Development of Contextual Learning-Based E-Module in Elementary School

Ridho Agung Juwantara[1*], Ambyah Harjanto[2], Akhmad Sutiyono[3], Dwi Utari[4]
[1,2,3,4]STKIP PGRI Bandar Lampung, Indonesia

*Correspondence address: ridhoaj57@gmail.com

Abstract

This research was motivated by the unavailability of contextual learning-based E-Modules in Civic lessson for Class IV Student of Insan Mandiri Elementary School at Bandar Lampung, so teaching and learning activities in class are still lacking in variety. E-Module are important for students to use because they make learning easier. A contextual approach is used to help student learn by associating learning material with the life around. The research method of this study used Development Research with the ADDIE model. Questionnaires, interviews, tests as data collection tools. This research is analyzed and explained with numbers and descriptive. Based on the results of the research, the material validation results were 83%, language validation was 93%, and design validation was 91%. The results of the teacher's response test were 78% and the student's response test was 80% in the "Decent" category. The effectiveness test obtained an average of 91 in the "Very High" effectiveness category. This research shows that the development of Civics E-Module teaching products based on contextual learning is urgently needed and deserves to be disseminated.

Keywords: Civic Education, Contextual learning, E-Module.

Abstrak

Penelitian ini dilatarbelakangi belum tersedianya E-Modul berbasis pembelajaran kontekstual pada mata pelajaran PKn bagi Siswa Kelas IV Sekolah Dasar Insan Mandiri Bandar Lampung, sehingga kegiatan belajar mengajar di kelas masih kurang variasi. E-Modul penting untuk digunakan siswa karena mempermudah pembelajaran. Pendekatan kontekstual digunakan untuk membantu siswa belajar dengan mengaitkan materi pembelajaran dengan kehidupan di sekitarnya. Alat bedah dalam penelitian ini menggunakan Development Research dengan model ADDIE. Kuesioner, wawancara, tes sebagai alat pengumpulan data. Penelitian ini dianalisis dan dijelaskan dengan angka dan deskriptif. Berdasarkan hasil penelitian diperoleh hasil validasi materi sebesar 83%, validasi bahasa sebesar 93%, dan validasi desain sebesar 91%. Hasil tes respon guru sebesar 78% dan tes respon siswa sebesar 80% dengan kategori "Layak". Uji keefektifan diperoleh rata-rata 91 dengan kategori keefektifan "Sangat Tinggi". Penelitian ini menunjukkan bahwa pengembangan produk ajar E-Modul PKn berbasis pembelajaran kontekstual sangat dibutuhkan dan layak untuk disebarluaskan.

Kata kunci: *Pembelajaran Kontekstual, E-Modul, Pendidikan Kewarganegaraan*

INTRODUCTION

Citizenship Education is a subject that is quite important for students because it contains values and moral education to increase knowledge and develop the ability to understand, live and believe in the values of Pancasila as a guideline for behavior in the life of society, nation and state, so that they become responsible citizens and reliable as well as providing the ability to learn further (Pradnyani, 2017).

Based on the results of observations and interviews with Civics teachers in grade IV Insan Mandiri Elementary School of Bandar Lampung, it is known that the Civics learning process only uses conventional methods which are still teacher-oriented, and textbooks. For example, the teacher only uses the lecture method or gives assignments in the textbook, that's not good (Dehyadegary, 2018). Likewise discussion activities carried out in groups are very rarely carried out, so that the exchange of knowledge from students who know to students who do not know is very small (Ilyas, 2019). Seeing this situation, students feel that they are not getting new experiences in the learning process, so that the learning activities carried out by students become less than optimal (Rangkuti, 2019)

Based on the results of the analysis of the needs for teaching materials used at Insan Mandiri Elementary School, it can be seen that the printed teaching materials provided by the school have not been developed by the teachers themselves. In terms of the material contained in textbooks, it also tends to be too universal and abstract, not concrete, so it does not yet function to stimulate and condition the growth of student learning experiences (Hidayah et al., 2021; Sitorus, 2019). Based on the analysis in terms of presentation, the textbooks used do not support the learning process, so that the learning substance is not implemented and student-centered (Fonda, 2018).

To overcome these problems, it is necessary to innovate teaching materials in the form of textbooks that are developed with several technological features (Tsai, 2018). One of the innovations is to create E-modules that can help the learning process and solve problems experienced by educators and students in the learning process (Syahrial, 2020). E-module development needs to be combined with learning models that suit the needs of students (Maria, 2022). The learning model that suits the needs of students is the Contextual learning model which is related to real things that are found in everyday life (Nitiaroza, 2018). The learning e-module with Contextual Teaching and Learning will be made as attractive as possible, such as adding variations in the form of questions and variations in activities that make students mingle with friends or the community (Nita Sunarya, 2018). Also added a variety of supporting images and video links so that students can visualize the meaning of learning (Inanna, 2021). The material will also be adapted to the characteristics of students in real life or everyday life (Eha, 2022). The e-Module that will be created will be specifically for Civics learning for class IV on Theme 9 Kayanya Negeriku Sub-theme 1 Kekayaan Sumber Energi in Indonesia. The relevance of this Civics material is identifying the implementation of obligations and rights as citizens in everyday life, so that this contextual learning becomes appropriate (Saad, 2019). Teaching materials in the form of Contextual-based modules are used by researchers because they are believed to provide many benefits to students, one of the benefits of which is to support student learning activities both at school, at home, or anywhere (Toni, 2020).

E-module is an electronic module whose access is carried out through electronic devices such as computers, cellphones, tablets (Erni et al., 2021; Najuah, 2022). E-modules or electronic modules are modules in digital form, consisting of text, images, or both which contain digital electronic material accompanied by simulations that can and are appropriate for use in learning (Nurhasnah, 2020; Ulliyah et al.m 2023). The e-module is considered more innovative because it presents the material in its entirety, especially now that students often open their cellphones instead of books (Dafit, 2021). The electronic module is an electronic version of a printed module that can be read on a computer and designed with the necessary software (Wibowo, 2018). The electronic

module also contains a variety of materials, methods, limitations and ways of evaluating that are designed systematically and interestingly to achieve competence according to electronic difficulties (Mahayukti, 2013). E-modules are designed according to the curriculum and are made in the form of non-printed teaching materials with displays using electronic devices such as computers or Android (Ganefri, 2019). Student independence is preferred in the use of E-Modules (Parmiti, 2020).

Contextual teaching and learning approach is a conception of learning that helps students and teachers relate subject content to actual situations and motivates students to make knowledge connections with application in their lives as family members, citizens, and workers (Bustami, 2018; Bujuri et al, 2022). The contextual approach itself has several implementation components including students directed to think constructivism, inquiry, asking, learning community, modeling, reflection, authentic assessment (Hermiwati , 2021). In line with that, according to (Rusman, 2021) the Contextual teaching and learning approach is a learning concept that can help teachers relate the material taught to students' real-world situations and encourage students to make connections between the knowledge they have and its application in their lives as family members and society (Bujuri & Baiti, 2018. This approach is very important to be absorbed in Civics learning, Civics are expected to be able to pay attention to the development of students' values, morals, and behavioral attitudes (Ridho, 2019). Civics is the study of everyday human life, teaches how to be a good citizen and upholds the values of Pancasila which is the basis of the state (Mauliddia et al., 2022; Rahayu, 2019). Citizenship Education is an educational program that has the core of political democracy expanded with other sources of knowledge, positive influences from school, community and parent education, all of which are processed to train students to think critically, be analytical, and act democratically (Firdaus, 2018; Hamzah et al., 2021). in carrying out a life based on Pancasila and UUD 1945 (Damri, 2020). In the end, citizenship education functions as a preparation for the younger generation to become citizens who have knowledge, skills, and values (Samsuri, 2011).

Through this research, it is hoped that there will be two findings, namely the feasibility of the product and the effectiveness of using the product in learning. this research tries to compare with research (Kuncahyono, 2018), where the development of E-Modules with practicality-related field trial results resulted in a score of 86.5% with practical criteria. In research (Nadya Ulfa, 2021) it was found that scientific literacy-based E-modules were very valid, practical and also suitable for use in learning activities, especially for high school students. This contextually based e-module is important because of an idea or new ideas and innovations in developing package book that you want to use in order Learning becomes more lively and interesting as well as the problems encountered students can solve.Seeing the findings from several studies above, this research is considered important in helping to create innovative learning products.

RESEARCH METHOD

This research is a development research model. The research design used in this study is the ADDIE model development research design. The steps of the ADDIE research model are as follows: (1) Analysis Stage, (2) Design Stage, (3) Development Stage, (4) Implementation Stage and (5) Implementation Stage Evaluation (Evaluation). Questionnaires, interviews, and tests were used as data collection tools. This research is analyzed and explained with numbers and descriptive.
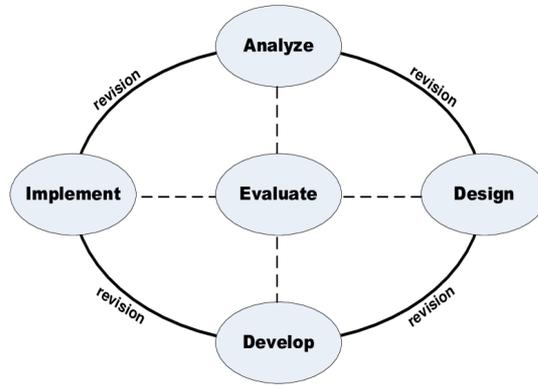
Picture 1. ADDIE Flow

RESULT AND DISCUSSION

The research was started by carrying out the needs analysis stage by considering the needs of students and the curriculum implemented in schools. At the design stage, the module is designed by adjusting the competency outcomes and learning planning. The following is the initial product design:
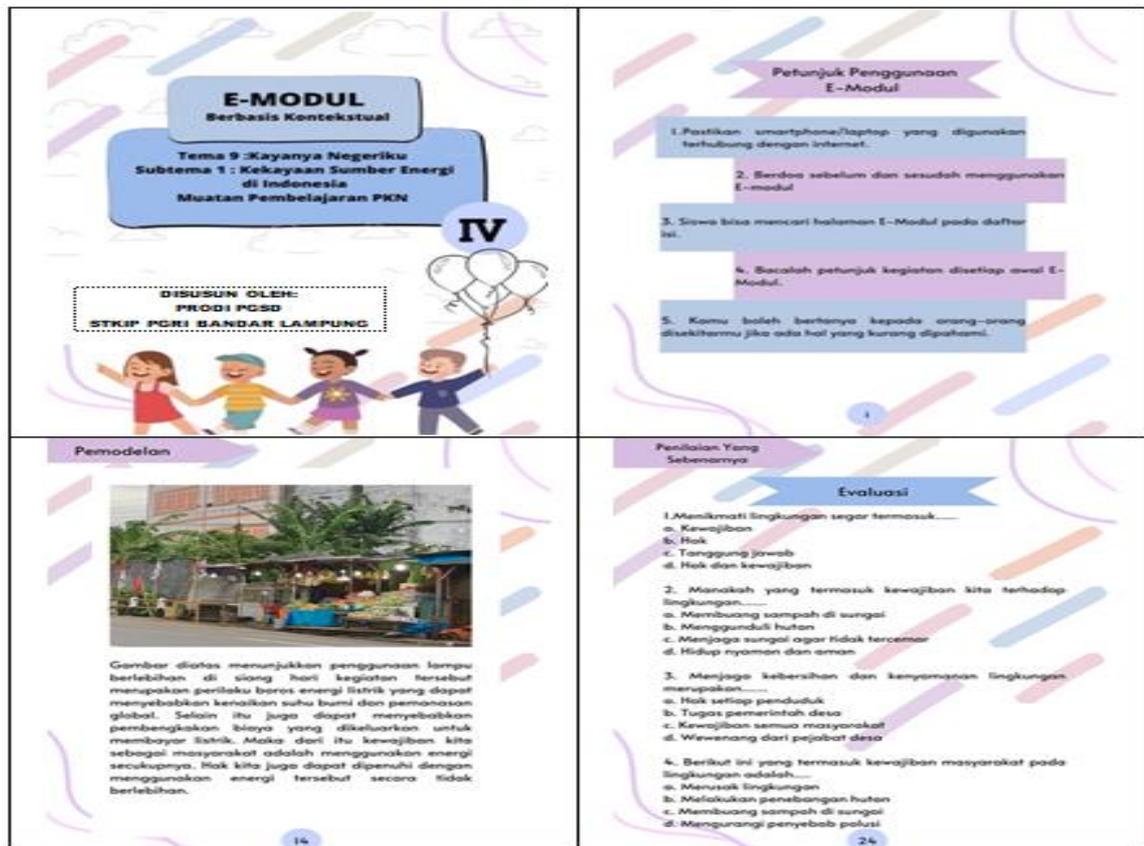
Picture 2. Initial Product Desain

E-Modules are developed according to design. After the E-Module has been successfully developed, the next step is to conduct a feasibility test. The due diligence will be validated by 3 experts, including material validation, product design, and language. In the validation process, the validator uses the instruments that were agreed upon in the previous stage.

In Material Expert Validation, the instrument used is a questionnaire that has been filled out by material experts, and the product gets results worthy of being tried with a little revision. The questionnaire contains 15 questions with a rating scale of 1-4. The questionnaire filled out by material experts got a score of 50 out of a maximum score of 60 and got a presentation result of 83% in a very decent category. It can be analyzed that in the material aspect, the product is in accordance with the curriculum, teaching lines and learning outcomes indicators. In accordance with research (Atika, 2018) this is important because if the Core Competencies and Basic Competencies in the syllabus have low suitability, the expected competencies are difficult to achieve and the objectives of developing curriculum functions are not optimally achieved. In addition, the material contained in the product is systematic, complete, and easy for students to understand. In validating the linguistic aspect, it was found that the E-Module was feasible to be tested without revision, by obtaining a score of 30 out of a maximum of 32 so that a percentage result of 93% was obtained with a very feasible category. The language aspect is considered to have good and correct Indonesian rules, as well as easy to understand and communicative. Determination of the use of language is in accordance with the level of grade 4 students, where the average age is still at the Concrete Operational level according to Jean Piaget's theory. At this stage the child begins to think logically and systematically to understand the substance of the reading and solve problems (Ridho, 2019). In product design validation, a maximum score of 43 out of 48 is obtained so that a percentage of 89% is obtained in the very feasible category. Teaching products are considered attractive because they have several features that strengthen student understanding such as accessible design, videos and images that are contextual and realistic. It is hoped that students will prefer learning and always review learning through this E-module wherever and whenever.
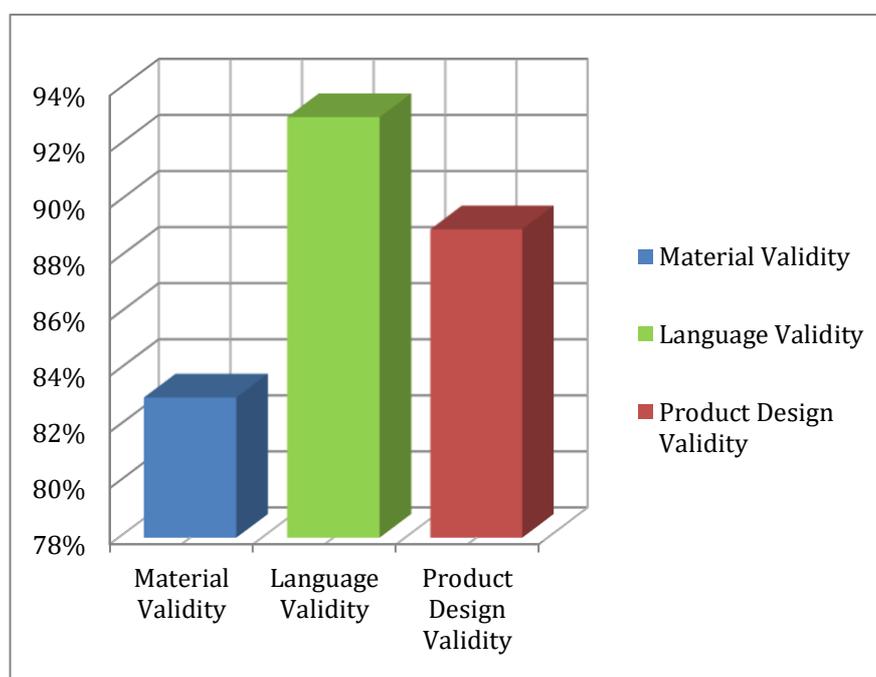
Picture 3. The results of material validation, language, and E-Module product design

The results of the teacher's responses show that the number containing 15 questions with a rating scale of 1-4 is 47 out of 60 maximum scores (78%), thus the module is considered feasible. In line with the teacher, student responses also showed positive results, where the numbers obtained from 23 student responses that were tested classically resulted in 80% with a feasible product interpretation. Product Effectiveness Test is carried out to fulfill the evaluation stage, namely the final stage where the learning carried out is evaluated to determine the effectiveness of the product.

This evaluation stage uses instruments in the form of tests related to the knowledge students have learned from the E-module. The questions posed consist of 10 multiple choice questions. Of the 23 students, 8 students scored in the high category and 15 students scored in the very high category and the average score obtained from all students was 91 in the very high effectiveness category. In accordance with the results of research (Lyvia, 2020) Contextual Learning can have a positive impact on Students' Knowledge Competence in Citizenship Education. From the results of the effectiveness test, the E-Module is proven to be able to build students' enthusiasm for learning and help understand more concretely from a contextual approach, so that it can sink in and last longer in students' memories.
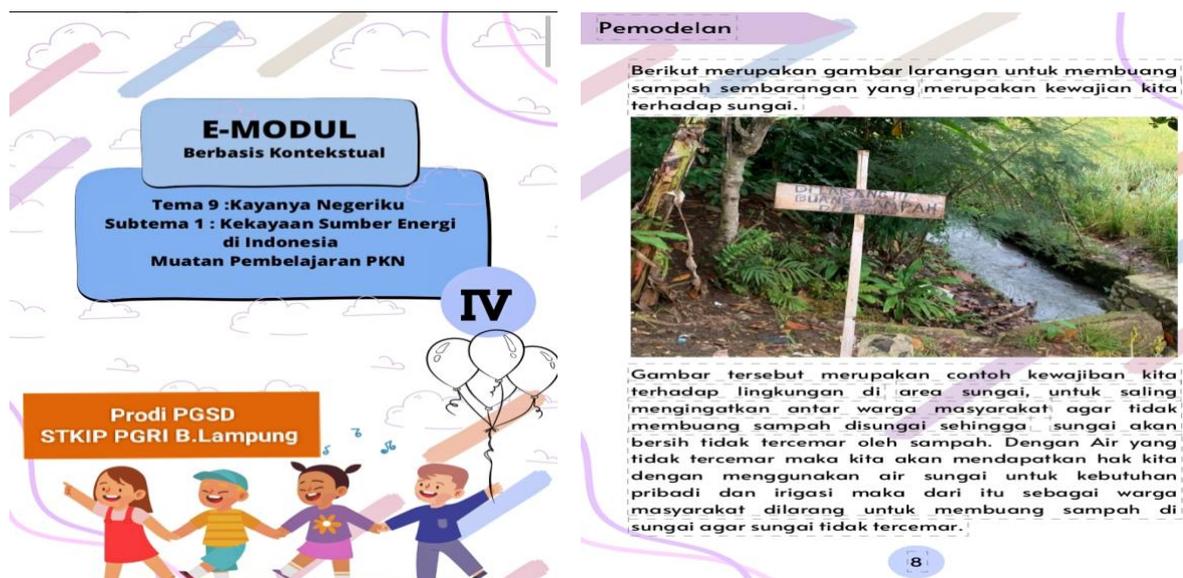
Picture 4. Finished Product

From several improvements made, including improving sentence structure, adding explanations, adjusting graduate achievement standards in the curriculum, adding realistic examples, pictures, videos, and adding links, the E-Module was also refined by taking into account the results of the responses of educators and students, by adding videos. explanations to support visualization of material and assignment platforms to strengthen understanding. The final product is the result of developing, revising and perfecting the contextual-based Civics E-Module product in learning Theme 9 Sub-theme 1 Class IV which is final. This E-Module is the result of research and development which is accessed using the Canva application with the addition of the Youtube link technology feature as an additional explanation of the material, as well as the Google Classroom link as an additional media assignment. It is hoped that this product will continue to be used by teachers to improve the learning process not only in Theme 9 Sub-theme 1, but hopefully in other Themes or in other classes. The following is the final product of the E-Module based on contextual learning Theme 9 Sub-theme 1 Class IV on Civics lesson content.

CONCLUSION

Based on the results of the research, the material validation results were 83%, language validation was 93%, and design validation was 91%. The results of the teacher's response test were 78% and the student's response test was 80% in the "Decent" category. The effectiveness test obtained an average of 91 in the "Very High" effectiveness category. This research shows that the development of Civics E-Module teaching products based on contextual learning is urgently needed and deserves to be disseminated. The findings in this study indicate that E-Module products are proven to be able to build students' enthusiasm for learning and help understand more concretely

from a contextual approach, so that they can be absorbed and last longer in students' memories. Limitations in this study apart from international literacy are also limited time in terms of improving and expanding product implementation. Limitations in this research apart from international literacy are also in the form of limited time in terms of improving and expanding product implementation.

REFERENCE

Atika. (2018). Analisis Kesesuaian Materi Pada Buku Teks Bahasa Indonesia Dengan Kompetensi Dasar Pada Silabus Bahasa Indonesia Kelas VII SMP Kurikulum 2013. *Jurnal Kode Bahasa, 7(2).*

Bujuri, D. A., Ananda, N., Saputra, A. D., & Handayani, T. (2022). Pengembangan Bahan Ajar Tematik Berbasis Model Pembelajaran Contextual Teaching And Learning di Madrasah Ibtidaiyah Swasta. *SITTAH: Journal of Primary Education, 3(2).*

Bujuri, D. A., & Baiti, M. (n.d.). Pengembangan Bahan Ajar IPA Integratif Berbasis Pendekatan Kontekstual. *Terampil: Jurnal Pendidikan dan Pembelajaran Dasar, 5 (2), 184–197.*

Damri dan Purta.F.E. (2020). *Pendidikan Kewarganegaraan.* Jakarta: Kencana

Dehyadegary, E., Divsalar, K., Shahsavari, F. P., Nekouei, S., & Sadr, A. J. (2018). Academic engagement as a mediator in relationship between emotional intelligence and academic achievement among adolescents in Kerman-Iran. *Journal of American Science, 8(9), 823–832.*

Erni, E., Adetiya, W., & Yuberti, Y. (2021). Development Of Android-Based Mobile Learning Media Using Android Studio On Natural Science Subject In Elementary School. *JIP (Jurnal Ilmiah PGMI)*, *7*(2), 101–108. https://doi.org/10.19109/jip.v7i2.10465

Firdaus, F., & Dewi, F. (2018). Application of Contextual Teaching and Learning (CTL) Components In Telecommunication Network Design and Optimization Course. *International Journal of Chemistry Education Research, 2(1), 24–33.* https://doi.org/10.20885/ijcer.vol2.iss1.art5

Fonda, A. & Sumargiyani. (2018). The Developing Math Electronic Module with Scientific Approach Using Kvisoft Flipbook Maker Pro for XI Grade of Senior High School Students. *Infinity Journal of Mathematics Education, 7(2), 109-122.*

Ganefri, et al. (2019). Efektivitas Pengembangan E-Modul Project Based Learning Pada Mata pelajaran Instalasi Motor Listrik. *Jurnal Imiah Pendidikan dan Pembelajaran 3(3), 309.*

Hamzah, A., Handayani, T., Nurlaeli, N., Shawmi, A. N., & Bujuri, D. A. (2021). Development Of Palembang Local Wisdom-Based Civic Education Teaching Subject In Elementary School. *JIP (Jurnal Ilmiah PGMI)*, *7*(2), 133–140. https://doi.org/10.19109/jip.v7i2.10562

Hidayah, N., Nasir, N., Afriana, S., & Shawmi, A. N. (2021). Development Of Environment-Based Islamic Comic Learning Media At Class Iv In Elementary School. *JIP (Jurnal Ilmiah PGMI)*, *7*(1), 41–51. https://doi.org/10.19109/jip.v7i1.8276

Hermiwati. (2021). *Contextual Teaching And Learning.* Sukoharjo: Oase Pustaka.

Ilyas. (2019). The Effect of Use of Contextual Teaching and Learning (CTL) Learning Model on Understanding the Concept of Waves of Coastal School Students. *Jurnal Pendidikan Fisika, 7(3).*

Inanna. 2021.Modul Elektronik (E-Modul) Sebagai Media Pembelajaran Jarak Jauh.Poceedings of national seminar Universitas Negeri Makasar. *Seminar Nasional 2021, 6.*

Indrayadi, T. (2020). The Effect Of Contextual Teaching And Learning On Reading Motivation. *International Journal of Scientific & Technology Research, 9(2).*

Juwantara, R. A. (2019). Efektivitas ekstrakurikuler pramuka dalam menanamkan karakter jujur disiplin dan bertanggung jawab pada siswa madrasah ibtidaiyah. *Jurnal Premiere Educandum: Jurnal Pendidikan Dasar dan Pembelajaran, 9(2), 160-71.*

Juwantara, R. A. (2019). Analisis teori perkembangan kognitif piaget pada tahap anak usia operasional konkret 7-12 tahun dalam pembelajaran Matematika. *Journal Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah, 9(1).*

Kuncahyono. (2018). Pengembangan E-Modul (Modul Digital) Dalam Pembelajaran Tematik Di Sekolah Dasar. *Journal of Madrasah Ibtidaiyah Education, 2(2).*

Lestari, H. D., & Parmiti, D. P. (2020). Pengembangan E.Modul IPA Bermuatan Tes Online Untuk Meningkatkan Hasil Belajar. *Journal of Education Technology 4*(1), 74.

Lisyanti. D. (2019). Pengembangan E-Modul Matematika Berbasis *Exe Learning* Pada Siswa Kelas VIII. *Universitas Islam Negeri Raden Intan Lampung.*

Lyvia. (2020). Contextual Learning Based on Multicultural Increase Students' Knowledge Competence in Civic Education. *International Journal of Elementary Education, 4(3), 321–328.* https://doi.org/10.23887/ijee.v4i3.26239

Maria. (2022). Development of HOTS-Based E-Modules Using Sigil Applications on Circular Motion Materials. *Jurnal pendidikan Fisika, 10(2).*

Maulida, U. (2022). Pengembangan Modul Ajar Berbasis Kurikulum Merdeka. *Tarbawi: Jurnal Pemikiran dan Pendidikan Islam 5(2), 132-137.*

Mauliddia, A. M., Nisa, K., & Jiwandono, I. S. (2022). Pengembangan Media Pembelajaran Ritatoon untuk Menarik Minat Belajar Siswa Pada Mata Pelajaran PPKn Kelas IV SDN 1 Kerumut. *Jurnal Ilmiah Profesi Pendidikan*, *7*(2c), 729-734. https://doi.org/10.29303/jipp.v7i2c.585

Najuah. (2022). Development of Historical Electronic Module On The Impact Of European Colonization For The Indonesian Nation For Senior High School. *International Journal of Educational Research & Social Sciences, 3(1).*

Nitiaroza. (2018). Practicality Of Mathematics Learning Tools Based On Discovery Learning For Topic Sequence And Series. *International Journal of Scientific & Technology Research, 7(5).*

Novitasari, N. (2022). Pengembangan E-Modul Biologi Pengayaan Terintegrasi dengan Imtaq Pada Materi Pokok Sistem Hormon Untuk Siswa Kelas XI SMA/MA. *Universitas Islam Riau.*

Nurhasnah. (2020). Developing Physics E-Module Using "Construct 2" To Support Students' Independent Learning Skills. *Thabiea: Journal Of Natural Science Teaching, 3(2).*

Octavia, S. A. (2020). *Model-Model Pembelajaran*. Yogyakarta: Deepublish.

Piung, F., Hasby, M., Jusrianto, & Edy Wahyono. (2022). Efektivitas Pendekatan Kontekstual Terhadap Hasil Belajar PKn Siswa Kelas IV SDN 028 Baebunta. *DEIKTIS: Jurnal Pendidikan Bahasa dan Sastra 2(3) 366-379.*

Pradnyani. (2017). Pengaruh Pembelajaran Quantum Berbasis Kearifan Lokal Tat Twam Asi Terhadap Kompetensi Pengetahuan PKn Siswa Kelas IV SD Gugus PB. Sudirman Denpasar Barat. *International Journal of Elementary Education, 1(4).*

Prastowo, A. (2016). *Panduan Kreatif Membuat Bahan Ajar*. Yogyakarta: DIVA Press.

Rahayu, A.S. (2019). Pendidikan Pancasila dan kewarganegaraan. Jakarta: Bumi Aksara.

Rangkuti, A. N., & Hasibuan, W. S. (2019). Learning of Spatial Operations in 1st Grade of Junior High School (MTs.S NU Paringgonan) Ulu Barumun Sub-district Padang Lawas Regency. *Budapest International Research in Linguistics and Education Sciences (BirLE) Journal, 2(1): 181-193.*

Saad, R., Mukramin, A. G. A., Putra , D .P., & Fiskawarni, T. H. (2019). The Influnce of Problem-Based Learning Model and Prior Knowledge toward the Physics Procedural Aplication Ability. *Jurnal Pendidikan Fisika Universitas Muhammadiyah Makassar, 7(1), 49-64.*

Saputra. A. (2022). Pengembangan Modul Pembelajaran PKn Menggunakan Model Contextual Teaching And Learning (CTL) Untuk Siswa Kelas V Di Sekolah Dasar Negeri 33 Padang Mandiangin. *Universitas Bung Hatta.*

Sitorus, H.V., Nugrahadi, E.W., & Budiarta, K. (2019). The Effect of Learning Strategy and Thinking Ability on the Students' Learning Outcomes in Economics Subject of XI Social Students in Senior High School State 1 in Pematang Siantar. *Budapest International Research in Linguistics and Education Sciences (BirLE) Journal, 2(4): 451-460.*

Suarsana, I. M. Mahayukti, G. A. (2013). Pengembangan E-Modul Berorientasi Pemecahan Masalah Untuk Meningkatkan Keterampilan Berpikir Kritis Mahasiswa. *Jurnal Pendidikan Indnesia, 2(2).*

Sukmawati, Z. (2022). Pengembangan E-Modul Teritergrasi Nilai Moderasi Beragama untuk Siswa Kelas IV Pada Materi Kisah Keteladanan Wali Songo II. *Institut Agama Islam Negeri (IAIN) Batusangkar.*

Sumandya, I Wayan. (2021). Development Of A Vocational Based Mathematics E-Module. *International Journal of Scientific & Technology Research 10(6).*

Sunarya, N. (2018). Pengembangan modul elektronik (e-modul) interaktif pada mata pelajaran Kimia kelas XI SMA. *Jurnal Inovasi Teknologi Pendidikan, 5(2).*

Syahputri, I. Dafit, F. (2021). Pengembangan E-Modul Membaca Siswa Kelas 3 SDN 029 Pekan Baru. *Jurnal Pendidikan, Sosial, dan Agama, 13(2).*

Syahrial. (2020). Impact E-Modul Ethnoconstructivism: Attitude & Motivation. *International Journal of Scientific & Technology Research, 9(4).*

Tania, L., & Susilowibowo, J. (2017). Pengembangan Bahan Ajar E-Modul Sebagai Pendukung Pembelajaran Kurikulum 2013 Pada Materi Ayat Jurnal Penyesuaian Perusahaan Jasa Siswa Kelas X Akuntasi SMK Negeri 1 Surabaya. *Jurnal Pendidikan Akuntansi, 5(2).*

Tsai, T. P., Lin, J., & Lin, L. C. (2018). A Flip Blended Learning Approach for Epub3 Ebook-Based Course Design and Implementation. *Eurasia Journal of Mathematics, Science and Technology Education, 14(1), 123-144.* https://doi.org/10.12973/ejmste/79629

Ulfa, N. (2021). The Development of Acid Base E-Module Based on Scientific Literacy. *Jurnal Edukimia, 3(3).*

Ulliyah, H., Sutomo, M., & Suhardi, A. A. (2023). Lectora-Based Interactive E-Modules: A Solution to Develop Mathematical Logic Intelligence of Islamic Elementary School Students in the Era of Society 5.0. *JIP (Jurnal Ilmiah PGMI)*, *9*(1), 27–40.

Wibowo, E. (2018). Pengembangan Bahan Ajar E-Modul Dengan Menggunakan Aplikasi Kvisoft Flipbook Maker. *Universitas Islam Negeri Raden Intan Lampung.*

Wicaksono. A. (2022). *Metodologi Penelitian Pendidikan*. Yogyakarta: Garudhawaca.

Y., Bustami. (2018). The Implementation of Contextual Learning to Enhance Biology Students' Critical Thinking Skills. *Indonesian Journal of Science Education, 7(4).*