportionally according to consumer needs, no more and no less. d) The food must be safe when consumed without causing harm.

The student worksheets is structured for two meetings. The first meeting discussed material on the content of food ingredients, the digestive system in the human body, and technology related to food processing. The second meeting discussed the material needs of energy, energy balance, maintaining an ideal body weight, nutrition management and a balanced diet, and activities to calculate daily calorie needs.

Student Worksheet Assessment Sheet

The components of the student worksheets assessment sheet developed consist of the identity of the assessor, introduction, instructions for filling out, aspects of the assessment (feasibility of content, presentation, graphics, and language suitability), notes/inputs, conclusions, and signatures.

Student Response Questionnaire Sheet

The components of the student response questionnaire to the student worksheets consist of instructions for filling out, assessment aspects (feasibility of content, presentation, language, and graphics), notes, and signatures. The component of the student response questionnaire to the learning process consist of aspects of lesson plan implementation, process-based learning aspects, aspects of Nutrition Awareness Planting, and aspects of Model Science, Technology, Engineering, Mathematics, and Religion.

Validation Results and Input from Validators on Student Worksheets

The average validator's assessment of the student worksheets does not have a large difference. The level of agreement is obtained from calculating the difference in the validator's assessment score. The size of the difference in assessment becomes a measure of the level of agreement on the feasibility of the device provided by the validator. If the difference in assessment is 1, it is said that the level of agreement is low, and if the difference is 1, it is said that the level of agreement is high.The difference in the assessment by the validator obtained is 0.32 so that it can be said that the level of agreement on the feasibility of "high" given by the validator to the student worksheets.

Implementation Stage

The student worksheets that has been developed is then applied to learning to get assessment and input from students. The data from the student responses questionnaire is needed to determine the practicality of the student worksheets that has been developed.

Evaluation Stage

At this stage an evaluation of the student worksheets developed and the learning process that has been implemented are carried out. The evaluation was carried out based on the input obtained from the validator and student response questionnaire sheets along with the observations made by the researcher. This evaluation aims to make the student worksheets developed and the learning process better and in accordance with the development objectives.

The assessment score given by the validator to STEM-R-based biology worksheet get results with an average score of 4.2 so that referring to Table 1 it is included in the very good category and it can be concluded that the validated STEM-R-based biology worksheet is feasible. The average validator rating for products does not have a large difference. The level of agreement is obtained from calculating the difference in the score of the validator's assessment. The magnitude of the difference in assessment is a benchmark for the level of agreement on the eligibility of the device provided by the validator. The difference in assessment $\geq$ 1 can be said to be a low level of agreement and the difference in assessment $\leq$ 1 can be said to be a high level of agreement. The difference in the assessment by the validator is 0.32 so that it can be said that the level of agreement on eligibility is "high" given by the validator for STEM-R-based biology worksheet.

The results of filling out the student response questionnaire to the STEM-R-based biology worksheet on the digestive system material after learning obtained a score of 4.43, and obtained a score of 4.24 for the applied learning process. Based on table 1, it is included in the very good category. Seeing the results of the questionnaire responses which have a very good category on the developed student worksheets and the learning process, this shows that students have a positive response to the developed student worksheets. Based on these results, it can be concluded descriptively that the STEM-R-based biological worksheets developed are practical.

The positive response of students to the developed student worksheets indicates that students have good motivation in using the developed STEM-R-based biological student worksheets. In the context of learning, motivation is the overall driving force in in students who encourage learning, ensure continuity of learning activities and which gives direction to learning activities so that the goals desired by students can be achieved (Daud, 2012: 249). Good motivation will have a positive relationship with the interests and learning outcomes of students. This positive attitude and motivation will certainly have an impact on good learning outcomes, as the results of Dimyati and Mudjiono's research (Budiariawan, 2019, p. 107) which states that someone who has high motivation in learning, the learning outcomes that will be obtained by that person will be better. Therefore, the use of STEM-R-based worksheets on the digestive system material developed is expected to contribute positively in improving student learning outcomes.

The last stage of this research process is to improve the STEM-R-based biological student worksheets according to the notes and input provided by the validator and students. Improvements are broadly grouped into repairs feasibility of content, presentation, graphics, and language suitability.

CONCLUSION

First, the development of STEM elements in the student worksheets material for the digestive system is explained as follows. Elements of biological science were developed in the discussion of nutrition (nutrient content) and calorie requirements. The element of technology is developed in using the internet to find information and discussions related to processing technology and food safety. Technical elements are developed in the process of calculating weight using a scale, designing food processing, designing healthy menus, and making food menu models. The mathematical element is developed by calculating calorie needs and calculating the cost of preparing food. The addition of the element of religion into the student worksheets is done by adding a topic of discussion with the title of Islamic teachings on the digestive system. The topic is divided into 3 sub-topics, namely, an explanation of thayyiban halal food, the etiquette of eating and drinking according to Islam, and the portion of eating in Islam. Second, the results of the assessment score with a scale of five on the feasibility of the STEM-R-Based student worksheets on the digestive system material by validator I was obtained at 3.6, validator 2 was 4.8, validator 3 was 4.6, validator 4 was 3.2, and validator 5 of 4.8. The average assessment by the validator is 4.2, so it can be concluded that the student worksheets developed is suitable for use in the very good category. The student worksheets that has been made also gets a positive response from students. This is evidenced by the student's assessment of the student worksheets which obtained a score of 4.43 in the very good category. Students' assessment of the learning process obtained a score of 4.24 which is also in the very good category.

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