Thabiea : Journal of Natural Science Teaching
Vol. 5(1), pp. 45-55, 2022
Available online at
http://journal.iainkudus.ac.id/index.php/Thabiea
p-issn: 2580-8474, e-issn: 2655-898X

Development of Modules Containing Islamic Values in Inquiry-Based Basic Physics Practicum

Arghob Khofya Haqiqi[1]*, Wakhid Fitri Albar[2], Zidni Azizati[3], Puryanti Soprihatin[4] Lia Duwi Aryani[5], Nailatus Sa'adah[6]

[1,4,5,6]State Islamic Institute of Kudus, Gondangmanis street No.51, Ngembalrejo, Kudus, CentralJava, 59322, Indonesia

[2]Semarang State University, Sekaran street, Sekaran Gunungpati Semarang, 50229, Indonesia

[3]Walisongo State Islamic University, Prof. Hamka street, Ngaliyan, Semarang, 50185, Indonesia

**Correspondence: arghobhaqiqi@iainkudus.ac.id*

Keywords:
Practicum
Module
Basic Physics
Inquiry
Islamic Values

Abstract

This study develops an inquiry-based practicum module that integrates Islamic values to increase students' independent learning for basic physics. The main goal is that the developed module will be valid and interesting. Research and development using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) is the type of this study. The implementation phase was conducted at two stages i.e. small group stage and the field group stage. The field group covered all of the population. While the instruments were a validation questionnaire and a student-attractiveness-response questionnaire. The questionnaires were intended for the product. The Islamic values include Qur'an Ayah, Hadith, Reflexion or Hikmah, Muslim Scientists, and Muslim Priests. The basic-physics-practicum module was validated by three experts who are a material expert with a final score (average score) of 3.8, a religious expert of 3.9, and a media expert of 3.5. The three validation results are included in the "Valid" criteria. About the response test, there were two tests, which are the small group test with an average acquisition of 3.27 and the field group test 3.30. The two response-test results are included in the "Very Interesting" criteria. Based on these results, it can be concluded that the product of the basic-physics-practicum module is valid and interesting so that it can be used for learning basic-physics practicum.

To cite this article:
Haqiqi, A. K., Albar, W. F., Azizati, Z., Soprihatin, P., Aryani, L.D., Sa'adah, N. (2022). Development Of Modules Containing Islamic Values In Inquiry-Based Basic Physics Practicum. *Thabiea : Journal of Natural Science Teaching*, 5(1), 45-55.

Introduction

Education, as an important field, which is useful for human life, will always exist throughout the ages. Various countries including Indonesia have continuously developed their countries' education to achieve an optimal quality as its important role in forming the character of a nation. Education is not only a benchmark for the progress of a nation, but also a relay of knowledge from the past, present, and future generations. According to Ki Hajar

Dewantara, education means an effort to catalyze the growth of character and the human mind. The educational efforts include providing teaching and learning, guidance, direction, and so on to achieve the goals of the education.

Practicum is a learning activity that aims to allow students to test and apply theories by utilizing laboratory facilities and other facilities (Khamidah & Aprilia, 2014). Thus, through the practicum process, the knowledge gained by students will be able to last longer by conducting their experiments than the knowledge obtained from books or information provided by others. The previous sentence emphasizes that first-hand experience will last longer than second-hand experience.

For achieving a well-conducted practicum. Arifin (1995) explained that in studying natural science material, it is necessary to have a guide that contains practicum objectives and steps, tools, substances, and observation sheets for practicum activities or usually referred to as a practical guide. The practical guide is expected to be able to direct students to do the correct practicum in conducting experiments/practice. This practical guide as teaching material is often called a practicum module. A module is a form of print-based teaching material which is designed for students to learn independently because the module is equipped with instructions for self-study (Asyhar, 2010).

One of the compulsory subjects in the Tadris IPA (natural sciences education) study program of IAIN Kudus is the basic-physics practicum. Subjects that are contracted in the third semester were considered quite difficult to follow. This was because students found it difficult to carry out practicum using the old practicum module. This is based on observations made by the author in November 2020, obtaining information through direct experience and interviews with lecturers and students of the basic-physics practicum of the study program Tadris IPA of IAIN Kudus. In the observation, students who carried out the practicum expressed their difficulties in experimenting. This was because the old modules are still lacking detailed guidance regarding the basic introduction of tools and materials in the practicum. Some theories which should be contained in the practicum module were also missing. The steps on the work procedure of the current module were difficult for students to understand. To sum up, the practicum module is not complete, moreover, it is regarded still in the form of a cookbook, so students tended to only follow what was written in the guidebook. Thus, it resulted that the learning becoming less meaningful. In addition, the absence of Islamic integration in the practical activities does not match the hallmark of IAIN Kudus as an Islamic religious college.

In terms of process skills, students who used the old practicum module were more likely to be less creative in carrying out the practicum. The practicum module which was like a cookbook led students to be passive in thinking creatively. Therefore, to overcome these problems, researchers took the initiative to develop the practicum module. The practicum module would be developed using a structured inquiry-based learning model which emphasizes the process of searching and finding.

The practicum module with a structured inquiry-based learning model is the right learning model because the inquiry-based learning model has several steps which are following practicum activities. The steps of inquiry are (1) orientation activities, (2) formulating problems, (3) formulating hypotheses, (4) collecting data, (5) testing hypotheses,

and (6) formulating conclusions. In addition, the inquiry learning model can train students in developing thinking skills through questions (Suyanti, 2010).

This module is developed using steps and words which are easy for students to understand. In addition, with the value of Islamic integration, students will have more insight into physics which comes from the Qur'an. Consequently, students can easily carry out the practicum process whose activities match the hallmark of academic activities at Islamic religious colleges. Recently, the model of integrating science with the Qur'an in learning has existed and has been widely developed. This is because mathematics is not an isolated knowledge, which can be perfect because of itself, but the existence of physics is needed by humans to assist in understanding and mastering religious, social, economic, and natural problems. Physics learning needs to be integrated with Islamic values so that there is no difference between general science and religious science so that it can give the impression of Islamic physics learning, increase students' intellectual and spiritual intelligence, and introduce the relationship between physics and Islamic values. Forms of integration include both providing arguments from the Qur'an and hadith in learning materials, and inserting a little history of Islam along with Muslim scientists and scholars who are relevant to the material. This is certainly very beneficial for students so that they can realize the educational goals which set out in national law UU no. 20 of 2003 concerning the National Education System which states that the purpose of national education is to develop the potential of students to become human beings who believe and fear God Almighty, become democratic citizens, and have a noble character such as healthy, knowledgeable, capable, creative, independent, and responsible.

This study aims to produce an inquiry-based practicum module for basic physics which integrates Islamic values. The benefits of this research are to produce an inquiry-based practicum module that integrates Islamic values in the basic physics practicum course for aiding students in carrying out the practicum process in the laboratory.

Method

The research method used in this research is research and development. The development carried out is in the form of creating an inquiry-based basic physics practicum module that integrates Islamic values to increase learning independence and students' religious attitudes. This research was conducted in the odd semester of the 2021/2022 academic year at the Tadris IPA study program, Faculty of Tarbiyah, State Islamic Institute (IAIN) Kudus.

This study uses a descriptive development model with the ADDIE development model. The ADDIE development model consists of five stages, as the name implies, which stands for Analysis, Design, Development, Implementation, and Evaluation. The analysis stage is to find out how the implementation of basic physics practicum learning at Tadris IPA (Science Education Study Program) of IAIN Kudus. One of the main instruments of the analysis stage is an interview to a basic physics practicum. After getting some aspects that should be analyzed thoroughly, we analyzed the respected aspects. Then, we design a product as the second stage. In the development stage, our products are validated by respected experts who consist of material experts, religious experts, and design experts. In this development, the stage might be their revisions. The revised product will be validated again which might result

from some other revisions. We would revise again, validated again, and so on until we reach a final product that meets all of the valid criteria. Next, we implement the developed products as the implementation stage. There are two stages of this implementation i.e. Small Group Design and Field Group Design. The small group consisted of 6 students who were randomly chosen from Tadris IPA while the field group was conducted to all of the students of Tadris IPA in which there are 2 classes in a total of 33 students. The last, we evaluate to get the response of student interest to the product of this development research.

The research design uses one class as the research sample. The samples of this research represent some objectives of this research which focuses on basic physics practicum. The experimental class was given treatment in the form of learning using the module. The test subjects of this research development product consisted of design experts, content/learning experts, and an expert for a field test and a small group test. The main instruments of this research were a validation questionnaire and a student-attractiveness-response questionnaire.

Results and Discussion

Based on the description of the research and development process which has been described above, it is obtained that the basic physics practicum module product is integrated with Islamic values based on the inquiry approach in the basic physics practicum form material. The product of the basic physics practicum module is certainly following the objectives of research and development of researchers. This basic physics practicum module was developed using the ADDIE development research model (Analysis, Design, Development, Implementation, and Evaluation).

The first stage in this development research is the analysis stage. The analysis phase was conducted to find out how the implementation of basic physics practicum learning at Tadris IPA IAIN Kudus was carried out. An interview has been used as the first instrument of this stage. We interviewed a lecturer of basic physics practicum. After the interview, it is concluded that there are some of the aspects which should be thoroughly analyzed i.e. student needs, curriculum, and student characteristics. Based on the results of the analysis of student needs, there are several considered things that students need in learning, such as a teaching material that can be used for independent study, integrated with Islamic values, easily accessible, and interesting. While the curriculum analysis resulted that the teaching materials prepared to refer to the IQF (Indonesian Qualification Framework) curriculum. The IQF curriculum contains core competencies, basic competencies, indicators, and learning objectives which contain 4 competencies, i.e., attitudes, knowledge, general skills, and special skills. Moreover, learning in the IQF curriculum is currently set to use an inquiry approach in the implementation of learning (Endang, 2020). Meanwhile, in the analysis of student characteristics, the results show that there are students in the Natural Sciences Study Program who are active and some are passive. Based on the three results of the analysis above, the researchers developed teaching materials in the form of a basic physics practicum module that was integrated with Islamic values based on an inquiry approach to the basic physics practicum material.

After conducting the analysis, the next stage is the design stage. In designing the product, researchers need 3 (three) applications, i.e., Canva, Microsoft Word, and Photoshop. The Canva app is used to design the front cover and back cover. While the Microsoft Word

application is used to design the appearance of the module and arrange the contents of the module according to its components. The components of this basic-physics practicum module are the front cover, editorial team, introduction, instructions for using the module (for lecturers and students), module characteristics, table of contents, introduction, activities before learning, apperception, history of discovery of basic physics practicum, Islamic learning motivation, learning activities by following the learning steps of the inquiry approach, insertions, summaries, post-learning activities, evaluations, answer keys, bibliography, and back cover. The module is designed using Calibri, Times New Roman, Cambria Math, Rockwell, and Algerian fonts. The various sizes of 10-20 are set according to the needs of researchers. While the basic colors of the module are green, white, and orange. This is what the module arrangement looks like (Figure 1 & Figure 2).

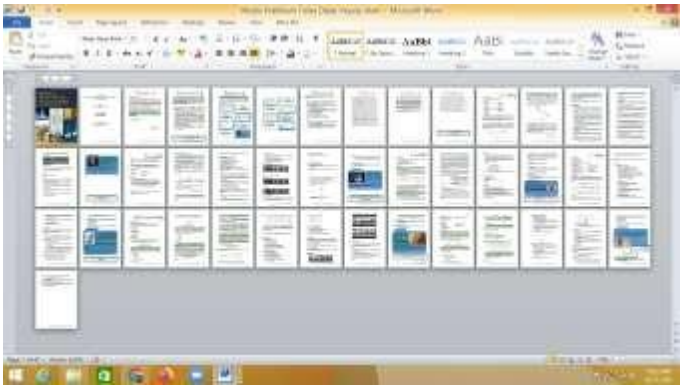

Figure 1. Module Arrangement View

Figure 2. Module Display

The third stage is developing the product of this development research. At this stage, the draft module will be validated by two experts which consist of material experts and religious experts. This validation test is useful for improving the quality of the module product to be better and more valid. The material expert validation test consists of two stages, i.e., the first stage and the second stage. The following is a tabulation of the results of material expert validation (Figure 3.)

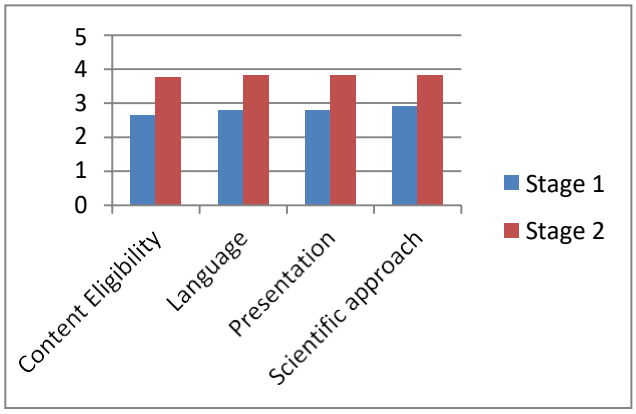

Figure 3. Graph of Material Expert Validity Test

In the first stage, it obtained an average score of 2.8 with the criteria of "quite valid" which had to be partially revised. After revisions were made to the parts of the material which were not quite right, the next step was the second stage of the material expert validation test. The second stage of the material expert validation test obtained an average score of 3.8 with "valid" criteria and no further revision needed. Consequently, the material expert validation test stops at the second stage. The reason behind the validity of the second stage of the test is that the modules on aspects of content assessment, language use, presentation, and preparation of the inquiry approach learning steps are as expected by the two validators. This is the same as the research results of Sepi Wulandari, et al., (2020) that the results of valid material expert validation tests can be used in learning because the material presented is following the expected learning objectives so that it is feasible to implement.

In the validation test, religious experts obtained an average value of 3.9 which has "valid" criteria, so there is no need to do a second religious expert validation test. The religious expert validation test resulted valid criteria because the module has contained Islamic values in the form of aqidah values and moral values in their learning activities. The detailed Islamic values are Qur'an Ayah, Hadith, Reflexion or Hikmah, Biography of Muslim Scientists which are related to the respected topics, and quotes from Muslim Priests. Some of the Qur'an Ayah are like Q.S. al-kahfi (18: 96) which discusses heat, Q.S. Al-Baqarah (2: 22) about fluids, and other Qur'an Ayah such as Q.S. Aljatsiyah (45: 22), Q.S. Al- Anfaal (8: 2), Q.S. Al-Baqarah (2: 19), Q.S. An-Nur Ayat (24: 40), etc. which are related to various physics concepts which are being learned by the students. Quotes from Muslim Priests such as Imam Syafi'I, Imam Malik, Abdurrahman Wahid, Al-Ghazali, Sufyan bin Uyainah, Hasan al-Bashri, etc. and introduction and biography of Muslim Scientists such as Abbas Ibn Firnas, Al-Battani, Ibnu al-Nafis, Muhammad bin Zakariya ar-Razi, Ibnu Sina/ Avicenna, Muhammad bin Musa Al-Khawarizmi, etc. have been successfully integrated to the module with beautiful design. The religious experts concluded that the integration of the Islamic values could be said to cover all of the complexity of Islam views in the related basic-physics topics. Moreover, the designs are amazingly executed by putting special places to the Islamic values. This result is following the research resulted by Mulia Diana, et al., (2018) who stated that the validity of the religious expert validation test means that the research product has met the required criteria in terms of integrating material with religious values. Thus, the module can be used for classroom learning.

Meanwhile, the media validation test consists of two stages, i.e., the first stage and the second stage. The tabulation of the results of media expert validation is presented in the following Figure 4.

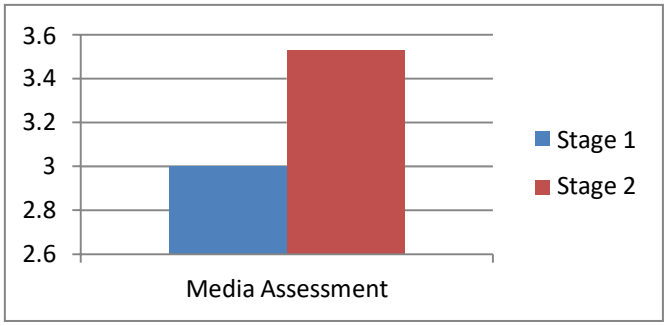

Figure 4. Media Expert Validity Test Results

The first stage of the media expert validation test obtained an average value of 3 which had the criteria "quite valid", so a partial revision was necessary. This partial revision of the media aspect improves the module in terms of the media, namely how to use and display the module product. After the module is repaired, the next step is the second media expert validation test. The second media expert validation test obtained an average value of 3.5 which had "valid" criteria, so the media expert validation test stopped at the second stage. The validity of the second stage of the media expert validation test is because the module has met the aspects of good media assessment according to the two relevant media expert validators. This is the same as the research results from Edi Wibowo and Dona Dinda Pratiwi which are valid in the media expert validation test. This means that the resulting electronic-based research development product is feasible and can be used for learning. Thus, the research development product in the form of a basic physics practicum module has been valid in 3 (three) aspects, namely material, religion, and media so that it is feasible and can be used for learning basic physics practicum.

The next stage is the implementation stage which contains a response test of student interest in the product of the basic-physics practicum module. The following is an explanation of the student attractiveness response test results:

1) Small-Group Test

   The number of respondents in the small-group test is 6 students. The small group test got an average value of 3.27 which was included in the "Very Interesting" criteria.

2) Field-Group Test

   In the field-group test, there were 33 students. The field group test got an average value of 3.30 which had the criteria of "Very Interesting".

The following is a graph of the average score obtained from the small group test and field group test (Figure 5.)

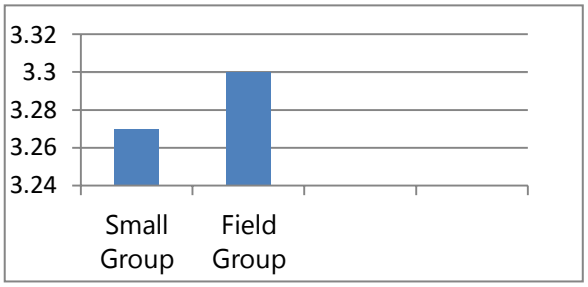

Figure 5. The Result of the Attractiveness Response Test Module

The last stage of this development research is the evaluation to find out the response of student interest to the product of this development research. The technique used at this stage is to use a product attractiveness response questionnaire consisting of 20 questions. In creating the questionnaire, researchers used Google Forms to make it easier for students to fill out. This implementation stage consists of two tests, i.e., the small group test and the (large) field group test. The small group test conducted on 6 students obtained an average score of 3.27 which has the criteria of "very interesting". Meanwhile, the field group test was conducted on a class of 33 students. In this field group test, the average score is 3.30 which has the criteria of "very interesting". The difference between both tests is 0.03. Based on the results of the average score of the small group test and the field group test, the research product in the form of this module is very interesting and suitable for learning. In the results of research Moch. Asyroful Minan (2017) also stated that the module with Islamic values and an inquiry approach is very effective for use in learning and can improve students' spiritual attitudes.

Based on the stages which have been carried out, the product of this development research is in the form of an electronic basic physics practicum module which is integrated with Islamic values based on an inquiry approach. The presentation of this inquiry module can make it easier for students to learn anytime and anywhere. Moreover, the contained Islamic values consist of Islamic motivation, aqidah values, and moral values which are integrated with their learning activities. The detailed Islamic values are Qur'an Ayah, Hadith, Reflexion or Hikmah, Biography of Muslim Scientists which are related to the respected topics, and quotes from Muslim Priests. All Islamic values have been wonderfully integrated into the module. To sum up, the Islamic values and the inquiry have been successfully validated and evaluated.

Learning basic physics practicum requires prerequisites in the form of continuity with other (learning) materials. This does not rule out the possibility to integrate basic physics practicum learning with religious values. The integration of basic physics practicum material with Islamic values is very much needed in religious-based schools. Materials that are integrated with Islamic values can provide better effects and learning outcomes than learning which only provides pure-science material. This is supported by the research of Nurhamdiah, et al. (2020) which states that basic physics practicum teaching materials integrated with Islamic values based on the inquiry approach are very practical to develop student character. So that learning material in the form of basic physics practicum with the integration of Islamic values can be a memorable lesson for students. Moreover, it suits the national goal of our education which is to foster students' character.

In addition to integrating the material with religious values, learning steps are also important in the preparation of the module. These integrating results support some of the previous researches such as Mulia Diana, et al., (2018), Moch. Asyroful Minan (2017), and Haqiqi and Albar (2019). This basic physics practicum module uses inquiry approach learning steps. Learning by using the steps in the inquiry approach can develop students' creativity, critical thinking, and the ability to give opinions. In addition, the inquiry approach can also catalyze student enthusiasm to participate in the teaching and learning process. There are several inquiry patterns, this research supports the pattern that we chose from various patterns which were analyzed by Pedaste M, et. al. (2005).

The advantage of this development research is that it produces teaching material products that can be used for online learning which are independent, easily accessible, and interesting. The developed learning materials and activities are also integrated with Islamic values. In addition, the steps used in the learning activities use the inquiry approach learning steps. In the inquiry approach, there are five learning steps, i.e., Formulating problems for students to solve; Establishing a temporary answer or better known as a hypothesis; Looking for information, factual data needed to answer the problem; Concluding answers or generalizations; Applying conclusions/generalizations in new situations. So that this basic physics practicum module is also able to provide active and effective learning for students.

While the drawback is that the basic physics practicum module developed only consists of a few materials which only cover the second-semester material. So, it still needs to be more widely developed. However, even though there is a slight drawback, this basic physics practicum module can be used in learning basic physics practicum.

Conclusion

From the research, it can be concluded that this research produces a product of teaching materials, i.e., a basic physics practicum module based on an integrated inquiry into Islamic values. The product of development research in the form of a basic physics practicum module based on integrated inquiry Islamic values is concluded to be significantly valid. In the validity test related to the content, the average value of 3.8 is obtained which has the "Valid" criteria. In the validity test, religious experts obtained an average value of 3.9 which has the "Valid" criteria. The second media-expert validity test obtained an average value of 3.5 which has the "Valid" criteria. Thus, the final results of the three validity test experts are valid and suitable for use in classroom learning.

The results of the student's response to the basic physics practicum module based on integrated inquiry Islamic values are "Very Interesting". The attractiveness response test was carried out in small groups consisting of 6 students and field group tests consisting of 33 students. For the small group test, the average value is 3.27 which has the criteria of "Very Interesting". While the field group test obtained an average value of 3.30 which has the criteria “Very Interesting”.

Acknowledgment

The authors would like to thank the Research and Community Service (LPPM) of IAIN Kudus for providing financial support to this research.

References

Achmad Buchori, N. D. R. (2017). Pengembangan e-modul geometri dengan pendekatan matematika realistik di sekolah dasar, 26(1), 23–29.

Ahmadi, Abu dan Uhbiyati, Nur. 1990. Ilmu Pendidikan. Jakarta : Rineka Cipta

Arifin, M. 1995. Pengembangan Program Pengajaran Bidang Kimia. Surabaya: Airlangga University Press.

Asyhar, R. 2010. Kreatif Mengembangkan Media Pembelajaran. Jakarta: Gaung Persada GP Press.

Haqiqi AK, Albar WF (2019). Islamic Character in Science Learning for Madrasah Ibtidaiyah Students in the 4.0 Industrial Revolution Era, *International Conference on Science and Engineering 2019 (2) p 237*.

Khamidah, N dan Aprilia, N. 2014. Evaluasi Program Pelaksanaan Praktikum Biologi Kelas XI SMA Se-Kecamatan Umbulharjo Yogyakarta Semester II TahunAjaran 2013/ 2014. JUPEMASI-PBIO 1(1): 5-8.

Kusaeri. (2017). Historiografi Matematika. Yogyakarta: Matematika.

Lestari, E. T. (2020). Pendekatan Saintifik di Sekolah Dasar (Yogyakarta). Deepublish.

Majid Abdul. 2006. PerencanaanPembelajaran: Mengembangkan Standar Kompetensi Dosen. Bandung: PT Remaja Rosdakarya.

Mardiah, S., & Rinaldi, A. (2018). Pengembangan Modul Pembelajaran Matematika Berbasis Etnomatematika Menggunakan Metode Inkuiri Matematika, 1(2), 119–126.

Minan, Moch. Asyroful. "Pengembangan Modul Matematika Bernuansa Islami Dengan Pendekatan Saintifik Pada Materi Pokok Aritmatika Sosial Peserta Didik Kelas VII MTsN Brangsong Kendal" (2017).

Mulia Diana, Netriwati, dan F. I. S. (2018). Modul Pembelajaran Matematika Bernuansa Islami dengan Pendekatan Inkuiri. Desimal:Jurnal Matematika, 1(1), 7–13.

Musdalifah, dkk, 2018. Pengembangan Penuntun Praktikum Biologi Terintegrasi Nilai-Nilai Keislaman di MAN 1 Makassar. http://eprints.unm.ac.id

Mustaqim, dkk. 2015. Pengembangan Modul Praktikum Berbasis Multimedia Interaktif Pada Praktikum Elektronika Dasar I Materi Dioda Ii Mahasiswa Pendidikan Fisika UIN Walisongo Tahun 2015. Semarang : UIN Walisongo (skripsi)

Nihayati, S. (2020). Integrasi Logika Matematika dalam Ayat-Ayat Al-Qur'an dengan Nilai-Nilai Akhlak. Jurnal Edumath, 6(1), 40–47.

Nurhamdiah, Maimunah, dan Yenita Roza. "Praktikalitas Bahan Ajar Matematika Terintegrasi Nilai Islam Menggunakan Pendekatan Saintifik." Jurnal Cendekia: Jurnal Pendidikan Matematika 04, no. 01 (2020): 193–201.

Pedaste M, et. al. (2015). Phases of inquiry-based learning: Definitions and the inquiry cycle, *Educational Research Review 14 (2015) 47–61*.

Prastowo, Andi. 2012. Panduan Kreatif Membuat Bahan Ajar Inovatif. Yogyakarta: Diva Press

Pratiwi, E. W. dan D. D. (2018). Pengembangan Bahan Ajar Menggunakan Aplikasi Kvisoft Flipbook Maker Materi Himpunan. Desimal:Jurnal Matematika, 1(2), 147–156.

Rara Seruni, Siti Munawaroh, Fera Kurniadewi, M. N. (2019). Pengembangan modul elektronik (e-modul) biokimia pada materi metabolism lipid menggunakan flip pdf professional. JTK: Jurnal Tadris Kimia, 1(Juni), 48–56.

Santi Budiarti, Murbangun Nuswowati, da E. C. (2016). Guided inquiry berbantuan e-modul untuk meningkatkan keterampilan berpikir kritis. Journal of Innovative Science Education, 5(2), 144–151.

Schleicher, A. (2018). PISA 2018 Insights and Interpretations. Retrieved from https://www.oecd.org/pisa/publications/PISA2018_CN_IDN.pdf

Suyanti, R.D. 2010. Strategi Pembelajarn Kimia. Yogyakarta: Graha Ilmu

Suyanto, S. (2018). The Implementation of The Scientific Approach Through 5Ms of The Revised Curriculum 2013 in Indonesia. Cakrawala Pendidikan, 37(1), 22–29.

Syafril, Z. Z. (2017). Dasar-Dasar Ilmu Pendidikan. Jakarta: Kencana.

Wulandari, S., Febrini, D., & Syafri, F. S. (2020). Pengembangan Modul Matematika yang Terintegrasi Nilai-Nilai Islam Berbasis Pendekatan Saintifik pada Materi Himpunan. Jurnal Equation: Teori Dan Penelitian Pendidikan Matematika, 3(2).

Yuliana, N., Pratiwi, D. D., Anwar, S., Matematika, P., Islam, U., & Lampung, N. (2018). Pengembangan Media Interaktif Matematika Berbasis Macromedia Flash, 3(November), 50–60.

Zulpah, M., & Nesa, Z. (2019). Tanggapan Siswa Mengenai Implementasi Nilai-Nilai Islam dalam Pembelajaran Matematika, 0812(50), 61–68.